GREEK STATIVE PASSIVES AS SMALL NON-PASSIVES

Lefteris Paparounas Université du Québec à Montréal paparounas.lefteris@uqam.ca

ABSTRACT

Stative passives in Greek are mixed projections, combining an adjectival external syntax (contributing a stative interpretation) with verbal internal properties (associated with eventivity). This paper brings to light a range of novel generalizations on how these two categorially disgtinct sets of properties are syntactically configured. In particular, a close comparison of the stative passive with its eventive counterpart affords new insights into the event and argument structure of the stative passive: the event entailed by the stative passive cannot be directly targeted for syntactic modification; and the core argument of the stative passive is structurally and interpretively severed from the verbal structure, associated instead only with the adjectival/stative projection. This state of affairs is argued to follow, in the context of a syntactic theory of word formation, from a complex head analysis of Greek stative passives: the stative passive is built from a verbal projection that lacks phrasal properties.

Keywords: stative passive; adjectival passive; complex head; event structure; argument introduction

1 Introduction

What does it mean for an object to be syntactically constructed – and how can we tell? Such questions arise rarely of self-evidently large objects such as clauses, taken virtually unanimously to be constructed by a phrasal syntax. But for smaller objects – those that manifest phrasal properties less obviously, at least on the surface – things are different. The possible role of syntax in the creation of (descriptively) smaller objects engenders different theoretical approaches linked in fairly clear ways to the divide between approaches based on lexical rules and approaches privileging the role of syntax in the creation of complex objects below the 'word' level. A particularly fertile playing field for the development of these approaches has been the study of *mixed projections* – structures that seem to have the internal syntax of one category, and the external distribution of another.

This paper contributes to this domain of inquiry a set of novel observations on the event and argument structure of a mixed projection $par\ excellence$, the Greek stative passive in -men. It shows

that, although the stative passive is indisputably deverbal in a basic sense, it fails to inherit a range of properties typical of purely verbal projections. Specifically, a new set of diagnostics reveals that the stative passive diverges from its eventive counterpart, the closest comparandum exhiting a *bona fide* verbal phrasal syntax, in both event and argument structure, in ways not attributable solely to the presence of a stative/adjectival layer in stative but not eventive passives. The paper argues that these generalizations are perspicuously explained by a *complex head* approach to the structure of stative passives in Greek, whereby the stative passive is syntactically constructed and deverbal yet lacks phrasal verbal syntax.

1.1 CONTEXT: VERBAL INHERITANCE IN MIXED PROJECTIONS

A central domain of inquiry in the study of mixed projections concerns patterns of *inheritance* of verbal properties: the presence/absnece of such properties provides a window onto whether the mixed projection should be taken to be derived from a verbal category or not.

Within the vast literature on deverbal mixed projections, work on nominalization has pride of place. Simplifying considerably, two opposing intuitions have coexisted in this strand of the literature for decades. The first intuition recognizes that at least some deverbal nominalizations share numerous event- and argument-structural properties with corresponding purely verbal structures. Inheritance patterns of this type seem to warrant deriving the nominalization from the corresponding verbal structure one way or another. The second intuition pushes in the opposite direction, emphasizing deviations between deverbal nominalizations and their putative base, in a way that seems to militate against a straightforward derivation of one from the other.

Consider by way of illustration the way in which both intuitions find their origin in one of this literature's founding documents, Chomsky (1970) (cf. Embick 2021b; Marantz 1995, 1997). One of Chomsky's key observations concerned the way in which hallmarks of verbal syntax seem to be differentially inherited by different classes of apparently deverbal nominals. Thus, for instance, the raising syntax found with verbs like *appear* (1a) survives in the gerund *appearing* (1b), but it does not in *appearance* (1c).

- (1) a. Mary appears to be the best candidate.
 - b. Mary's appearing to be the best candidate
 - c. *Mary's appearance to be the best candidate

The two intuitions discussed above effectively reflect different expectations on whether it should be the pattern shown in (1b) – verbal inheritance – or the pattern in (1c) – verbal non-inheritance – that generalizes within a given class of deverbal nominals.

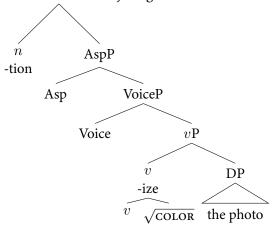
Consider as an example those formations that have come to be called Complex Event Nominals (CENs) ever since Grimshaw (1990):

(2) The colorization *(of the photo) in a day.

In contemporary theories of syntactic word formation, many CENs have received analyses of what

I will call the *Phrasal Layering* type, where patterns of inheritance of verbal event and argument structure arise because the CEN embeds phrasal verbal syntax (see among many others Alexiadou 2001; Borer 2003; Bruening 2013; Fu, Roeper, and Borer 2001).

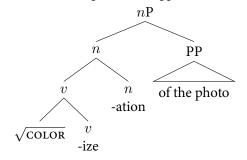
(3) CEN à la Phrasal Layering



Such analyses are perfectly poised to capture patterns of inheritance, and owe, at a minimum, some explanation of patterns of non-inheritance of the kind known since at least Chomsky (1970); compare in this connection Bruening (2018) with Wood (2023: 2.3.5).

The opposing strand is also found. Wood (2023) has recently drawn attention back to patterns of non-inheritance in CENs, based on a detailed case study of Icelandic. Wood proposes that the relevant patterns arise, in the context of a syntactic theory of word formation, on an understanding of the relevant CENs as complex heads: deverbal structures whose verbal core meets the nominal superstructure by directly combining heads, with any dependents entering the structure in the higher nominal portion (for nominalization, see also Benz 2023; Lee 2024).

(4) CEN à la Complex Head approach



Analyses like (4) in fact have antecedents outside the domain of nominalization, for stative passives, in Embick (2021a), developed further in Biggs and Embick (2023), Embick (2023). These works

represent the latest steps in a long line of inquiry on the properties of stative passives, guided by considerations parallel in many ways with those underlying the study of nominalizations; see among many others Alexiadou and Anagnostopoulou (2008), Anagnostopoulou (2003), Bešlin (2021), Borer (1984), Bresnan (1982), Bruening (2014), Embick (2004a), Kratzer (2001), Levin and Rappaport (1986), Meltzer-Asscher (2011), Williams (1981). But whereas stative passives are potentially just as illuminating as deverbal nominals with respect to verbal inheritance, their properties remain arguably less well understood.

It is the domain of stative passivization that I focus on here. I show that the Greek stative passive in *-men*–, sometimes taken to be the poster child of analyses such as (3) applied to stative passives, instead furnishes a new existence proof in favor of structures like (4), within the context of a syntactic theory of word formation. The argument is based on a set of novel generalizations on the argument structure and event modification properties of the Greek stative, which are in turn predicated on new diagnostics for the properties of stative passives developed here.

1.2 STATIVE PASSIVE: GOALS AND STRUCTURE

Exemplified in (5), the Greek stative passive built using the stativizer -men has the outer morphology and external distribution of an adjective; as we will see throughout, it also bears certain hallmarks of a verbal internal syntax, and accordingly also bears verbal inner morphology (here, the verbalizer -iz). The *eventive* passive in the language looks different, not making use of participial morphology at all (5).^{1,2}

- (5) a. I zoni ine asfal- iz- men- i. the.nom belt.nom be.3sg secure VBZ PTCP F.Nom 'The seat belt is secured.'
 - b. I asfal- iz- men- i zoni the.nom secure VBZ PTCP F.NOM belt.nom 'The secured seat belt.'
- (6) a. I zoni asfal- is- θ- ik- e. the.nom belt.nom secure VBZ PFV.**NACT** PST 3SG 'The seat belt was secured.'
 - b. I zoni eçi asfal- is- θ i. the.nom belt.nom have.3sG secure VBZ PFV.NACT 3SG 'The seat belt has been secured.'

Greek (5) has formed an important basis for the development of *phrasal layering* analyses of stative

¹Glossing abbreviations: **NACT** = non-active, \underline{ACT} = active, 1 = first person, 2 = second person, 3 = third person, ACC = accusative, COMP = complementizer, DEM = demonstrative, DIM = diminutive, F = feminine, GEN = genitive, IMP = imperative, M = masculine, N = neuter, NEG = negative, NOM = nominative, PASS = passive, PFV = perfective, PL = plural, POSS = possessive, PST = past, PTCP = participle, RECIP = reciprocal, REFL = reflexive, SG = singular, VBZ = verbalizer.

²Greek judgments have been confirmed with a pool of four native speakers; differences noted between consultants, or diverging judgments offered by native speakers consulted at linguistics conferences, are noted where applicable.

passives ever since the pinoeering work of Anagnostopoulou (2003). This work observed that Greek stative passives license agent-oriented modifiers seemingly freely; (7) is one example.

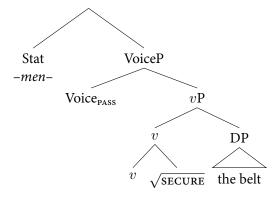
(7) I porta ine aniy- meni viea / me losto / apo ton the.nom door.nom be.3sg \(\sqrt{OPEN} \) PTCP violently with crowbar.ACC from the.ACC \(\text{diarikti.} \)

burglar.ACC

'The door is opened violently/with a crowbar/by the burglar.'

Given the assumption that such modifiers must be hosted in a (phrasal) Voice projection, examples like (7) suggest that this projection must be present in the structure of the -men- stative. On the resulting type of approach, a Greek -men- participle is assigned the analysis in (8):

(8) *Greek -men- participle with Phrasal Layering*



Three analytical ingredients conspire to make (8) what it is.

The first is the assumption that (5) is a passive in the deep sense; that is, that the nominal *the belt* originates inside the verbal substructure, in that syntactic position that is commonly associated with the thematic role of theme.

The second ingredient is an upshot of the first: if *the belt* originated where themes normally originate, then the verbal substructure in the phrase marker of (5) must involve the kind of projection where themes normally 'meet' verbal projections: a vP like any other.

The third ingredient is an extension of the second to higher portions of the structure. According to (8), the structure does not only include the kind of verbal substructure that normally introduces themes. Rather, we also find higher in the same structure the functional material responsible for introducing agentivity: a (passive) VoiceP like any other. Though nothing in the overall approach demands that this particular layer be present in every instance of stative passivization cross-linguistically, the claim has been that it is so in the case of Greek (Anagnostopoulou 2003 and much subsequent work). This conclusion is of course very much in line with the overall spirit of Phrasal Layering.

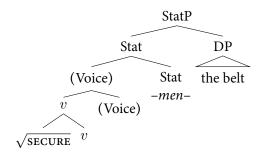
(8), as made up of these three ingredients, creates a strong expectation for the case of Greek: stative passives in the language should amount to little more than stativized eventive passives. Since the stative in (8) effectively contains the eventive, the properties of the former should persist in the latter, and any deviations between the two should be due to nothing but the sole differentiating factor between the two, namely, the stativizing layer that makes a stative out of an eventive. Divergences not readily attributable to this layer are unexpected.

This general expectation is embodied in three more specific predictions. Firstly, the argument *the belt* in the stative should show the same properties as the promoted theme of the eventive passive. Secondly, modification of the stativized event in the stative should be qualitatively the same as modification of the event in the eventive, *modulo* any effects of stativity. Finally, agent-oriented modification should pattern the same way in the stative as in the eventive, again *modulo* any effects reliably attributable to the stativizing layer.

The main empirical contribution of this paper is a new investigation of these predictions for a language, Greek, whose stative passives have received close attention only for the third dimension, that concerning agent-oriented modification. The novel generalizations that emerge through a careful comparison of eventive and stative passives widely counterexemplify the predictions of (8): the sole argument of the stative is not on a par, positionally or thematically, with that of the eventive, nor does event modification in the stative resemble event modification in the eventive. In addition, the generalizations concerning agent-oriented modification in the stative turn out to be considerably more complex than has previously been appreciated, further casting doubt on this third dimension of (8).

In place of (8), I argue that the appropriate analysis of Greek stative passives is one where, although constructed in the syntax, the stative passive lacks phrasal internal structure, instead instantiating a 'smaller' syntax for its verbal core, as in (9) (see also Biggs and Embick 2023; Embick 2023; Wood 2023). I parenthesize Voice in (9) in the interest of clarifying that the choice between the structures in (8) and (9) is in principle independent of the issue of whether we must countenance the presence of particular projections, in this case Voice, inside whatever the correct structure turns out to be. Finally, I focus on stative passives in the predicative position throughout; attributive stative passives have separate properties worthy of their own investigation, see Biggs and Embick (2023) and Paparounas (2023: ch.4).

(9) Greek -men- participle as a complex head



'Smallness' here refers to two related aspects of (10). Firstly, the core argument originates in the stative portion, such that the 'passive' in stative passive emerges as a misnomer. Secondly, partly as a result of there being no argument in the verbal portion of the structure, the verbal projection in (10) is not unambiguously phrasal in the sense of Chomsky (1995). Instead, what (9) schematizes is a situation where the first phrasal projection in the structure is the stative projection; and as a result, the only eventuality that can be directly modified is the stative eventuality. Unlike in (8), there is no vP to be adjoined to in (9); as we will see, this much will derive the impossibility of direct event modification in the stative.

I argue for (9) over (8) on the basis of two kinds of phenomena.

A first class of phenomena, investigated in section 2, concerns event modification. Previous literature on Greek stative passives has concentrated heavily on agent-oriented modification in particular; this choice reflects a general focus on the Voice-related properties of these structures ever since Anagnostopoulou (2003). Pivoting to a domain that has thus remained relatively underinvestigated for Greek – the modification of the eventualities making up the stative passive – we find a striking asymmetry between statives and eventives: in the stative, the stativized event is inaccessible for state-irrelevant modification. Only state-level modifiers are thus licit (see also e.g. Biggs and Embick 2023; Gehrke 2013, 2015; Maienborn, Gese, and Stolterfoht 2016; McIntyre 2013, 2015).

The second class of phenomena, taken up in section 3, targets the structural provenance and thematic integration of the sole argument; itself an underexplored issue, for Greek and beyond. In the eventive passive, this argument, the surface subject, originates inside the vP, and is interpreted systematically as a theme – this much is unsurprising. Interestingly, however, the argument of the stative does not originate inside the stativized verbal structure; moreover, whenever it is interpreted as a theme of the stativized event, this interpretation amounts to a backdoor inference that can be shown to be defeasible under particular circumstances. The argument is in fact linked only to the state, bearing the role of a state holder. The term 'stative passive' is accordingly misleading in a sense, with -men– statives amounting to a case of external predication, both structurally and interpretively.

On both fronts, then, the conclusions counterevidence the predictions of the Phrasal Layering approach, which posits both a low origin for the surface subject (in practice, if not necessarily in essence) and an eventive vP that should be perfectly eligible for modification (this being very much the essence of the overarching approach). I show how the 'small' approach instead accommodates both kinds of differences easily: unlike the eventive, which bears a phrasal structure, the stative lacks an unambiguously phrasal vP, meaning that no elements that would yield such a category – either low vP-internal arguments, or adjuncts – are permitted. Section 4 develops this analysis, and section 5 defends it against alternatives.

These results have implications for the nature of verbal inheritance more generally; at a minimum, they suggest that the presence of verbal properties in categorially mixed deverbal structures need not correspond to the presence of a full-fledged phrasal verbal substructure. In other words, the notions 'syntactically constructed' and 'phrasally built' are potentially dissociable These results are recapitulated in section 6, which concludes the paper.³

³Certain key generalizations drawn here initially seem compatible with a lexicalist view of stative passive formation as

2 Modifying eventualities in the -men- stative passive

2.1 BACKGROUND: ON MODIFICATION IN THE STATIVE PASSIVE

Investigations of the structure of mixed categories must reckon with a serious metholodological question: to what extent can structural diagnostics from the clausal domain be extended straightforwardly to the mixed category?

The answer to this general question is not likely to be straightforward; at the same time, the domain of nominalization is rife with situations where, at a minimum, diagnostics carried over from the verbal domain seem to behave in a more liberal fashion (see Wood 2023: sec. 2.5, ch. 4 for recent discussion). Consider, for instance, the appearance in English of *by*-phrases in nominals that are far from clearly deverbal:

- (10) a. This sketch by Picasso sold for quite a bit.
 - b. A foul by the midfielder caused the game to be halted.

The point of such examples is not to suggest that *by*-phrases must necessarily be treated differently in nominals versus clauses (see esp. Bruening 2013 on related points), but merely to illustrate that recategorization has the potential, descriptively at least, to introduce modification possibilities of its own, distinct from what one observes in the verbal domain proper. In other words, facts such as (10) do little on their own to illuminate the proper analyses of such cases, but they do constitute a cautionary note against a piecemeal extension of diagnostics from the verbal to the recategorized domain: for instance, it would clearly be premature to conclude from simple inspection of (10) that the nominals at hand must include a Voice projection.

In stative passives, too, such complexities apply, concerning both agent-oriented and event modification.

Regarding agent-oriented modification, the diagnostic nuances discussed here have not always been taken into account in studies of Greek, with the notable exception of Alexiadou, Anagnostopoulou, and Schäfer (2015: ch. 5), at least to some extent. I thus revisit this issue in section 5.2, arguing that, at a minimum, agent-oriented modifiers are not clearly as freely attachable in stative passives as they are in eventive passives; and that a state-level attachment view perspicously explains a novel generalization at the intersection of stative passivization and reflexivization.

Turning to event modification, I am interested here in illustrating two sorts of diagnostic dangers

much as with the complex head approach advocated here. But there continue to be reasons to forgo a lexicalist treatment, even in light of the issues raised here for phrasal syntactic accounts. Two recent empirical developments are particularly noteworthy in this connection. Firstly, Embick (2023) shows that lexicalist accounts mispredict important aspects of the interaction between adjectival negatiol and resultative secondary predication in English; the relevant data can be replicated in Greek, leading to the same conclusion. Secondly, Biggs and Embick (2023) show that English stative passives show distinct event-structural properties between predicative and attributive positions, facts which again replicate in Greek (see Paparounas 2023: ch.4): such instances of syntactically determined interpretive flexibility are difficult to capture on a lexicalist account, which predicts, all things being equal, that the interpretation of a lexically derived stative passive should be constant across syntactic environments. For reasons of space, I leave more detailed comparison of the account developed here with a lexical account to work devoted specifically to this end.

involved in examining the modification possibilities of the stative passive vis-à-vis the eventive. The first danger is to be too hasty in drawing conclusions from the felicity of a given modifier in the stative passive. The second danger is to be too hasty in drawing conclusions from the *infelicity* of a given modifier. I illustrate each in turn, using manner and temporal modification as examples, respectively.

Consider firstly the Greek example in (11). It involves a manner adverb modifying a stative passive; and it is possible to conclude, from the mere fact that the adverb is licensed here, that (11) must instantiate *bona fide* event modification, with the example asserting that the poster in a state resulting from a hanging event that unfolded in an awkward or sloppy manner.

(11) I afisa ine kremas- men- i atsala. the.nom poster.nom be.3sg hang PTCP F.nom sloppily 'The poster is sloppily/awkwardly hung.'

But we must be wary of reaching this conclusion too fast, since (11) is compatible with a reading on which the adverb has little to do with the underlying event: it is possible to utter (11), for instance, in a situation where we know the poster to have been hung up perfectly, but where the adhesive later failed, resulting in an awkward way of hanging at present. That this construal is at least possible is clarified by similar-looking examples such as (12), where there is no sensible event-related construal. There is no plausible sense in which (12) asserts that the poster-hanging event took place in an upside-down fashion; rather, the poster is in an upside-down state.

(12) I afisa ine kremas- men- i anapoða. the.nom poster.nom be.3sg hang PTCP F.nom upside.down 'The poster is hung upside down.'

(11) and (12) illustrate a cautionary note arising from the properties of stative passives: since they involve an event and a state, either eventuality could, in principle, be targeted for modification; and while it easy to tell which one is actually targeted in examples like (12), this is not as clear in (11). This type of complexity is emphasized by studies focussed on eventuality modification in stative passives in other languages (see especially Gehrke 2011, 2015; McIntyre 2013, 2015; Rapp 1996).

Taking such nuances into account and using a non-state-compatible manner modifier in Greek reveals a simple but important first observation: the stativized event is not readily manner-modifiable.

- (13) a. I porta anixθike (γriγora).
 the.nom door.nom open.nact.pst.3sg quickly
 'The door was opened (quickly).'
 - b. I porta eçi anixti (yriyora). the.nom door.nom have.3sG open.PFV quickly 'The door has been opened (quickly).'
- (14) I porta ine aniymeni (#yriyora). the.NOM door.NOM be.3SG open.PTCP.F.NOM quickly 'The door is opened (quickly).'

Consider now the opposite danger, that of concluding too much from the fact that a given modifier is infelicitous in the stative. In the domain of temporal modification, Greek eventives and statives again come apart: whereas eventives initially seem to freely tolerate temporal adverbial modification (15); but the event of the stative passive strongly resists being situated temporally in the same way (15a); cf. (16b), which shows that temporally situating the *state* is perfectly licit.

- (15) I porta vaftike (xθes). the.NOM door.NOM paint.NACT.PST.3SG yesterday 'The door was painted (yesterday).'
- (16) a. I porta ine va-men-i ($\#x\theta$ es). the.nom door.nom be.3sg \sqrt{PAINT} PTCP F.nom yesterday 'The door is painted (yesterday).'
 - b. I porta itan vamen-i ($x\theta es$). the nom door.nom be.pst.3sg \sqrt{PAINT} PTCP f.nom yesterday 'The door was in a painted state (yesterday).'

It is tempting to take the contrast between (15) and (16a) as suggesting some deep-seated difference between eventives and statives, all things being equal. But doing so would be a mistake, because all things are not equal: the impossibility of temporal modification is not particular to stative passives, appearing instead as a general property of state-denoting structures, witness the perfect in (17).

(17) I porta eçi anixti (#xθes). the.nom door.nom have.3sG open.pfv yesterday) 'The door has been opened (yesterday).'

Preliminary facts like these illustrate an important broader point: some divergences between eventive and stative passives, like the impossibility of temporal modification in the latter, are attributable to independent properties of stativity, and thus not necessarily probative as to the structure of the stative *per se*. But others, like the impossibility of state-irrelevant manner modification in the stative, are not; and it is divergences of this latter kind that Phrasal Layering accounts will have trouble reckoning with.

Consider now what the diagnostic nuances just discussed mean for the specific case study from Greek pursued here. As already mentioned, event modification has not been closely investigated for Greek. Doing so on the basis of manner adverbs, as briefly sketched above, is one way of remedying the situation; but, as also discussed above, the state-modification confound will often muddy the waters here. As such, I develop here a novel event modification diagnostic for the stative passive, free of this confound, complementing the also novel diagnostics for a distinct domain, the provenance of the surface subject, discussed in section 3.

2.2 A NEW EVENTUALITY DIAGNOSTIC: APPROXIMATIVES

A first diagnostic helping adjudicate between the two competing analyses of stative passives outlined in section 1.2 comes from modification by approximative adverbials. This phenomenon constitutes a domain where the properties of the stative passive seem crucially different to those of the eventive; as we will see, the stative licenses a proper subset of the interpretive possibilities found in the eventive, a finding wholly unexpected under the layering account.

Diagnostically speaking, the broader aim here is to examine modification of the eventualities denoted by the stative passive. As already discussed in section 2.1, this is not always a straightforward endeavor. Recall from (11), repeated here as (18), that many modifiers whose behavior is straightforward in the clausal context are less clearly reliable in the stative passive: in the case at hand, it will not be instantly clear whether the adverb in (18) is construed as an event and a state modifier, as these readings are not unrelated to each other. In fact, as clarified by (12), repeated here as (19), pure state-level modification can be shown to be independently available. As such, the mere presence of the adverb in (18) is not by itself probative, and such cases will more generally be informative as to the structure of stative passives only insofar as the relevant readings can be manipulated independently of each other.

- (18) I afisa ine kremas- men- i atsala. the.nom poster.nom be.3sG hang PTCP F.nom sloppily 'The poster is sloppily/awkwardly hung.'
- (19) I afisa ine kremas- men- i anapoða. the.nom poster.nom be.3sg hang PTCP F.nom upside.down 'The poster is hung upside down.'

The reason why examples like (18) are not instantly probative is that the two conceivable readings of the modifier are intimately related: sloppy events and sloppy states are both sloppy in the same way. An obvious way to sidestep this complication would be to identify a modifier that instead yields easily distinguishable, to a large extent unrelated, readings. I argue here that approximatives, in particular the Greek counterpart of *almost* and a related counterfactual adverb, instantiate one case of exactly this kind, providing easily disentanglable readings and yielding satisfyingly sharp judgments.

To my knowledge, approximative modification has not been investigated in detail in the context of stative passives elsewhere; but see Nissenbaum 2018, who touches on the issue with reference to English, noting the basic contrast in the context of a broader discussion.

2.2.1 A (NON-)AMBIGUITY

To see what is at stake, consider the ambiguous Greek sentence in (20), containing an active verb modified by one of the language's approximatives, *sçeðon*. Like its English counterpart, this modifier licenses a well-known ambiguity (see e.g. McCawley 1971; Rapp & von Stechow 1999). As shown in the translation, (20) can describe situations where Snow White initiated an apple-eating event and came very close to completing it without doing so; or situations where it nearly came to pass that

Snow White ate the apple, but in fact the event was never initiated. Call the former interpretation the *scalar* reading, and the latter the *counterfactual* one.

- (20) I çonati sçeðon efaje to milo. the.NOM Snow.White almost eat.PST.3SG the.ACC apple.ACC 'Snow White almost ate the apple.'
 - ✓ 'Snow White almost finished eating the apple.'

scalar

✓ 'It almost happened that Snow White ate the apple.'

counterfactual

The scalar/counterfactual ambiguity is plausibly one determined by the attachment height of the approximative modifier (see Rapp & von Stechow 1999). In particular, we can take the scalar interpretation to be state-modifying, in the sense of asserting that the resultant state associated with some event almost obtained; whereas the counterfactual reading is event-oriented insofar as it asserts that the event did not take place (though there can be nuance on the exact nature of this reading, orthogonal here; see e.g. Horn 2011; Sadock 1981).⁵ Given that the scalar reading is state-modifying, it does not obtain with predicates lacking good target states; as such, a *sçeðon*-modified activity like that in (21) is unambiguous.

(21) I çionati sçeðon klotsise ti bala. the.nom Snow.White almost kick.pst.3sG the.acc ball.acc 'Snow White almost kicked the ball.'

Xscalar **✓** counterfactual

Crucial here is the behavior of this modifier in passive contexts. Consider firstly that eventive passives freely license the scalar/counterfactual ambiguity: thus, the eventive passive in (22) is ambiguous just as the active transitive (20) was. In (22), this ambiguity is brought out by the different continuations provided in the subexamples, with the first one favoring the scalar reading of the starting sentence, and the second one the counterfactual reading.

- (22) To milo sçedon fayoθike apo tin x^jonati... the.nom apple.nom almost eat.**NACT**.PST.3SG from the Snow.White 'The apple was almost eaten by Snow White...'
 - a. ... Afise mono ena komataki. leave.pst.3sG only one.ACC piece.DIM.ACC 'She left only a little piece.'

scalar-facilitating

b. ... Eftixos, o griniaris ti stamatise prin kataferi na thankfully the.nom Grouchy.nom 3sg.f.acc stop.pst.3sg before manage.3sg comp

⁴The judgments below replicate across my consultants; however, I have encountered two speakers for whom *sçeðon* cannot be counterfactual. For speakers of this type, the point made by the following examples can be made with the purely counterfactual modifier *paraliyo*, see section 2.2.3 below. See also Oikonomou, Rizou, Bondarenko, Özsoy, and Alexiadou (2022).

⁵The discussion in McCawley (1971) in fact distinguishes a third reading very closely related to what I here take to be the scalar one; see Rapp and von Stechow (1999) for discussion of whether these are actually distinct readings.

to dagosi. 3sg.n.acc bite.3sg

'Thankfully, Grouchy stopped her before she managed to take a bite.'

counterfactual-facilitating

Strikingly, stative passives behave entirely unlike eventive passives with respect to modification by approximatives. Consider firstly the basic examples in (23), providing an initial illustration of this crucial contrast: *sçeðon*-modified predicative stative passives only license the scalar reading. The judgments here are generally extremely robust, as they seem to be for the English translations of the examples; see footnote 4 for an orthogonal point on inter-speaker variation, and cf. Oikonomou et al. (2022).

(23) a. To milo ine sçeðon fayo- men- o. the.nom apple.nom be.3sg almost $\sqrt{\text{EAT}}$ PTCP N 'The apple is almost eaten.'

Xcounterfactual **✓** scalar

b. To milo itan sçeðon fayomen- o. the.nom apple.nom be.pst.3sg almost $\sqrt{\rm EAT}$ ptcp 3sg 'The apple was almost eaten.'

Xcounterfactual **✓** scalar

One may wonder whether the difference between (22) and (23) can be attributable to some hidden third factor independent of the structure of passives *per se*, such as the mere presence of stativity. To the best of my knowledge, this does not seem to be the case: (plu)perfect eventive passives continue to be ambiguous when modified by *sçeðon*, even though (plu)perfects are state-signifying.

- (24) To milo sçedon içe fayoθi apo tin xⁱonati... the.nom apple.nom almost have.pst.3sg eat.pfv from the Snow.White 'The apple had almost been eaten by Snow White...'
 - a. ... otan i vasilisa ti fonakse ke ecini afise when the.nom queen.nom 3sg.f.асс call.psт.3sg and дем.f.nom leave.psт.3sg

to telefteo komati.

the.ACC last.ACC piece.ACC

'when the queen called her and she left the last piece.'

b. ... otan o griniaris ti stamatise prin kan to thankfully the.nom Grouchy.nom 3sg.f.acc stop.pst.3sg before even 3sg.n.acc dagosi.

bite.pfv.3sG

'when Grouchy stopped her before she even took a bite.'

A particularly striking illustration of this difference between stative and eventive passives is found when we embed both in a context that forces the counterfactual reading. In (25), we find first a *sçeðon*-modified eventive or stative passive, followed by a continuation asserting that the event in question did not in fact take place. As expected, this continuation is perfectly felicitous in eventive passives

in the aorist (25a) and pluperfect (25b); but it yields a stark contradiction in (25c). This is precisely the state of affairs we expect if, unlike eventive passives, stative passives do not accommodate the counterfactual reading.

- [In a Hunger Games-esque competitive deathmatch, a cunning player leaves out a poisoned apple for their hungry competitors.]
 - To ðilitirias- men- o sçeðon fayoθike apo polus a. milo the.nom $\sqrt{\text{POISON}}$ PTCP N.nom apple.nom almost eat.**NACT**.PST.3SG from many pextes, ala eftixos kanis tus ðen to efaje telika. player.PL but thankfully no-one.NOM 3PL.POSS NEG 3SG.N.ACC eat.PST.3SG ultimately 'The poisoned apple was almost eaten by many players, but thankfully none of them ate it in the end.'
 - b. To ðilitirias- men- o milo sçeðon içe fayoθi apo polus the.nom √poison ptcp n.nom apple.nom almost have.pst.3sg eat.pfv from many pextes, ala eftixos kanis tus ðen to efaje telika. player.pl but thankfully no-one.nom 3pl.poss neg 3sg.n.acc eat.pst.3sg ultimately 'The poisoned apple was almost eaten by many players, but thankfully none of them ate it in the end.'
 - c. To ðilitirias- men- o milo itan sçeðon fayo- men- o the.NOM \(\sqrt{POISON} \) PTCP N.NOM apple.NOM be.PST.3SG almost \(\sqrt{EAT} \) PTCP N.NOM (apo polus pextes), #ala eftixos kanis ðen to içe from many.PL player.PL but thankfully no-one.NOM NEG 3SG.N.ACC have.PST.3SG fai. eat.PST.3SG

'The poisoned apple was almost eaten, but thankfully no-one had eaten it.'

2.2.2 Approximatives in activity statives

Probing the matter further, we find additional evidence that stative and eventive passives dissociate in the domain of approximative modification.

One clear case comes from activities, which were noted in (21) to never license counterfactual readings. For completeness, let us first note that this impossibility of the counterfactual construal of *sçeðon* persists in the eventive passive:

(26) I bala sçeðon klotsiθike apo ti çonati.
the.Nom ball.Nom almost kick.NACT.3sG from the Snow.White
'The ball was almost kicked by Snow White.' ✓ counterfactual ✗scalar

Recall now that the counterfactual reading is the one that stative passives seem to not license. Since this is the only reading available with activities (26), the preceding discussion leads us to expect that the stative counterpart of (26) should be entirely infelicitous. This prediction is borne out: (27) is judged as highly deviant, unlike its eventive counterpart (26).

(27) #I bala ine / itan sçeðon klotsi- men- i. the.nom ball.nom be.3sg be.pst.3sg almost $\sqrt{\text{KICK}}$ PTCP F.Nom

Note that the impossibility of (27) cannot be reduced solely to the more general difficulty associated with interpreting stative passives of activities. Activity stative passives, odd when uttered out of the blue, improve considerably when embedded in a so-called 'job is done' context such as (28) (cf. Kratzer 2001: p. 11, Alexiadou et al. 2015: p. 153); the type of context in (28) due to David Embick):

- (28) [Our job in the football factory is to test the durability of all newly produced footballs by kicking them.]
 - I bales ine klotsi- menes, pame na fiyume. the.nom.pl ball.nom.pl be.3pl $\sqrt{\text{KICK}}$ ptcp go.1pl comp leave.1pl

'The balls are kicked, let's go home.'

The 'job is done' context, however, does not serve to repair (27), as shown in (29). The deviance of (27) is thus not reducible solely to the difficulty of forming a good activity stative passive; rather, the culprit must (also) be the unavailability of a counterfactual reading, the only type of reading otherwise possible with activities in stative passives.

- (29) [*The speaker recounts their early departure from the football factory today:*]
 - #I teleftees bales itan sçeðon klotsi- menes, ala the.NOM.PL last.NOM.PL ball.NOM.PL be.PST.3PL almost √KICK PTCP but vareθikame ke fiyame.
 become.bored.PST.1PL and leave.PST.1PL

'The last balls were almost kicked, but we got bored and left.'

2.2.3 A COUNTERFACTUAL MODIFIER

A crucial final piece of evidence demonstrating that stative and eventive passives do not behave on a par with respect to approximative modification comes from the language's other approximative modifier. The adverbial *para-liyo* (literally but.for-little) is purely counterfactual: as shown in (30) it never licenses the scalar reading in active transitives and eventive passives.

- (30) a. O Janis paraliyo efaje to milo.
 the.noм John.noм very.nearly eat.pst.3sg the.ACC apple.ACC
 'John very nearly ate the apple.' ✓ counterfactual ✗scalar
 - b. To milo paraliyo fayoθike apo to Jani. the.Nom apple.Nom very.nearly eat.NACT.PST.3SG from the John 'The apple was very nearly eaten by John.' ✓ counterfactual ✗ scalar

This modifier thus provides a generalized version of the case of activity statives just noted, that is, a case where we eliminate in the baseline one of the two readings of *sçeðon* available with the eventive but not the stative passive. Just as in the case of activity statives, we expect *paraliyo*-modified stative passives to be odd, since this modifier is only capable of yielding a counterfactual reading, but this is precisely the reading that we have found to be impossible with stative passives elsewhere. And indeed, just as in the case of activity statives, this prediction is borne out:

(31) #To milo ine / itan paraliyo fayo- men- o. the.nom apple.nom be.3sg be.pst.3sg very.nearly $\sqrt{\text{EAT}}$ PTCP N 'The apple is very nearly eaten.'

Note that (31) uses an accomplishment, which otherwise forms perfect target states; the deviance of (31) is thus entirely due to the impossibility of counterfactual modification in the stative passive.

2.3 EXPLAINING THE CONTRAST

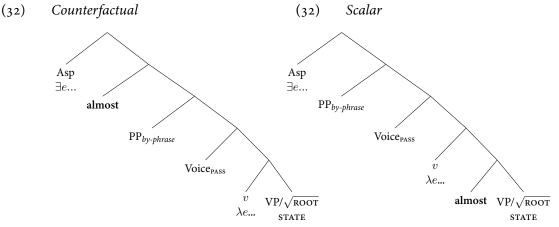
It is sensible to treat the *almost* ambiguity as structural: in particular, following Rapp and von Stechow (1999), the two readings of approximatives can be taken to correspond to two distinct attachment sites for this type of modifier, yielding distinct interpretations.

For concreteness, we can describe the denotation of the approximative in informal terms that capture a popular semantics for such elements due to Sadock (1981): a modifier like *almost* applied to some proposition P entails that P is true in some possible world very similar to the world of evaluation. I shy away from committing to a particular implementation of this general approach, and thus illustrate the ambiguity in informal terms immediately below. This is done partly for reasons of brevity and partly in the interest of sidestepping disagreements on the precise semantics for *almost* that, though important, are orthogonal to the point made here (see Horn 2011 for one overview). Simply put, what is of interest here is the different behavior of *almost* in eventive versus stative passives, not the nature of *almost* itself.

What is crucial is that, following Rapp and von Stechow (1999), *almost* will yield different results when attaching to an event compared to a state. Attached to an event, the modifier will assert effectively that it was almost the case that the event occured; attached to a state caused by an (instantiated) event, *almost* will assert that the event brought it about that the state almost obtained.

From this perspective, consider the following two abstract structures, llustrating informally how each reading can be derived when an approximative modifier combines with the structure of an eventive passive. In (32), *almost* attaches above the eventive core of the structure, but presumably below the level where the event variable is closed off. This type of structure will yield the type of denotation whereby the modifier has access to the event, thus eventually signifying the set of events where it was almost the case that the denotation of the eventive passive came about. Compare this state of affairs to (32), where the attachment site of the modifier is considerably lower: the idea in this case is that *almost* can attach below the level where the event variable is introduced, such that the resulting denotation will pick out the set of relevant events initiated by the *by*-phrase that almost culminated in bringing about a state of the relevant type. What is crucial here is not so much the exact

projections to which *almost* is taken to attach; rather what matters is the location of this modifier relative to the event variable.



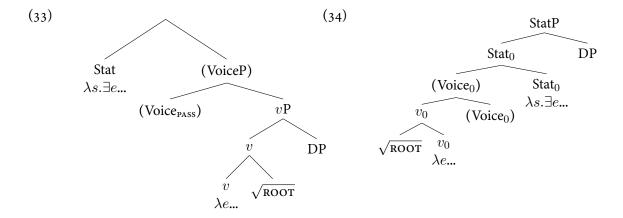
 \approx 'it was almost the case that PP brought it about that VP'

 \approx 'PP brought it about that almost VP'

Now, consider the behavior of *almost* in the stative passive, as predicted by each of the two analyses thereof under consideration here. Unlike the eventive passive, the stative passive has, on any conceivable analysis, a high stative component alongside its eventive core (let us ignore the VP/Root-level state here). The difference between the Layering and complex analyses is with respect to that eventive core: on Layering analyses, this consists of (at least) a full-fledged vP, one presumably capable of being modified. On the complex head analysis, by contrast, the structure has different properties: there is no unambiguously phrasal vP projection capable of hosting vP modifiers.

The reasoning of the argument now becomes clear: if the stative passive is like the eventive passive in possessing phrasal verbal structure, then *almost* should, all things being equal, be able to attach there. In (33), the relevant verbal projection is, as it happens, the projection where eventivity is introduced: it is thus unclear why, in a structure like (33), almost cannot modify a verbal projection with an open event variable, much like it does in (32), to derive the counterfactual reading.

Compare now the complex head structure. If no phrasal structure is possible below the stativizer, then *almost* has no event-related projection to attach to: the first phrasal projection is in fact one whose minimal projection has existentially closed the event, such that a Stat-level *almost* will only have access to the higher stative eventuality. In other words, only the complex head approach seems capable of deriving all and only the interpretations that we find, namely, just the scalar one.



3 THE PROVENANCE OF THE SOLE ARGUMENT

Greek stative and eventive passives dissociate in a further respect, namely, in the provenance of the core argument: in the stative passive, this nominal originates in the stative portion of the structure, bearing no structural relation to the verbal substructure.

Two quite distinct phenomena point to this conclusion. Firstly, new evidence from idioms suggests a basic structural difference between stative and eventive passives such that the core argument does not form a constituent with the verbal substructure of the stative passive. Secondly, new considerations from a particular domain, concerning ingestive Roots, corroborate the conclusions from idioms and suggest that the structural difference is accompanied by a basic interpretive difference: the core argument not only originates externally to the verbal substructure, but is also interpreted independently from the event, being thematically integrated instead only to the stative portion of the denotation of the stative passive.

3.1 IDIOMS

A first positional diagnostic comes from passivizable idioms. This diagnostic represents a somewhat restricted corner of the overall empirical picture, insofar as the language's reliable passivizable idioms are few and far between; nonetheless, those passivizable idioms that we do find offer a clear empirical picture, and the judgments here, too, are extremely robust.

Consider firstly the baseline example in (35); as the translations indicate, the example furnishes two quite distinct interpretations. The literal, compositional meaning is a quite bizarre one, to the extent that it is available in the first place (see below); alongside it, we find the idiomatic reading that a speaker uttering (35) would usually intend.

(35) I θorivi mu exun kopsi ta ipata. the noises 1SG.GEN have.3PL cut.PFV the.ACC.PL livers.ACC.PL Literal: 'The noises have cut the livers to my detriment.'

Idiomatic: 'The noises have scared me to death.'

(36) is an additional example clarifying that the fixed part of the idiom is made up of the verb 'cut' and the nominal 'the livers', with the dative maleficiary and (what is in this case) the nominative DP not forming part of the idiom.

(36) I teleftea skini tis tenias mas ekopse ta the.nom last.nom scene.nom the.gen movie.gen 1pl.gen cut.pst.3sg the.acc.pl ipata.
livers.acc.pl
'The last scene of the movie scared us to death.'

It is worth noting at the outset that (35)-(36) are strongly idiomatic in a very straightforward sense. The archaic noun *ipata* 'livers' does not, in fact, form part of many speakers' vocabularies outside of this idiom, the everyday word for 'liver' in Modern Greek being distinct; even for the speakers who are aware of the meaning of *ipata* outside the idiom, it is very plausibly part of a learned stratum of the vocabulary (typically found, for example, in medical textbooks). This fact has a positive upshot for the diagnostic utility of this idiom, insofar as, if the idiom turns out to be unavailable in some particular configuration, this effect is particularly pronounced, a non-idiomatic reading generally being hard to access due to the restricted distribution of *ipata*.

Note now that the idiom survives in the eventive passive, as shown in (37). But things change in the stative passive: insofar as (38) is interpretable, it can bear only the bizarre literal interpretation which, as just mentioned, is in fact not readily available for many speakers.

- (37) Mu exun kopi ta ipata apo tus θ orivus. 1SG.GEN have.3PL cut.PASS.PFV the livers from the noises 'I have been scared to death by the noises.'
- (38) #Mu ine ko- mena ta ipata (apo tus θorivus). 1SG.GEN be.3PL $\sqrt{\text{CUT}}$ PTCP the livers from the noises Intended: 'I am scared to death (by the noises).'

The language's second reliable passivizable idiom behaves similarly. In (39), we observe that 'to roast the fish on one's lips' can be interpreted to refer to the act of tormenting someone; this idiomatic reading is as accessible in the active as it is in the eventive passive.⁶ It disappears, however, in the stative (40).⁷

⁶For one of my consultants, (39b) is not clearly well-formed; but the same consultant nonetheless notes that (40) is worse than (39b).

⁷Note that the ungrammaticality of (38) and (40) cannot be easily attributed to incompatibility between the structure of the stative passive and the dative that denotes the maleficiary in these idioms. Datives involved in body-part possession, such as those in the idioms discussed here, do otherwise appear in the stative passive:

Mu ine pes- meno to iθiko.
 15G.GEN be.35G fall PTCP the.NOM morale.NOM
 'My morale is low.'

- (39) a. Mu epsise to psari sta xili.

 1SG.GEN roast.PST.3SG the fish on the lips
 'S/he tormented me' (lit. 'S/he roasted the fish on my lips.')
 - b. Mu exi psiθi to psari sta xili.

 1SG.GEN have.3SG roast.PASS.PFV the fish on the lips

 'I have been tormented.'
- (40) #Mu ine psi- meno to psari sta xili. 1SG be.3SG $\sqrt{\text{ROAST}}$ PTCP the fish on the lips Intended: 'I am in a tormented state.'

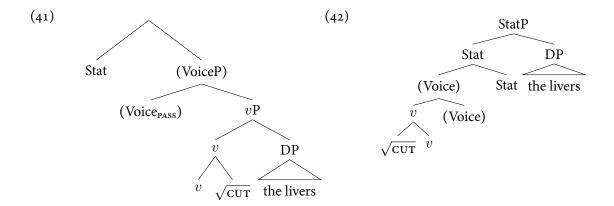
Here, I take the idiom facts to provide what is effectively a constituency diagnostic, one that militates against the presence of a phrasal $v{\rm P}$ in Greek stative passives. The argument presupposes is the view that idiomatic interpretations target parts of the structure local to each other, regardless of whether the relevant notion of locality is defined in terms of traditional constituency or some other notion that in practice largely overlaps with constituency (see e.g. Bruening 2010). On virtually any sensible theory of idiom formation, v and the DP should together comprise a possible host for idioms in the Phrasal Layering structure (41), but not in the complex head structure (42), at least not to the exclusion of the intervening stative material. In the phrasal layering analysis, the two are as local as local can be, but this is far from the case in the complex head analysis.

b.

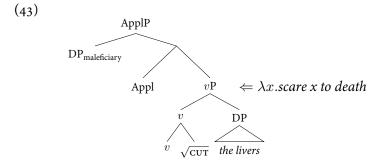
An obvious question concerns the implications of such data for the structure of stative passives. Much could be said in this connection, but, at a minimum, no problem will arise for the complex head analysis if, as I argue below, the core argument of stative passives originates in the stative component of the structure. But this domain clearly deserves more investigation, perhaps by examining against the background of the stative passive the many different datives of Greek (see Michelioudakis 2012: 192ff; Michelioudakis and Kapogianni 2013). Note that, as predicted by the analysis here, *bona fide* indirect objects are out in the stative passive:

⁽ii) a. To yrama *(tu) stalθice tu Joryu. the.nom letter.nom 3sg.m.gen send.nact.pst.3sg the.gen George.gen 'The letter was sent to George.'

^{*}To yrama (tu) ine stalmeno tu Joryu.
the.nom letter.nom 3sg.m.gen send.nact.pst.3sg be.3sg send.ptcp.n the.gen George.gen
'The letter is sent to George.'



Against this background, consider the fact that we must allow the passivizable idioms of Greek to target vPs: schematically, the basic situation must be as in (43), where, purely for the sake of exposition, I show the idiom as a denotation optionally 'inserted' into the relevant point in the structure. The idea in (43) is that, if 'insertion' of this kind occurs at the (phrasal, transitive) vP level, it is correctly predicted to be insensitive to higher portions thereof, and in particular to the presence/absence or properties of Voice; ergo, it should be able to obtain in both transitives and stative passives, as indeed it does.



The reasoning of the diagnostic now becomes clear. If the stative passive contained a phrasal vP, as it does on the layering analysis, it is not clear why idioms cannot arise in the stative. If, by contrast, the stative simply does not furnish the structure into which the idiom can be inserted – if, in particular, the 'object' DP and v are in fact not local to each other at all – we correctly derive this divergence between eventive and stative passives.

This is a first piece of evidence that the sole argument of stative passives originates in a distinct position from the theme of transitives/eventive passives.

3.2 Asymmetries in Voice reversals: Ingestives

Further evidence in favor of a 'small' analysis of Greek stative passives comes from a previously un(der)discussed but surprisingly rich domain, concerning the behavior of ingestive verbs under

stativization. The facts from this domain turn out to be particularly informative not only as to the position in which the sole argument of stative passives originates, but also for the way in which this argument is thematically interpreted: ingestives allow us to see that the interpretation of the sole argument of the stative passive is thematically more flexible than that of the theme of the passive, in a way that militates against associating this element with the verbal structure.

Though the empirical picture discussed here has, I believe, not been noticed before in its entirety, some crucial observations have already been made in Anagnostopoulou (2001) with specific reference to Greek; cf. Arad 1998 and Haspelmath 1994: p. 161 for related facts from other languages. Though I limit my attention to the behavior of ingestive verbs in stative passives here, the patterns discussed are likely part of a much broader cross-linguistic picture suggesting that the argument structure of ingestive verbs has particular properties; see e.g. Bhatt and Pancheva 2017; Krejci 2012; Newman 2009; Saksena 1980.⁸

3.2.1 THE PATTERN

Ordinarily, the sole argument of stative passives seems to share its thematic properties with the direct object of transitives, and the surface subject of eventive passives, in being read as the theme of the corresponding event. This fact has been true of every stative passive we have encountered thus far; (44) illustrates with one more set of examples.

- (44) a. Kliðosa tin porta apo mesa. lock.pst.1sg the.acc door.acc from inside 'I locked the door from the inside.'
 - b. I porta eçi kliðoθi apo mesa. the.nom door.nom have.3sG lock.**NACT**.PFV from inside 'The door has been locked from the inside.'
 - c. I porta ine kliðo-men-i apo mesa. the.nom door.nom be.3sG lock PTCP F.nom from inside 'The door is locked from the inside.'

But a restricted class of verbs constitutes an exception to this generalization. The basic pattern can be illustrated easily with reference to $\sqrt{\text{EAT}}$. Stative passives formed from this Root can license the expected interpretation of their sole argument, whereby this element is read as the theme of the associated event; (45) illustrates this possibility by embedding the stative in a context where Mary has undergone an eating event. But stative passives formed on the basis of $\sqrt{\text{EAT}}$ license a second, exceptional interpretation, one where the sole argument is (in some sense) the *agent* of the corresponding event. Thus, the Greek counterpart of *Mary is eaten* is felicitous not just in contexts like the one in (45), but also in situations where Mary is understood to have done the eating: (46)

⁸Ingestive verbs behave in a special way with respect to both stativization and (a type of) causativization: see e.g. Hindi in Bhatt and Pancheva 2017; Saksena 1980; Chichewa in Baker 1988: p. 461; Greek in Anagnostopoulou (2001); and cf. the papers in Newman 2009. I leave the intriguing links here for future work.

illustrates by showing that both the stative passive and the perfect are acceptable descriptions of the relevant event.

- (45) [The vicious human-eating plant consumes Mary.]
 - I Maria ine fayo- men- i. the.nom Mary.nom be.3SG eat PTCP F.NOM

'Mary is eaten.'

- (46) Q: I'm setting the table is Mary joining us?
 - A1: Oçi, i Maria ine fayo- men- i. no the.nom Mary.nom be.3sG eat PTCP F.nom 'No – Mary has eaten.'
 - A2: Oçi, i Maria eçi fai. no the.NOM Mary.NOM have.3SG eat.PFV 'No – Mary has eaten.'

(47) illustrates the full set of verbs patterning in the relevant way: stative passives formed from $\sqrt{\text{EAT}}$, $\sqrt{\text{DRINK}}$, $\sqrt{\text{STUDY}}$ and $\sqrt{\text{LEARN}}$ can all license the relevant 'special' interpretation, such that in (47), *Mary* can in principle be read as either the theme or the agent of the relevant events.

(47) I Maria ine { fayo- , pço- , ðiavaz- , ma
$$\theta$$
i- } men- i. the.nom Mary.nom be.3sg $\sqrt{\text{EAT}}$ $\sqrt{\text{DRINK}}$ $\sqrt{\text{STUDY}}$ $\sqrt{\text{LEARN}}$ PTCP NOM.F

It bears emphasizing just how unexpected this pattern is given what we have seen so far: this type of interpretation is simply completely impossible to obtain in what seems to be the normal case in stative passives. It also bears emphasizing that this interpretation is not enabled by context alone, but must be grammatically encoded somehow. (48) makes both points by illustrating that a noningestive Root like \sqrt{PAY} cannot license the special interpretation even in a context where this would be highly plausible – any other non-ingestive Root would serve to make the same point. (49) clarifies

- (i) a. Exo fai, ala ðen exo xortasi.

 have.1sg eat.pfv but Neg have.1sg become.full.pfv
 'I've eaten, but I'm not full.'
 - b. Ime fayo- menos, #ala ðen exo xortasi.
 be.1sg Veat PTCP but neg have.1sg become.full.pfv
 'I'm eaten, but I'm not full.'
- (ii) a. I'm done eating. (Biggs 2021)
 b. I'm done my homework. (Fruehwald & Myler 2015)

⁹An important part of the empirical picture here is that the relevant formations have clear aspectual properties, to the effect that the event in question must be read as telic/completed: we thus find (i) (this is also cross-linguistically pervasive: thus Engl. *drunk* and Italian *bevuti* mean 'inebriated', not just 'having drunk'. Cf. in this respect the *done*-statives of English (ii).

for completeness that, as expected, the stative is just fine in a context that favors the subject-as-theme reading that statives always allow.

- (48) [Splitting the check at the restaurant, our group discovers that Mary has already paid for her bit.]
 - Q: Does Mary need to put her card down?
 - A1: #Oçi, i Maria ine pliro- men- i. no the.nom Mary.nom be.3sg pay PTCP F.nom Intended: 'No – Mary has paid.'
 - A2: Oçi, i Maria eçi plirosi. no the.nom Mary.nom have.3sg pay.PFV 'No – Mary has paid.'
- (49) Q: Do we still need to pay Mary this month?
 - A1: Oçi, i Maria ine pliro- men- i. no the.nom Mary.nom be.3sg pay PTCP F.nom Intended: 'No – Mary is paid.'
 - A2: Oçi, i Maria eçi pliroθi. no the.nom Mary.nom have.3sg pay.**NACT**.PFV 'No – Mary has been paid.'

The verbs participating in this alternation are all (literally or metaphorically) *ingestive*, denoting the consumption of a concrete or abstract entity. This type of pattern seems to be cross-linguistically pervasive with ingestives: see English in (50), ¹⁰ Hebrew in (51), and Italian in (52).

- (50) Mary is drunk / learnèd / well-read.
- (51) a. Ha tapux haya axul. the apple be.PST.3SG eat.PTCP 'The apple was in an eaten state.'
 - b. Lazet la derex axulim ve stuyim. get under way eat.ptcp.pl and drink.ptcp.pl 'Set off having eaten and drunk enough.'

(Arad 1998: ex. (18))

Besides not belonging to the class of ingestives that shows cross-linguistically stable properties (see footnote 8), the English facts have other properties not shared by the Greek participles under discussion here; for instance, they are systematically unacceptable in predicative position.

(ii) #The criminal is escaped/confessed.

¹⁰English examples like those in (i) are sometimes discussed in the literature on English stative passives; see e.g. Bresnan 1995, Embick 2004a: fn. 6, McIntyre 2013: fn. 2, Bruening 2014: appendix 2.

⁽i) a. An escaped convict.

b. A confessed criminal.

(52) Venite già mangiati e bevuti.

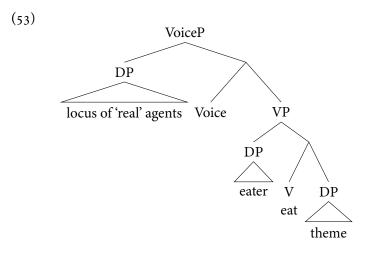
come.IMP.2PL already eat.PTCP.PL and drink.PTCP.PL

'Come over after having eaten and drunk.' (Arad

(Arad 1998: ex. (14b))

3.2.2 DERIVING THE PATTERN

Aspects of the interesting behavior of ingestives in Greek have been noted in Anagnostopoulou (2001), which proposes to cast the facts under a 'dependent role' account: the proposal is effectively that the relevant Roots are embedded in a structure involving an intermediate, VP-internal argument, one that can be interpreted as an agent whenever the 'real' agent DP is missing. (53) schematizes.



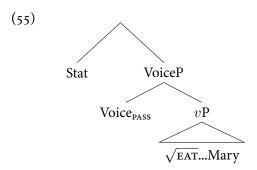
But there exists a crucial observation suggesting that this account will not be sufficient, and enabling a novel insight into the structure of statives in Greek more generally: the 'special' behavior of ingestive Roots, whereby the sole argument can (apparently) be interpreted agentively, arises in the stative passive, but never in the eventive. (54) illustrates: the examples in (54a) are perfectly well-formed, but only license the readings, implausible out of the blue, whereby Mary has been the theme of an eating, studying, or learning event. (54b) clarifies, for completeness, that passives from these Roots are flawless in the right contexts.

- (54) a. #I Maria eçi { fayoθi / ðjavasti / maθefti }.
 the.nom Mary.nom have.3sG eat.pfv.3sG read.pfv.3sG learn.pfv.3sG
 Only reading: 'Mary was eaten/read/learned.'
 - b. To psomi fayoθi vivlio eçi / to eçi the.nom bread.nom have.3sg eat.pfv.3sg the.nom book.nom have.3sg ðjavasti / to mistiko eci maθefti. read.pfv.3sg the.nom secret.nom have.3sg learn.pfv.3sg 'The bread was eaten / the book was read / the secret was found out.'

The overall pattern is thus asymmetrical: 'special' readings of the sole argument in the context of

ingestive Roots are possible only in the stative passive, but never in the eventive passive.

This asymmetry is entirely unexpected on the Phrasal Layering account, and, more generally, on any account where the sole argument of the stative passive originates below the stativizer. To see why, consider the representation in (55). Here, the stative contains the eventive; if the relevant effect involves interpreting *Mary* as an agent, and this interpretation takes place low in the structure, before Stat is merged, then, in (55), we should be able to derive the effect without ever merging Stat, thereby predicting that (54a) should be acceptable.



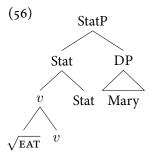
In other words, that the phenomenon is relativized to the stative passive suggests that we must 'know' that the structure is stative before introducing the argument that is exceptionally read as an 'agent'. If this argument originates low, as in (55), there is no way to derive this effect.

Compare now the complex head analysis in (56); here, the crucial aspect of the representation is that Mary is structurally unrelated to v, originating instead in the stativizing projection. Unlike the layering account, (56) manages to furnish, at the very least, the correct conditions for deriving the effect we find: since the argument originates above Stat, it is straightforward to guarantee that the phenomenon targets this configuration, which crucially sets apart the stative from the eventive passive. 11

¹¹Elena Anagnostopoulou (p.c.) conjectures that the structure in (53) might be able to derive the fact that the phenomenon here is relativized only to stative passives without recourse to a structure like (56). The idea would effectively be that, in (53), the 'eater' argument is not a canonical external argument, and thus cannot be targeted by eventive passivization, much like the external argument of experiencer and deponent verbs (see Grestenberger 2018; Zombolou and Alexiadou 2014). This account does not seem tenable, however. Firstly, it owes an explanation for the stative passive facts: given a structure like (53), what guarantees that the 'wrong' argument (i.e. the eater) can be externalized in the stative passive in the first place? Secondly, and relatedly, the parallel with deponents and experiencer verbs is only apparent: if there were a true parallel here, we would expect the effect that obtains with ingestives under stativized verbs to also obtain with stativized deponents and experiencer verbs, and this is not the case:

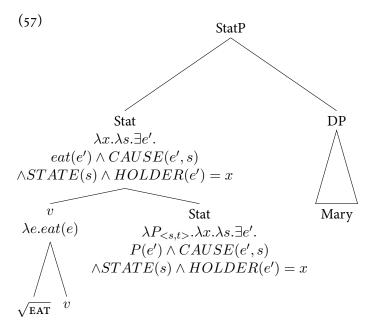
⁽i) I Maria ine katara- men- i. the.nom Mary.nom be.3sg curse PTCP F.Nom 'Mary is cursed'; NOT 'Mary has cursed (someone)'

⁽ii) a. To sçeðio ine skarfiz- men- o. the.nom plan.nom be.3sg think.up ptcp n.nom 'The plan is devised.'



Consider in more detail how the basic pattern, and its asymmetrical distribution, can be derived from (56).

I propose firstly that the crucial structural difference between (55) and (56), concerning the position of *Mary*, correlates with an interpretive difference: *Mary* in (56) is interpreted with respect to the state, not the event. In particular, *Mary* is linked to the state by means of a holder role; this element is not linked directly to the event.



(57) stands between several different views on the structure and thematic interpretation of stative passives. It resembles the conclusions of works on other languages insofar as they take the core argument of stative passives to be fully external (see Horvath and Siloni 2008; Meltzer-Asscher 2011,

b. #O efevretis ine skarfiz- men- os. the.nom inventor.nom be.3sg think.up PTCP M.NOM Intended: 'The inventor has come up (with something).'

2012 for Hebrew; Levin and Rappaport 1986; McIntyre 2013 and, to some extent, Bruening 2014 for English). It differs from these works, however, in taking it that the interpretation of this element is also distinguished from the theme of transitives/eventive passives: in particular, the theme role is not 'passed up' the structure in (57) (which might technically be possible; see e.g. Wood 2023). Closest to the approach in (57) are the analyses of the *done*-statives of English in Biggs (2021), Fruehwald and Myler (2015), where the core argument is both external to the verbal substructure structurally and understood as a state-holder interpretively; the statives analyzed in these works are, of course, different in important ways to the cases at hand here.

Once we countenance the view of thematic interpretation in the stative passive expressed in (57), we have the beginnings of a solution that derives the asymmetry between eventive and stative passives in the domain of ingestives. Whereas the eventive passive involves an instance of strict thematic determination, with the internal argument associated with the theme role, the stative passive affords thematic flexibility, insofar as it links the nominal in question to the role of holder of a state, remaining neutral, in principle, as to what its link is to the associated event. In other words, the core argument of a Greek stative passive is primarily a state-holder, and acquires other roles derivatively; as in Kratzer (1996), I take the role of state-holder assigned to some x to be in principle compatible with the inference that x is responsible for the state's obtaining, but also with construals where x is affected by the state in looser ways. What is needed, then, is some amount of precision on how these two possibilities distribute.

Schematizing the desired outcome, we may posit the meaning postulates in (58). (58a) ensures that holders of event-entailing states will normally be interpreted as themes of the associated event; this much captures the arguably prevailing case in stative passives. (58b) is contextual: it states that, in the context of (some) ingestive Roots, state-holders of event-entailing states may be read agentively instead. The idea is that the meaning postulates compete, with competition regulated by the Elsewhere principle, and that (58b) is optional; as such, (58a) with apply with the vast majority of Roots, and (58b) may, but need not, apply with ingestive Roots.

(58) *Meaning postulates*

a. $\forall x \, \forall e \forall s [event(e) \land CAUSE(e,s) \land STATE(s) \land HOLDER(s) = x] \rightarrow [THEME(e) = x]$

'Interpret the holder of an event-entailing state as the theme of the entailed event.'

b. OR $\forall x \ \forall e \forall s [event(e) \land CAUSE(e,s) \land STATE(s) \land HOLDER(s) = x] \rightarrow$

 $^{^{12}}$ Compare, for instance, the accounts in Meltzer-Asscher (2011) and Bruening (2014). Though differing on a few important fronts, both of these works postulate lambda abstraction for the theme role: for Meltzer-Asscher, this operation is part of the lexical rule of adjectival passive formation, while for Bruening it is effected by operator movement from the complement of v in the stative passive. Neither approach seems well-positioned to accommodate the thematic flexibility we observe with stativized ingestives in Greek. Note also that the analysis in Bruening (2014) predicts that evidence for A' movement within the stative passive should be found; this does not immediately seem to be the case.

⁽i) *The papers are filed without examining.

¹³In fact, Biggs (2021) takes the state-holder DP to also control a PRO in the lower agent position.

```
[AGENT(e) = x] in the context of \{\sqrt{\text{EAT}}, \sqrt{\text{LEARN}}, ...\} 'In the context of \{\sqrt{\text{EAT}}, \sqrt{\text{LEARN}}, ...\}, optionally interpret said entity as an agent.'
```

(58) should thus be understood as an instruction on how to interpret a particular thematic function present from LF onward; more specifically, it is an instruction on how to interpret the function HOLDER. Merely positing (58) does not seem to enrich the inventory of interpretive levels of the theory, insofar as any theory where thematic roles are functions at LF will need to eventually comprise instructions, at a level after LF, that specify how formal relations such as AGENT are to be read more concretely. From this perspective, the claim in (58b) is simply that speakers 'know' to interpret the holders of ingestive-induced states in a special way, at a level of lexical meaning that interacts with, but is fed by, the core grammar. 14

It is important to be precise about what aspect of the informal (58) is central to the discussion here, and what is incidental or beyond our scope. What is essential is that (58) is designed to apply to state-holders; as such, the instructions in (58) are simply not at stake in the eventive passive, where the deep object is unambiguously associated with the theme role. What is truly central here, then, is the idea that the core argument of the stative is thematically distinct from the deep object of the eventive passive, in a way that enables the former's special behavior in the context of ingestive Roots. A theory assigning identical thematic roles to these two elements would be faced with difficulty when it comes to the facts from ingestives, and this is what is crucial here. Beyond this point, we could choose to implement the particulars differently with little loss of insight, it seems.

(58b) raises the natural question of why it is ingestive Roots in particular that enable this special behavior, seemingly widely attested cross-linguistically. Though answering this question in depth is beyond our scope here, it is possible to offer a few instructive remarks, building in part on intuitions

- (i) a. Taisa { to peði / to eyo mu / (?)to fito }. feed.pst.1sg the.acc child.acc the.acc ego.acc 1sg.gen the.acc plant.acc 'I fed the child/my ego/the plant.'
 - b. To peði ine { taismeno / fayomeno }. the.nom child.nom be.3sg feed.ptcp.n.nom eat.ptcp.n.nom 'The child is fed/full.'
 - c. To eyo mu ine { taismeno / #fayomeno }. the.NOM ego.NOM 1SG.GEN be.3SG feed.PTCP.N.NOM eat.PTCP.N.NOM 'My ego is fed/full.'
 - d. To fito ine { taismeno / #fayomeno }. the.nom plant.nom be.3sg feed.ptcp.n.nom eat.ptcp.n.nom 'The plant is fed/full.'
- (ii) To peði /#to eyo mu /#to fito efaje afto pu to the.nom child.nom the.nom ego.nom 1sg.gen the.nom plant.nom eat.pst.3sg dem.acc that 3sg.n.acc taisa. feed.pst.1sg

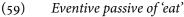
¹⁴Note in this connection that the 'agentive' reading of the core argument of an *eat* stative passive is clearly modulated by world knowledge, (i); cf. (ii).

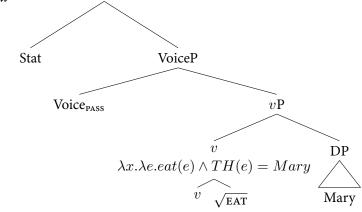
^{&#}x27;The child/my ego/the plant ate what I fed it.'

in the typological literature on ingestives.

Fistly, note that ingestives belong to the category of incremental theme verbs in the terms of Dowty (1991) and subsequent literature on telicity (cf. e.g. Krifka 1998; Tenny 1994): broadly speaking, the theme of an eating event is incrementally involved in the event itself, insofar as the state it is in, from wholeness to non-existence, determines the progression of the event. But ingestive verbs are described in the typological literature as having another noteworthy property, sometimes understood through the label 'affected agent' (e.g. Haspelmath 1994: 161ff; Saksena 1980; Naess 2011; Newman 2009):, in prototypical ingestive events, agents can also be understood as affected, in the sense that ingestion alters the (physical or mental) composition of the ingestor. The intuition in the typological literature on ingestive verbs is thus that their agents may be notionally more 'patient-like' than those of other predicates; ¹⁵ (58b) is one attempt of making this fuzzy notion somewhat more concrete, and, crucially, relativizing it to the corner of the grammar where it obtains in Greek, namely, stative passives.

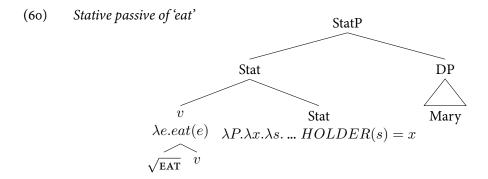
In summary, then, I take the exceptional behavior of ingestive Roots to be one corner of the grammar allowing us to glimpse an important divergence between eventive and stative passives: their core arguments, ostensibly both identifiable as themes, in fact have distinct structural and thematic properties. (59) schematizes.





¹⁵Naess (2011) notes that the 'affectedness' of the agents of ingestive verbs may underpin the cross-linguistically common deployment of verbs like 'eat' in so-called adversative constructions. Greek evidences these usages as well: in (ia), the subject of 'eat' is not read as active in any sense, instead merely receiving various unfortunate actions; this usage of 'eat' is pragmatically adversative insofar as combining it with positively-interpreted actions is distinctly odd (ib).

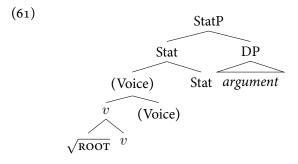
- (i) a. Efaje { ksilo / klotsça / jiuxaisma / vrisimo / ... }. eat.PST.3SG beating.ACC kick.ACC heckling.ACC cursing.ACC 'S/he was beaten up / kicked / heckled / cursed at.'
 - b. #Efaje { çirokrotima / epeno / siŋxaritiria }. eat.PST.3SG applause.ACC praise.ACC congratulations.ACC Intended: 'S/he received an applause/praise/congratulations.'



4 RECAPITULATING THE ANALYSIS: BUILDING AND INTERPRETING THE COMPLEX HEAD

We have seen evidence for two generalizations concerning *-men-* stative passives: their argument originates in a position external to the verbal substructure; and the event entailed by the stative passive cannot be directly modified, such that the only licit type of modification targets the stative eventuality.

In the context of a syntactic theory of word formation, the facts are amenable to an analysis whereby the verbal substructure of the stative passive is not phrasal, and thus fails to host either arguments or adjuncts. This basic analysis is recapitulated in (61).



The goal of this section is to begin to make precise the assumptions necessary for the grammar to countenance (61), as demanded by the Greek data. I accordingly offer here a focussed discussion centered on two specific points: what it means for the analysis in (61) to be 'small' given a particular view of phrase structure; and how the structure is interpreted, building on the discussion in the preceding section.

It is worth noting at the outset that the possibility of objects like that in (61) has been raised only recently; what the properties of such objects are is accordingly a question very much at the frontier of current inquiry, and I cannot do justice to every pertinent issue here. In defending and elucidating structures such as (61) for mixed projections, this paper joins an emerging literature (see esp Benz 2023; Biggs and Embick 2023; Embick 2021a, 2023; Lee 2024; Wood 2023; for related ideas see

Epstein, Kitahara, and Seely 2016; Harley 2005; Mateu 2002; Oda 2022; Piggott and Travis 2013; Tomioka 2006).

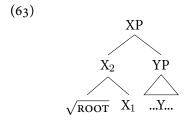
4.1 BUILDING THE SMALLER STRUCTURE

Fundamental to the analysis here is the idea that complex heads can be created by movement-free head-adjunction in the syntax, i.e. by external Merge, in the terms of Chomsky (2001). It is important to be precise on what exactly is entailed by this move from a theoretical perspective, and what questions arise once this move is made.

Take X and Y below to be terminal nodes, and take all terminal nodes to be *heads*. What the approach here requires is that heads can adjoin to each other, and that Roots can attach to heads in a similar manner, such that an object like (62a) can be produced by adjoining a Root to X, and subsequent adjunction of another head Y will produce the object in (62b).



What is not crucial here is the labelling-theoretic status of nodes like X_2 and Y_2 in the representations above: in a framework where labeling is relational, such as Bare Phrase Structure (Chomsky 1995), these would be simultaneously minimal and maximal, the distinction between heads and phrases not being primitive. What *is* crucial concerns representations like (63), where the label-theoretically ambiguous portion of the structure has received an adjunct that is unambiguously phrasal; it is in these situations that the output of the adjunction operation is itself unambiguously phrasal.



That an object like (62b) must be countenanced as a licit output of external Merge is, in my view, the null hypothesis given a system of phrase structure with the properties of that in Chomsky (1994, 1995): simply put, it is not clear, given the absence of a rigid phrase-structural schema, that objects like that in (62b) can be kept out without stipulation. This is of course not so in frameworks assuming a rigid phrase-structural component, which is perhaps why, in work in Government and Binding

theory Chomsky 1981, objects like (62b) were associated solely with the output of the operation Head Movement (see among many others Baker 1985, 1988; Hale and Keyser 1993) and, later, its postsyntactic counterparts (see esp. Embick and Noyer 2001; for recent developments in connection with the broader theory of affixation see e.g. Arregi and Pietraszko 2021; Harizanov and Gribanova 2019; Harley 2013). The claim that objects like (62b) can be derived in the absence of head movement is, of course, far from new in more recent years: the perspective here builds directly on Embick (2021a, 2023), Wood (2023) (cf. the notion of 'direct Merge' in Embick (2004a: 372ff), and the analysis in Bruening 2019), but the fact that external Merge of heads falls out straightforwardly from Bare Phrase Structure has been pointed out quite independently of the domain of argument structure, in works focussed on phrase-structural questions proper; see especially Epstein et al. (2016), Oda (2022) and the references above.

That external-Merge-derived complex heads must be countenanced is, of course, only one side of the larger theoretical question discussed here. The other half comprises the puzzle of how to circumscribe the cases where the system must create such a structure.

As already iterated several times, these considerations play out, in the domain of stative passives, once we consider the introduction of the core argument, and the modification of the stativized event. In particular, the terms 'phrasal' and 'not phrasal' have effectively been used as convenient shorthands for the idea that, whereas the highest projection of v in the eventive passive is unambiguously phrasal, insofar as it takes a phrasal complement DP and potentially at least one adjunct, the same projection in the stative passive is not unambiguously phrasal in this way: the core argument DP does not originate in a verbal projection in the stative passive, and adjunction to the verbal projection is not possible.

What must be derived, then, is the following statement:

(64) Explicandum

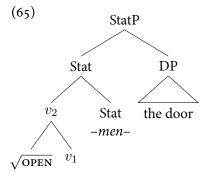
In Greek, unambiguously phrasal structure cannot be created below the stativizing head Stat.

There are different options on how to mechanically implement (64): for instance, in a system where selection is sensitive to the the saturatedness of the selectee (e.g. Bruening 2013), (64) can be implemented by stipulating that Stat selects for a projection of v whose selectional [D] feature has not been saturated. At present, it seems to me that such an analysis, and conceivable alternatives, derives (64) without offering further insight: what an analysis deriving (64) ultimately owes is a unification of (64) with other cases where 'small' structures seem to be called for. Since the properties of such structures are very much an active area of inquiry, I must put the matter to the side here. If the suspicion proves to be correct that (64) forms part of a wider pattern in the syntax of mixed projections, then an explanation considerably deeper than a selection-based approach will have to be sought.

4.2 Interpreting the smaller structure

The interpretation of -men – statives on the complex head approach is fully compositional. Putting to the side the possible inclusion of Voice (on which see section 5.2), a representation like (65) involves

the two basic pieces in (66).



(66) Basic denotations

a.
$$\|v_2\| = \lambda e.open(e)$$

$$\text{b.} \quad \mathbb{\bar{[}} \text{ Stat } \mathbb{\bar{]}} = \lambda P_{< s,t>}.\lambda x.\lambda s. \exists e. P(e) \land CAUSE(e,s) \land STATE(s) \land HOLDER(s) = x$$

(66a) is a denotation according to which v, combined with $\sqrt{\text{OPEN}}$, 16 yields sets of opening events. Note that this is, in a sense, the 'unergative' denotation of v, one that does not introduce a theme role. The structure in (65), where the DP is introduced high, will inevitably guarantee that this denotation of v is chosen, on any sensible view of how v comes to be associated with distinct denotations in unergative versus other structures. If the difference arises solely at LF, with one and the same syntactic object v taking different denotations conditioned by the local presence of an internal argument, then in (65) the non-theme-introducing denotation would have to be chosen; if we instead have distinct syntactic objects v_1 and v_2 , associated in a one-to-one fashion with distinct denotations conditioned by the local presence of an internal argument, then, again, the 'unergative' v will have to be chosen.

(66b) is a denotation that resembles to a large extent the basic denotation of (target) state-deriving elements in Kratzer (2001), or, more precisely, a delexicalized version thereof. On this approach, Stat takes a predicate of events, existentially closes the associate event, introduces a state variable, and asserts that a CAUSE relation holds between these two eventualities. This much is more or less a standard treatment of stativizers; note that, as discussed in section 2.3, existential closure of the event at the Stat level will correctly preclude higher modifiers from accessing the event variable.

(66b) has the additional property that it introduces a state-holder role, and an associated entity variable. As discussed in section 3.2.2, the association of a state-related holder role to the core argument DP will correctly leave open the possibility that this DP not be interpreted as a theme of the event in the narrow sense. Recall in this connection that the facts from idiom formation discussed in section 3.1 independently support positioning the DP that saturates the holder role apart from the verbal substructure.

 $^{^{16}}$ I leave open the details of how the Root composes with v; the analysis developed here is compatible with different views on this issue.

4.3 THEMATIC CONSIDERATIONS

Before concluding this section, it is important to clarify certain aspects of the stance taken here on thematic interpretation in the Greek stative passive. As we will see, the issues that arise here relate both to specific questions in the domain of stative passives proper – such as the question of circumscribing the distribution of stative passivization – and to much broader architectural issues in the decompositional framework assumed here, such as the question of how Roots are distributed across functional environments.

The perspective taken here on thematic interpretation in the stative passive both builds on and breaks with previous work on the issue. The analysis above upholds a lasting insight according to which stative passives lack what Levin and Rappaport (1986) dub *thematic constancy*: the interpretation of the DP of which a stative passive is predicated cannot be consistently characterized by reference to a specific thematic role label (cp. e.g. Bresnan 1982; Williams 1981). The analysis here dispenses with thematic constancy in a way that marks a departure from much previous work, namely by eschewing a direct relation between the core argument and the stativized event altogether: on the analysis here, the core argument is integrated into the event only derivatively, through meaning postulates whose application can be contextually modulated. We have seen this view affords the amount of thematic flexibility required to account for the peculiar behavior of ingestive verbs, a striking pattern not readily accounted for in accounts linking the core argument directly to the event, be they lexical (e.g. Levin & Rappaport 1986) or syntactic (e.g. Alexiadou et al. 2015; Bruening 2014; Embick 2004a).

It may initially seem as if this account runs the risk of overgeneration when it comes to circumscribing the range of 'verbs' capable of yielding good stative passives. Consider, for instance, the observations that together seemingly suggest that unergative verbs fail to form stative passives in (67) (see e.g. Bresnan 1982; Levin & Rappaport 1986).

- (67) a. #Mary is run.
 - b. #Mary is laughed.
 - c. #Mary is danced.

On the account developed here, nothing prevents examples such as (67) from being syntactically generated: since Mary is, on this account, fully external to the verbal projection, nothing prevents the system from building a (small) verbal substructure on the basis of e.g. \sqrt{RUN} , with a stative superstructure introducing Mary on top. The interpretation would derive Mary as the holder of a state resulting from a running event; the only possible source for the ill-formedness of (67a), then, would be conditions on the interpretation of such a state, conditions that are (presumably) not syntactic in any narrow sense.

This is arguably a welcome result. The paradigm in (67) is seemingly less clearly related to the fact that the relevant Roots typically form unergatives, forming instead a broader pattern concerning what counts as an admissible resultant state (see e.g. McIntyre 2013).

Consider firstly the fact that Root specificity is not at issue; any account that stipulates, one way or another, that stative passives involving Roots such as $\sqrt{\text{RUN}}$ are systematically ungrammatical is

on the wrong track. Such stative passives are, in fact, readily admissible as long as a clear result state is provided. In English, this is often accomplished by resultative predicates and particles:

- (68) a. The soles of Mary's shoes are run thin. (Embick 2023: p. 16)
 - b. Mary is (all) laughed **out**.
 - c. Mary is (all) danced out.

Resultative particles/predicates effectively add a new eventuality creating a good target state for Roots that otherwise lack them. Crucially, this effect is orthogonal to the fact that such Roots, being overhwelmingly activity-denoting and thus lacking good target states without support, normally form unergatives: the same effect can obtain with unaccusative-forming Roots (see McIntyre 2013: 33ff).

We thus consider it a welcome result that the present analysis does not treat stative passives of unergative-forming Roots as necessarily syntactically ill-formed across the board. This discussion does not, of course, exhaust the issue of circumscribing the distribution of stative passivization; a remaining question that deserves particular attention in future work concerns the range of arguments of which a stative passive can be predicated. An influential discussion here emanates from Levin and Rappaport's (1986) *Sole Complement Generalization*, taken up in subsequent work (see e.g. Embick 2004a); as the status of the relevant generalizations has not investigated closely for Greek, the language of focus in this paper, I put the issue to the side here.

5 AGAINST ALTERNATIVES

Two kinds of alternatives to components of the analysis presented in the previous section merit close consideration. The first concerns the question of whether the agent-introducing head Voice forms part of the verbal substructure of the Greek stative passive. The second concerns the possibility of recognizing two distinct structures for *-men-* statives, in a way that structurally reifies the target/resultant state distinction of Kratzer (2001), Parsons (1990).

I discuss each possibility in turn here.

5.1 Two structures?

Until now, the discussion of Greek stative passives has proceeded on the tacit assumption that participles in *-men-* form a homogeneous category. But it has previously been proposed that this is not the case: indeed, the proposals in Anagnostopoulou (2003) and subsequent work (see especially Alexiadou and Anagnostopoulou 2008; Alexiadou et al. 2015) incorporate the suggestion that there exist two different structures for *-men-* statives in Greek. If this suggestion turns out to be on the right track, then the purported structural ambiguity ought to be taken seriously when deploying diagnostics on the structure and interpretation of participles. Here, I argue that, in fact, there is little reason to posit a structural ambiguity of this type for Greek.

The approach in Anagnostopoulou (2003) and subsequent work involves two steps. The first step involves inheriting from Kratzer (2001) the interpretive distinction between *target* and *resultant*

states. The second step is to hard-code these readings into the syntax, by means of distinct structural correlates for each interpretation. I argue here that, on closer investigation, neither step is warranted. In particular, the distinction posed by Kratzer need not be treated by means of positing a rigid boundary between distinct interpretations in the first place; and there is thus little motivation for deriving each reading from a distinct syntax.

5.1.1 THE REASONING

The distinction between target and resultant states forms the backbone of the influential discussion in Kratzer (2001). It finds its roots in Parsons (1990):

'If I throw a ball onto the roof, the target state of this event is the ball's being on the roof, a state that may or may not last for a long time. What I am calling the Resultant-state is different; it is the state of my having thrown the ball onto the roof, and it is a state that cannot cease holding at some later time.'

(Parsons 1990: p. 235)

Kratzer proposes to implement Parsons' distinction between two kinds of states by positing two separate stative denotations, each associated with a different stativizing morpheme, as shown in (69):

(69) Kratzer's denotations

a.
$$[\![\operatorname{Stat}_1]\!] = \lambda P.\lambda s. \exists e. P(s)(e)$$
 target state
b. $[\![\operatorname{Stat}_2]\!] = \lambda P.\lambda t. \exists e. P(e) \wedge \tau(e) \leq t$ resultant state

(69a) is effectively a kind of resultative: combined with some P, it will yield a set of states resulting from prior events. (69b) is different: it will produce a predicate of times, one that will be true iff the state-holder underwent the relevant event at some point in the past.¹⁷

Kratzer's discussion is focussed on showing that that these two readings can be disentangled in German. Some attention is devoted to the behavior of the adverbial *immer noch* still, which Kratzer takes it can tease apart the two types of states (cf. Nedjalkov and Jaxontov 1988). This adverbial seems sensitive to the reversibility of a given state: Kratzer's reasoning is based on the assumption that target states are in principle reversible, whereas resultant states are not, insofar as they amount, by definition, to states that hold forever after an event has taken place. Thus, the acceptability of

¹⁷Kratzer (2001: p. 12), building on Parsons, emphasises that resultant states hold 'forever after' an event has taken place. Clearly, this notion must be relativized to particular time points: it must be the case that the resultant state of the dog being walked at noon today is a state of having been walked at noon today, not merely one of having been walked. If it were the state of having been walked that held forever, it would be contradictory to assert, the following day, that the dog has not been walked yet.

¹⁸Kratzer's diagnostic endeavor proceeds in concert with the development of several proposals not central here; these include, for instance, the proposal that only some participles are derived syntactically; the idea that, in turn, certain stative denotations can be hard-coded into the meaning of particular Roots; and the idea that, when the denotations in (69) are combined with verbs structurally, verbs that form target state passives are type-theoretically different from verbs that form resultant state passives (see Baglini 2012: p. 36). In the main text, I abstract away from these ancillary assumptions, focusing instead on the patterns that are argued to follow from the distinction in (69), and which in turn have motivated the extension of this distinction to Greek.

immer noch in (70a) indicates that the participle in this example is compatible with a target state reading; in (70b), on the other hand, the oddness induced by inclusion of the adverbial is taken to suggest that the participle *getrocknet* describes a resultant state.¹⁹

- (70) a. Die Reifen sind (immer noch) aufgepumpt. the.NOM.PL tire.NOM.PL be.3PL always more pump.up.PTCP 'The tires are (still) pumped up.'
 - b. Die Wäsche ist (#immer noch) getrocknet.
 the.NOM laundry.NOM be.3SG always more dry.PTCP
 'The laundry is (still) dried.' (Kratzer 2001: pp. 1–2)

In the influential discussion in Anagnostopoulou (2003) and subsequent work, this basic proposal from Kratzer is extended to Greek as follows. Firstly, it is observed that Greek –*men*– statives seem to be ambiguous between target and resultant states, insofar as the adverbial *akoma* 'still' can be observed to be differentially available across examples:

- (71) a. Ta lastixa ine (akoma) fusko- mena. the.nom.pl tire.nom.pl be.3pl still $\sqrt{\text{INFLATE}}$ PTCP 'The tires are (still) inflated.'
 - b. Ta ruxa ine (#akoma) steγno- mena.
 the.NOM.PL clothes.NOM.PL be.3PL still √DRY PTCP
 'The clothes are (still) dried.' (Alexiadou and Anagnostopoulou 2008: p. 36; judgments from the original)

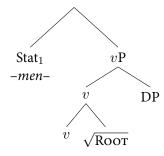
Then, Greek is argued to evidence the existence of a structural basis for the purported ambiguity between target and resultant states. The crucial examples here are of the type in (72): they seem to suggest that the presence of an agent-oriented modifier makes *akoma* deviant, and that this effect obtains across the board, i.e. both with Roots that otherwise yield good target states (like *inflated*) and with ones that do not (like *dried*).

- (72) a. Ta lastixa ine (#akoma) fusko- mena apo ti Maria. the.nom.pl tire.nom.pl be.3pl still \(\sqrt{Inflate} \) ptcp from the Mary 'The tires are (still) inflated by Mary.' (Alexiadou & Müller 2008: ex. (24a))
 - b. Ta ruxa ine (#akoma) steyno- mena me to sesuar. the.nom.pl clothes.nom.pl be.3pl still \sqrt{dry} ptcp with the blowdryer 'The clothes are (still) dried with the blowdryer.'

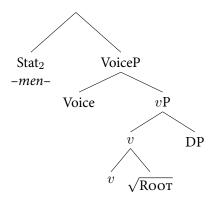
These facts are thus taken to suggest a one-to-one mapping between two seemingly unrelated dimensions, namely the target/resultant state distinction and the presence/absence of Voice, where agent-oriented modifiers are hosted. The resulting analysis is shown in (73).

¹⁹Kratzer (2001: p. 3) in fact seems to take the adverbial as a one-way diagnostic, arguing that, in some cases, failure to be modified by *immer noch* may be due to independent reasons related to lexical semantics (or, in fact, world knowledge). See main text below.

(73) a. Target state -men-



b. *Resultant state –men–*



5.1.2 AGAINST THE STRUCTURAL AMBIGUITY ACCOUNT

Let us summarize the reasoning that has led to the structural ambiguity account illustrated in (73). In (74), this reasoning is presented broken down into its component parts.

- (74) a. There exists a rigid interpretive distinction between target and resultant states.
 - b. This distinction is diagnosable by the behavior of modifiers sensitive to reversibility, like *still*.
 - c. In Greek, examples where a stative passive is modified both by *akoma* 'still' and an agent-oriented modifier are ungrammatical.
 - d. *Ergo*, the presence/absence of Voice maps onto the target/resultant state distinction.

I argue here that none of (74a-d) are evidenced by the facts in Greek.

Let us begin with (74a), the assumption that the target/resultant state distinction corresponds to a genuine interpretive ambiguity, to be treated by means of denotations as rigidly distinct as those in (69). It seems reasonable to treat (69) with some suspicion to begin with: it treats the two stativizers as two type-theoretically very different entities, which in turn need to combine with type-theoretically distinct verbs (see footnote 18). To the extent that the two meanings are judged to be closely related from a descriptive standpoint, and insofar as they will very often entail each other, (69) may give the initial impression of too inflexible a solution (see also Biggs and Embick 2023 on this point). Note, incidentally, that a Kratzer-style account is essentially one of homophony, and furnishes the expectation that the two stativizers should, in principle, be able to receive different realizations. I know of no language where this appears to be the case. Absence of evidence need not, of course, be taken as evidence of absence; but, at a minimum, questions should arise from the fact that even languages like Greek, which otherwise do assign distinct realizations to stativizers that can also be shown to be interpretively distinct, do not do the same for the purported ambiguity between target and resultant states.

Interpretively oriented literature following Kratzer (2001) has recognized as issues both of these

points, namely, the less-than-intuitive rigidity of (69) and the homophony problem (see e.g. Baglini 2012; Baglini and Kennedy 2019; Gehrke 2015; Maienborn 2009; see also Biggs and Embick 2023; Rapp 1996). Importantly, this literature also seems to have converged on the idea that the target/resultant state distinction can be recast without positing a sharp boundary between two wholly unrelated denotations, as Kratzer does. I cannot do justice to this literature here, and individual proposals differ from each other; what matters here is merely that it is far from clear that the facts necessitate positing a sharp distinction in the semantics, and the interpretive basis for a structural ambiguity of the kind posited in previous work on Greek may thus well be absent.²⁰

(74b), the assumption that adverbs like *still* reliably partition the data space into two classes that coincide more or less perfectly with the target/resultant state distinction, also seems questionable. As already noted in footnote 19, Kratzer (2001) cautions that the impossibility of *still*-modification is not a foolproof diagnostic of resultant-state-hood. It is not difficult to see why by returning Parsons' original example reproduced on p. 37: an event that involves a ball being thrown on the roof produces the target state resulting from this event, held by the ball. The reversibility of this state – in particular, whether the ball can be taken off the roof – is what *still* seems sensitive to, at least in part. But this seems orthogonal to the resultant state, which begins holding the moment the throwing event concludes. As such, conclusions predicated on the impossibility of *still* must be treated with caution.

Recent work on the interpretation of *still* has treated the reversibility requirement as presuppositional content contributed by this modifier, with a proposition P and its *still*-modified counterpart *still* P otherwise sharing the same basic at-issue content (see Baglini and Kennedy 2019; Ippolito 2004). The resulting view obviates the need for a target/resultant state distinction in the (lexical) semantics, as mentioned above; but it also has implications for what is to be concluded when *still* cannot be added to a sentence. Consider, for instance, the Greek paradigm in (75), based partly on a pair from English discussed in Baglini (2012: p. 38).

(75) a. #To ktirio ine akoma xtis- men- o. the.nom building.nom be.3sG still build PTCP N.NOM 'The building is still built.'

In Greek, at least, (i) is deeply infelicitous in the context given. This infelicity suggests that, whatever the nature of the resultant state reading is, it does not seem to be freely available, an observation not easy to reconcile with a distinct-denotations approach to the target/resultant state distinction.

²⁰It is worth noting in passing that the resultant state denotation in (69) itself has properties that could raise questions. For instance, Kratzer (2001: p. 11) seems to suggest that the German counterpart of (i) is felicitous in the context given.

 [[]A building was evacuated successfully hours ago, and the tenants have now moved back in. A police officer reports the successful evacuation to his supervisor:]

[#]To ktirio ine ekeno- men- o. the.nom building.nom be.3sg evacuate PTCP N.SG

^{&#}x27;The building is evacuated.'

- b. To ktirio ine akoma miso- xtis- men- o. the.nom building.nom be.3sg still half build PTCP N.nom 'The building is still half- built.'
- c. To ktirio ine akoma a- xtis- t- o. the.nom building.nom be.3sG still NEG builtd PTCP N.NOM 'The building is still unbuilt.'

(75a), uttered when pointing to a building, is odd in a way that its unmodified counterpart is not (*The building is built*, like any activity stative, becomes fine in a job-is-done context). Crucially, the addition of the degree modifier *half* in (75b) yields a flawless utterance. Why should such a sharp difference obtain? Clearly, the oddness of (75a) must be due to the fact that, simplifying considerably relative to the worked-out formal solutions above, the addition of *still* presupposes that the building's buildedness is at issue at utterance time. But it is difficult to conceive, out of the blue, of contexts where this would be the case; in other words, *still* being built is normally a trivial matter when we find ourselves at a time postdating the completion of a building event. In (75b), however, the addition of *half* makes it so that it is not trivial to assert that the relevant state, one of half-buildedness, holds at utterance time, precisely because this state is liable to change in the future.²¹ The same is true of the state of being unbuilt in (75c). Note furthermore with respect to (75a) that, once we *do* provide a context where it is buildedness, not half-buildedness, that is at issue, this example improves considerably.²²

- (76) A: I can't believe we borrowed so much money to have that building built! We're about to go bankrupt!
 - B: Ne, ala to ktirio ine akoma xtismeno. yes but the.nom building.nom be.3sG still built.PTCP.N.NOM 'Yes, but the building is still built.'

These examples illustrate that the (in)felicity of modifiers like *still* is governed by constraints operating at a pragmatic level;²³ and that, in any case, there seems little reason to hard-code into the lexical semantics of verbal forms the factors governing the differential availability of such modifiers between such examples as (75a) and (76). Looking ahead, I will argue that there is even less reason to hard-code these factors in the *syntactic* structure of different stative passives, at least in Greek.

²¹Note that this means that *still* is allowed to surface not by virtue of reversibility *sensu stricto*, as what is at stake in (75b) is not whether the half-built building will revert to not having been built at all; rather, what seems crucial is whether the state is changeable (or *transitory*, to use Kratzer's and Parsons' term).

²²Julie Legate (p.c.) notes that *akoma* in (76) is paraphrasable as *nevertheless* in a way that other instances of this modifier are not. I leave open whether this observation may make (76) less probative than it initially seems, noting that the other crucial examples in the main text are not subject to the same concerns.

²³The following example from Biggs and Embick (2023) clarifies even further that the felicity of *still* is determined by pragmatic factors, in this case relating clearly to world knowledge: we happen to know that vases are hard to put back together once shattered, but alliances less so. Similar examples can be constructed for Greek; see also Meltzer-Asscher (2011: fn. 27) for the same conclusion in Hebrew.

⁽i) a. The vase is #(still) shattered.

What, then, of (74c), the observation that *akoma* 'still' cannot appear if the stative is modified by agent-oriented modifiers? We just saw that the felicity of *still*-type adverbials seems to be modulated heavily by pragmatic factors; it is considerations of this type that must extended to these cases, too.

Consider in more detail the relevant examples, which are of the type in (72), repeated here as (77). There are questions that could be asked here concerning the licensing of agent-oriented modifiers, that I postpone to section 5.2. Instead, let us focus, again in informal terms, on the conditions under which examples like (77a) could be uttered. Recall that an *akoma*-modified participle is infelicitous whenever it is not plausible that the state's holding at utterance time is at issue. Examples like (77a) set the bar somewhat higher, by requiring that it be the case additionally that Mary's bringing about the eventuality be part of the at-issue content.

- (77) a. Ta lastixa ine (#akoma) fusko- mena apo ti Maria. the.nom.pl tire.nom.pl be.3pl still \(\sqrt{INFLATE} \) pTCP from the Mary 'The tires are (still) inflated by Mary.'
 - b. Ta ruxa ine (#akoma) steyno- mena me to sesuar. the.nom.pl clothes.nom.pl be.3pl still $\sqrt{\text{dry}}$ ptcp with the blowdryer 'The clothes are (still) dried with the blowdryer.'

The conditions under which (78a) could be felicitously uttered thus seem quite narrowly circumscribed: they are limited to those situations where Mary's bringing about the inflatedness that holds at utterance time is at issue, and where it is also crucially relevant that the individual in question was Mary; if only inflatedness were at issue, the by-phrase would have little to contribute.

- (77) does not provide contexts against which to judge the relevant examples, and it is not unexpected, then, that the sentences are judged as odd when they are read with *akoma* 'still' included. Providing an appropriate context, contrived as the result might be, seems to help the example greatly; see also Alexiadou et al. 2015: p. 181, who reach a similar conclusion, discussed further in section 5.2.
- (78) [It has been thought for decades that Wiles provided the definitive proof of Fermat's Last Theorem. Now, an elderly mathematician alleges that the solution provided by Wiles is, in fact, his, and was plagiarized by Wiles all those years ago. After much press coverage and investigation, the allegation is proven to be false.]

```
To θeorima tu Ferma { ine akoma / parameni / eksakoluθi the.nom theorem.nom the.gen Fermat.gen be.3sg still remain.3sg continue.3sg na ine } apoðeðiymeno apo ton Wiles.
```

'Fermat's theorem is still/remains/continues to be proven by Wiles.'

Such facts militate against the move to cast examples like (77) as crucially probative on the structure of participles; all the more so when they are coupled with the more general consensus in the

b. The alliance is (still) shattered.

interpretively-oriented literature on the topic that *still*-type adverbials need not be accounted for in the lexical semantics of verbs.

We thus arrive at (78d), the proposal that Greek evidences two types of *-men-* participles, distinguished by the presence/absence of Voice, related in turn to the target/resultant state distinction. At this point in the discussion, we are left with little reason to posit this structural distinction. There is little motivation from the perspective of interpretation to treat the boundary between the relevant readings as grammatically encoded in the first place; the examples that were taken to support the structural ambiguity account for Greek can be insightfully reanalyzed; and, in any case, it does not seem warranted to posit, with reference to alternations like (75), repeated here as (79), that *built* derives from a structure that includes Voice, while *half-built* necessarily corresponds to a Voice-less structure. The syntax/interpretation of Voice instead seems orthogonal to patterns like (79).

- (79) a. #To ktirio ine akoma xtis- men- o. the.nom building.nom be.3sg still buil ртср n.nom 'The building is still built.'
 - b. To ktirio ine akoma miso- xtis- men- o. the.nom building.nom be.3sg still half buil PTCP N.NOM 'The building is still half- built.'

In giving up the structural ambiguity account in (73), we seem to be relinquishing little by way of explaining the target/resultant state distinction. The reason is that it is not clear that the role of Voice is in any sense causal, even on an account like (73): there is no principled reason inherent to the semantics of target or resultant states why the former should be incompatible with agentivity, and why the latter should necessitate it. Instead, it seems that the reasons for making Voice differentially available in the relevant structures were purely correlational, based on the apparent incompatibility of agent-oriented modifiers with akoma (77). But, since this apparent incompatibility arguably is neither systematic nor structurally grounded, an account eschewing (73) suffers no loss of insight in this domain. We also avoid the homophony problem, insofar as the two instances of -men in (73) were intended as distinct stativizers with distinct selectional properties.

5.2 VOICE OR NO VOICE?

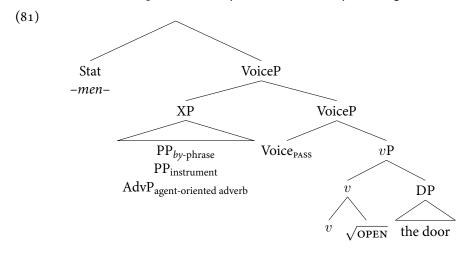
A further possibility not closely examined until now concerns the presence of the agent-introducing projection Voice in the structure. As mentioned repeatedly above, Greek is often taken to be a language that freely admits agent-oriented modifiers in stative passives (see Anagnostopoulou 2003 et seq.). The observation has been that agent-oriented modifiers are admissible in a seemingly much more liberal fashion than in languages like English or German (see especially Alexiadou et al. 2015: ch. 5 for recent comparative overview); see (80) for one example (not taken directly from previous literature), whose informativeness will be revised below. In turn, this observation has often been un-

²⁴See also Biggs (2021: 300ff) for the conclusion that Voice cannot be the factor blocking target state readings in English *done* statives.

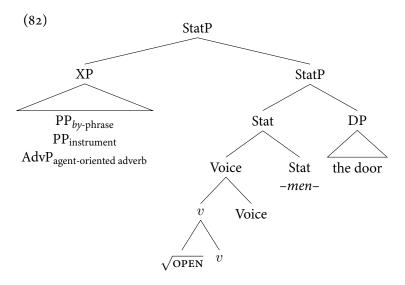
derstood in terms of the presence of a Voice projection that is necessarily phrasal, by virtue of hosting said agent-oriented modifiers, as in (81).

(80) I porta ine aniy- meni viea / me losto / apo ton the.NOM door.NOM be.3sg √OPEN PTCP violently with crowbar.ACC from the.ACC ðiarikti.

burglar.ACC 'The door is opened violently/with a crowbar/by the burglar.'



The 'small' analysis developed thus far does not admit phrasal adjunction of this type below the Stat projection. On such an analysis, such modifiers must enter higher, e.g. as in (82).



(82) is in principle perfectly possible under a complex head approach; and it thus bears emphasziing that the question of the presence/absence of Voice is properly orthogonal to the choice between Phrasal Layering and the complex head analysis.²⁵

The discussion below shows that the generalizations concerning agent-oriented modifiers in – *men*– statives are considerably more complex than some previous work on the language has appreciated. The most conservative generalization that emerges from the discussion below is that agent-oriented modifiers are not as freely available in the language's stative passive as they are in the even-tive.

I take these discrepancies to suggest that Voice is, in fact, not present in the stative passive; and that apparent cases of agent-oriented modification in the stative passive involves such modifiers entering the structure at the level of the state. This conclusion not only mirrors results emanating from stative passives in other languages, but is also shared by recent work on Greek.

I accordingly proceed to show that much of the data invoked in some literature on Greek to support the presence of Voice can be reanalyzed; and that the overall view I advance here helps makes sense of an entirely novel generalization, concerning the interaction of stativization and verbal reflexivization.

5.2.1 STATE RELEVANCE

Consider as a point of departure the observation, emphasized already in section 2.1, that it is not always trivial to ascertain whether a modifier seemingly licit in the stative passive modifies the lower event or the higher state. Consider in this connection the pair in (83), suggesting that the adverb *fast* is differentially available in stative passives formed from $\sqrt{\text{OPEN}}$ and $\sqrt{\text{WRITE}}$. In (83a), the adverb does not seem to be able to modify *opened*; if event-related modification were freely available in the stative passive, this restriction should not arise. Consider now (83b): the adverb is significantly better in this case.

- (83) a. I porta ine anigmeni (#yriyora). the.NOM door.NOM be.3SG open.PTCP.F.NOM quickly 'The door is opened quickly.'
 - To grama ine γrameno (γriγora).
 the.Nom letter.nom be.3sg write.PTCP.N.Nom quickly
 'The letter is written quickly.'

This apparently Root-modulated availability of modification is unexpected if the eventive component of the stative passive is freely accessible. In particular, (17) illustrates a conclusion we have at this point made repeatedly: that the event in the Greek stative passive is generally not easily accessible

²⁵What the complex head analysis does not permit, by definition, is for Voice to introduce specifiers or adjuncts, and thus be phrasal. As such, on an analysis like (82), if the agent-oritented modifier is to be interpreted as modifying Voice, then some aspect of the interpretation of Voice must effectively be 'passed up' the tree – an instance of delayed saturation, in the terminology of Kastner (2017), Myler (2016), Wood (2014, 2015), Wood and Marantz (2017). See Paparounas (in press) for a concrete implementation along these lines.

for modification, in this case by an adverb like *fast*. Of interest from this perspective is that the very same modifier seems to be licit in (83b).

What seems to be playing a crucial role is the possibility of extrapolating from the state itself that the event unfolded quickly. With a Root like $\sqrt{\text{WRITE}}$, this type of reverse-engineering is easy: in particular, (83b) is uttered most felicitously in situations where one can detect from properties of the writing itself that the writing event must have unfolded quickly, for instance by noticing that the handwriting is sloppy. What a quick door-opening event would look like that leaves detectable marks of quickness on the opened state seems, all things being equal, more difficult to imagine.

It is such contrasts that have led different authors to propose for different languages that eventuality-oriented modifiers are only licit in stative passives insofar as they are construable as relevant to the state (see Rapp 1996 for German; Meltzer-Asscher 2011 for Hebrew; McIntyre 2013 for English; see also Gehrke 2015 versus McIntyre 2015).

It is important to note that judgments like those in (17) are somewhat fickle when examples are presented in isolation: in particular, consultants will often internally posit contexts that force a state-relevant construal of the modifier. In the case at hand, (17) can be felicitously uttered in situations where we conclude from inspection of the scene that the opening event was one where the door accumulated enough speed to collide with the wall. Diacritics like # should thus be treated with caution in cases such as (17); they are not intended to suggest that the examples are categorically infelicitous, but merely that they require heavy contextual support of the kind just described.

What is instructive, from this perspective, is not the status of example like (83a) in isolation. Rather, any conclusions should arise from observing possible contrasts between such examples and examples like (83b), where the context for the state-relevant construal is less far-fetched.

Even more probative, in this case and all cases below, is the contrast between stative and eventive passives with respect to modification. The eventive passive is simply never subject to state relevance effects, and this fact deserves a principled explanation. Compare thus the contrast in (83) with the non-contrast in (84).

- (84) a. I porta içe anixti yriyora (ja na perasi i the.nom door.nom have.pst.3sG open.nact.pfv quickly to сомр pass.3sG the.nom vasilisa).

 queen.nom
 - 'The door had been opened quickly (so that the queen would pass through).'
 - b. To yrama içe yrafti yriyora (jati ekline the.nom letter.nom have.pst.3sg write.nact.pfv quickly because close.pst.3sg to taçiðromio).

 the.nom post.office.nom

 'The letter had been written quickly (because the post office was closing.'

That contrasts like (83) are, ultimately, a matter of world knowledge correctly predicts that, holding the Root constant, adverbs more easily understood as state-relevant will produce better results than (17). This seems to be the case: in (85), for instance, it is not difficult to imagine that a violent

door-opening event will produce a state that allows us to conclude that the event unfolded violently.

(85) I porta ine aniymeni viea. the.nom door.nom be.3sg open.ptcp.f.nom violently 'The door is opened violently.'

That state relevance seems to modulate the availability of certain modifiers in the domain of event modification raises the question whether a similar situation could obtain in the domain of apparently agent-oriented modification. This seems to be the case.

There is precedent in the literature for this conclusion. Alexiadou et al. (2015: p. 181) posit this type of analysis to accommodate the presence in some examples of agent-oriented modifiers alongside *akoma* 'still'. Recall from section 5.1 that this work takes target and resultant state passives to be structurally distinct, with only resultant state passives including Voice. It is further assumed that *akoma* 'still' distinguishes between these two structural possibilities, with the adverbial being claimed to be *i*) only compatible with target states, and *ii*) incompatible with agent-oriented modifiers. State relevance is then invoked to explain data like the following, where, in tension with what is taken in Alexiadou et al. (2015) to be the general pattern, *akoma* 'still' surfaces unproblematically next to an agent-oriented modifier:

- (86) a. To staðio ine akomi periciklomeno apo tin astinomia. the.nom stadium.nom be.3sg still surround.ptcp.n.nom from the police 'The stadium is still surrounded by the police.'
 - b. O skilos ine akomi ðemenos me skini.
 the.nom dog.nom be.3sg still tie.up.ptcp.n.nom with rope
 'The dog is still tied up with a rope.' (Alexiadou et al. 2015: p. 181)

The conclusion drawn from such examples in Alexiadou et al. (2015) is that target state participles must admit apparently agent-oriented modifiers to in fact enter the structure at the state level, since, on the account therein, target states lack Voice; on the resulting overall account, resultant state participles admit 'real' agent-oriented modifiers, while target state participles admit only state-relevant adjuncts. Recall now from section 5.1 that there in fact seems little reason to reify the target/resultant state distinction as anything more than a matter of world knowledge; and that, in any case, there is no easily identifiable sense in which the presence of Voice should be causal in deriving resultant state readings. As such, it seems reasonable to try and generalize the conclusion already drawn for part of the data in Alexiadou et al. (2015), to the effect that Greek –men– participles only ever admit state-oriented modifiers.

This view requires three kinds of support. Firstly, we expect to find contrasts sensitive to state relevance in the domain of agent-oriented modifiers. Secondly, we owe an explanation of why, in much of the literature on Greek since Anagnostopoulou (2003), agent-oriented modificiation in – *men*– statives has been taken to be free. And finally, the Voice-less view of –*men*– statives should, ideally, yield correct predictions in a domain independent from the data concerning agent-oriented modifiers proper.

All three kinds of support are found, as discussed in the following sections. Consider firstly that the effects of state relevance in -men statives can be detected, as already acknowledged in Alexiadou et al. (2015) in connection with the examples just discussed. More examples are given here in the interest of further illustration; in both cases, the crucial observations are that a) the Root does not describe eventualities whose resultant state normally readily enables identification of the agent; and that b) agent-oriented modifiers (in this case by-phrases) are accordingly degraded in the stative passive, relative to their flawless status in the eventive.

- (87) a. I poli eçi katastrafi (apo Romeus stratiotes). the.NOM city.NOM have.3SG destroy.NACT.PFV from Roman soldier.PL 'The city has been destroyed (by Roman soldiers).'
 - b. I poli ine katestra- men- i (#apo Romeus stratiotes). the.nom city.nom be.3sg \(\sqrt{DESTROY} \) PTCP F.Nom from Roman soldier.pl 'The city is destroyed (by Roman soldiers).'
- (88) a. I maθites eçun eksetasti (apo to ðiefθindi). the.NOM.PL student.NOM.PL have.3PL examine.PFV from the principal 'The students have been examined (by the principal).'
 - b. I ma θ ites ine eksetas- men- i (#apo to ðief θ indi). the.nom.pl student.nom.pl. be.3pl $\sqrt{\text{EXAMINE}}$ PTCP pl.nom from the principal 'The students are examined (by the principal).'

5.2.2 REANALYZING EXISTING DATA

The question arises, then, of why agent-oriented modifiers have previously been taken to be freely available in (resultant) stative passives in Greek. While it is of course impossible to examine every single example raised in previous work, I identify here several key generalizations, focussed on the most extensive recent discussion of Greek –*men*– statives, in Alexiadou et al. (2015: ch. 5).

Firstly, unless care is taken to devise examples where a state-level construal is disfavored (see (87)-(88)), we expect modifiers to be coercable into state-relevance, all things being equal. Indeed, this confound has not always been controlled for; for instance, in the cases in (89), Mary could be construed as having a signature cooking style, while the question of whether a pen was deployed is not difficult to resolve from inspecting a piece of writing.

- (89) a. Ta kefteðakia ine tiyanis- men- a (apo ti Maria). the.PL meatball.PL.NOM be.3PL √FRY PTCP N.PL.NOM from the Mary 'The meatballs are fried by Mary.' (Alexiadou et al. 2015: p. 154)
 - b. Ta kefteðakia ine kala / prosektika tiyanis- men- a. the.pl meatball.pl.nom be.3pl well carefully \sqrt{fry} ptcp n.pl.nom 'The meatballs are fried well/carefully.'(Alexiadou et al. 2015: p. 154)
 - c. To kimeno ine yrameno me stilo.
 the.nom text.nom be.3sG write.PTCP.N.Nom with pen
 'The text is written with a pen.' (Alexiadou et al. 2015: p. 154)

Secondly, examples free of the state relevance confound often deploy additional elements that seem to facilitate the inclusion of agent-oriented modifiers. One illustration comes from the insightful discussion of Greek negated participles in Alexiadou et al. (2015: 167ff). This work argues that bona fide agent-oriented modifiers can be present in negated statives in Greek (cp. Anagnostopoulou 2003 for the opposite claim). Regarding by-phrases, many examples look like (90a); the rest of the examples in (90) are attested and taken from the web.

- simberifora ðen emine (90)I sxoliasta. the.nom behavior.nom 3sg.poss.m neg stay.pst.3sg neg $\sqrt{\text{comment}}$ ptcp f.nom apo tus ðimosioyrafus. from the journalist.PL 'His behavior did not remain uncommented on by the journalists.' (Alexiadou et al. 2015: p. 167)
 - Mono to 5% tis jis parameni an- engixapo ton only the the gen earth gen remain. 3 sg neg $\sqrt{\text{TOUCH}}$ PTCP N. Nom from the $an\theta ropo$

human

'Only 5% of the Earth remains untouched by humans.' https://tinyurl.com/bdfwd266

... parameni se meyalo vaθmo an- ekserevni- tc. the.nom area.nom remain.3SG in large degree NEG √EXPLORE PTCP F.NOM from episkeptes. visitors

'The area remains mostly unexplored by visitors.' https://tinyurl.com/3kddazmz

xoros Enas θavmasios pu meni an- ekmetalef- tone.Nom wonderful.nom space.Nom that stay.3sg NEG $\sqrt{\text{EXPLOIT}}$ PTCP M.Nom from tin politia.

the state

'A wonderful space that remains unexploited by the state.' https://tinyurl.com/4ca9katj

Strikingly, however, the above examples use *remain*; changing this verb to the copula reduces the acceptability of the examples significantly.

(91) simberifora tu (ðen) ine sxoliasa. the.nom behavior.nom 3sg.poss.m neg $\,$ be.3sg neg $\sqrt{\text{comment}}$ PTCP f.nom (??apo tus ðimosioyrafus).

from the journalist.PL

'His behavior is (not) uncommented on (by the journalists).'

Mono to 5% tis jis ine an- engixt-(??apo ton only the the gen earth gen be 3sg neg $\sqrt{\text{TOUCH}}$ PTCP N.NOM from the an θ ropo). human

- 'Only 5% of the Earth is untouched (by humans).' https://tinyurl.com/bdfwd266
- c. I perioçi ine se meyalo vaθmo an- ekserevni- t- i (??apo the.nom area.nom be.3sG in large degree neg √explore ptcp f.nom from episkeptes).
 visitors
 - 'The area is mostly unexplored by visitors.' https://tinyurl.com/3kddazmz
- d. Enas θavmasios xoros pu ine an- ekmetalef- t- os one.Nom wonderful.Nom space.Nom that be.3sg Neg √EXPLOIT PTCP M.NOM (??apo tin politia).

from the state

'A wonderful space that is unexploited (by the state).' https://tinyurl.com/4ca9katj

Once again, it seems somehow crucial that the *by*-phrase be state-relevant, in this case being the entity determining whether the state is to be maintained or not; hence the *be/remain* contrast. What the contrast follows from is an open question; for our purposes here, it suffices to note that contrasts such as those between (90) and (91) do not seem expected if negated participles include Voice.²⁶ Related considerations arise for instruments. Many examples here are of the type in (92).

(92) To DNA ine a- ora- t- o akoma ke me to pço ðinato mikroskopio. the.NOM be.3SG NEG $\sqrt{\text{SEE}}$ PTCP N even and with the most powerful microscope 'DNA is invisible even with the strongest microscope.' (Alexiadou et al. 2015: p. 170)

Note here two factors; firstly, the fact that these are seem to be negated modal states (thus 'invisible', not 'unseen'); secondly, the inclusion of *akoma ke* 'even'. This element seems crucial in enabling the modifier to be licensed, compare (93a). (93b) is a constructed example illustrating the same point, as does (93c), which is a repurposed example from the literature showing also that, sometimes, *remain* and *even* are deployed in the same example.

- (93) a. To DNA ine a- ora- t- o (??me to pço ðinato mikroskopio). the.nom be.3sg neg $\sqrt{\text{SEE}}$ PTCP N with the most powerful microscope 'DNA is invisible even with the strongest microscope.' (Alexiadou et al. 2015: p. 170)
 - b. Me tetrapli epenðisi titaniu, to xrimatocivotio ine a- paraviaswith four-ply coating titanium.GEN the.NOM safe.NOM be.3SG NEG √BREACH t- o ??(akoma ke) me tripani.
 PTCP N.NOM even and with drill 'With a four-ply titanium coating, the safe is unbreachanble, even with a drill.'

²⁶The contrast here could also be taken as evidence against the view that non-negated *-men*- statives freely admit agent-oriented modifiers, given that negated statives seem to be negated *-men*- statives (see Alexiadou et al. 2015: p. 167, Paparounas 2023: 175ff). This conclusion is only safe to draw, however, once we firmly establish the properties of negated participles in further detail. In any case, conclusions on agent introduction should not be drawn from negated statives alone; see in this connection the discussion of Bruening's (2014) argument in favor of the presence of Voice in English statives in Alexiadou et al. (2015: ch. 5).

Ta proima staðia tis arostças paramenun / ??ine athe.NOM.PL early.NOM.PL stage.NOM.PL the.GEN sickness.GEN remain.3PL be.3PL NEG ðiaynos-??(akoma ke) me tis pço sinxrones klinices even and with the most contemporary clinical $\sqrt{\text{DIAGNOSE}}$ PTCP N.PL meθoðus. method.pl. 'The early stages of the disease remain/are undiagnosable even with the most up-todate clinical methods.' (cf. Alexiadou et al. 2015: p. 170)

Note now that *even* has clear focal properties, raising the question of whether its inclusion forces attachment of its associate in a position different from that of *bona fide* agent-oriented modifiers. Note further that there is a sense in which using *even* makes it unclear whether the objects in question are, in fact, interpreted as real instruments: in conjunction with the modal nature of the negated participle, examples like (93b) seem to mean 'the safe is unbreachable, even with a drill *at our disposal*'.

Overall, it is this type of observation that seems worthy of being taken into account in a future investigation of agent-oriented modification in Greek stative passives with an eye towards state relevance. Such an account must be supplemented with a more precise definition of what these effects derive from; a definition of this kind is essential in ensuring that state relevance not be manipulated as an *ad hoc* device for Voice-less accounts of stative passive to escape potential issues. Finally, a comprehensive account must to justice to possible differences between languages; the lucid comparative discussion in Alexiadou et al. (2015: 181ff) provides a foundation to this end.

For now, I turn to one final observation that seems crucially in line with the predictions of a Voice-less account of Greek stative passives.

5.2.3 A NEW GENERALIZATION: REFLEXIVIZATION

The Voice-less view of *-men-* statives makes a crucial correct prediction concerning a domain independent of the data discussed thus far, involving the interaction of stativization with verbal reflexivization.

Greek builds verbal reflexives by means of the prefix *afto*-, such that (94b) is, descriptively, the verbal counterpart of (94a). A fully parallel situation obtains in the domain of reciprocals (95).

- (94) a. Simfona me ti miθolojia, afti i θeotita ðimiurɣi- s- e according.to with the mythology this.nom the.nom deity.nom √CREATE PFV.ACT 3SG ton eafto tis apo to miðen. the.ACC self.ACC her from the zero 'According to mythology, this deity created itself out of nothing.'
 - b. Simfona me ti mi θ olojia, afti i θ eotita **afto-** δ imiur γ iaccording.to with the mythology this.nom the.nom deity.nom refl $\sqrt{\text{CREATE}}$ θ ik- e apo to mi δ en.

 PFV.NACT PST.NACT 3SG from the zero
 'According to mythology, this deity self-created out of nothing.'

- (95) a. I Maria ke o Janis ipostiriz- un o enas the.nom Mary.nom and the.nom John.nom support 3PL.<u>ACT</u> the.nom one.nom ton alo.
 the.acc other.acc
 'Mary and John support each other.'
 - b. I Maria ke o Janis **alilo** ipostiriz- **onde**. the.NOM Mary.NOM and the.NOM John.NOM RECIP √SUPPORT- 3PL.NACT 'Mary and John support each other.'

afto- (and, to a somewhat lesser extent, alilo-), have been the topic of some amount of attention (see esp. Alexiadou 2014; Embick 2004b; Paparounas 2023; Rivero 1992; Spathas, Alexiadou, & Schäfer 2015; Tsimpli 1989). They have the syntax of passives: they involve a single, internal argument, with the element afto-/alilo- being responsible for deriving reflexivity/reciprocity, respectively. Much recent work has argued that this state of affairs follows from taking afto-/alilo- to be Voice-level elements, such that reflexivity/reciprocity is a type of Voice on a par with (or built on top off) passive (see esp. Paparounas 2023; Spathas et al. 2015; cf. e.g. Baker 2022; Labelle 2008; McGinnis 2022 for similar analyses of other languages). This conclusion has potential diagnostic utilitys: if verbal reflexives/reciprocals are Voice constructions, they could be used to test for the presence of Voice.

afto-/alilo- do provide an important window into the structure of the Greek stative passive, one that seems to be in line with the Voice-less account thereof: *afto-/alilo-* never combine with –*men*–statives. As far as I know, this is a novel generalization.

Consider firstly the following set of minimal pairs, with (eventive) verbal reflexives given in the *a*. and stative passives in the *b*. examples. In each case, the stative passives are well-formed unless the reflexivizer *afto*- is added; they thus differ crucially from the *a*. examples, where *afto*- is perfectly acceptable forming a verbal reflexive (which has passive-like properties; see references above). In each case, care has been taken to construct plausible examples warranting the use of a stative; additionally, the *a*. examples employ nonactive perfects, to keep possible effects of stativity/perfectivity constant to the greatest extent possible.

- (96) a. O Janis eçi afto- katastraf- Ø- i me to poli poto.
 the.NOM John.NOM have.3SG REFL √DESTROY PFV.NACT 3SG with the much drink
 'John has destroyed himself from too much drinking.' eventive
 - b. Toso pu pini, o Yanis ine (*afto-) katestra- men- os. that.much COMP drink.2SG the.NOM John.NOM be.3SG REFL VDESTROY PTCP NOM 'From drinking so much, John is (self-)destroyed.'
- a. Exondas metan^josi ja tis praksis tu, o ðrastis having regret.PFV for the action.PL 3SG.M.POSS the.NOM perpetrator.NOM omolojise ke ousiastika eçi afto- kataðikas- θ- i se isovia confess.PST.3SG and effectively have.3SG REFL √CONDEMN PFV.NACT 3SG to lifelong kaθirksi.
 imprisonment

- 'Having regretted his actions, the perpetrator confessed and has effectively condemned himself to life in prison.' *eventive*
- Exondas omolojisi, o ðrastis ine pleon (*afto-) kataðikashaving confess.3sg the.nom inmate.nom be.3sg as.of.now REFL √CONDEMN men- os se isovia kaθirksi.
 PTCP NOM to lifelong imprisonment 'Having confessed, the perpetrator is now (self-)condemned to life in prison.' stative
- (98) a. O Janis eçi afto- ðiafimis- θ i evreos sto the.nom John.nom have.3SG REFL $\sqrt{\text{ADVERTISE}}$ PFV.**NACT** 3SG widely on.the Instagram.

Instagram

'John has self-advertised widely on Instagram.'

eventive

b. Meta apo makroxroni kamban^ja, o Janis ine pleon evreos after from long.time campaign the.noм John.noм be.3sG as.of.now widely (*afto-) ðiafimiz- men- os sto Instagram.

REFL √ADVERTISE PTCP NOM on.the Instagram

'After a years-long campaign, John is now widely (self-)advertised on Instagram.' stative

Similar facts obtain in the domain of reciprocals, as shown in the next set of examples.

- (99) [After working with the suspects for hours, the expert interrogator has managed to turn the suspects' testimonies against each other. Announcing this success, she says:]
 - a. Teliosame. I ipopti exun pleon alilo- katiyorifinish.pst.1pl the.nom.pl suspect.nom.pl have.3pl as.of.now recip $\sqrt{\text{accuse}}$ $\theta\text{-}$ i.

PFV.NACT 3SG

'We're done - the suspects have now accused each other.'

eventive

b. Teliosame. *I ipopti ine pleon alilo- katiyori- menfinish.pst.1pl the.nom.pl suspect.nom.pl be.3pl as.of.now recip $\sqrt{\text{accuse}}$ ptcp i.

NOM.PL

'We're done. The suspects are now mutually accused.'

stative

- (100) a. I siraksi itan meyali, me apotelesma i ðio the.nom conflict be.pst.3sg large.nom with result the.nom.pl two iperðinamis na exun (alilo-) eksondo- θ i. superpower.nom.pl comp have.3pl recip $\sqrt{\text{extinguish}}$ pfv.nact 3sg 'The conflict was large, and as a result the two superpowers have extinguished each other.'
 - b. I siraksi itan meyali, me apotelesma i ðio the.nom conflict be.pst.3sg large.nom with result the.nom.pl two

iperðinamis (*alilo-) eksondoine superpower.nom.pl comp be.3pl recip √extinguish ptcp nom.pl 'The conflict was large, and as a result the two superpowers are mutually extinguished.' stative

(101) Ι pelates ðe mas xriazonde. Exun iði (alilo-) the.NOM.PL customer.NOM.PL NEG 1PL.ACC need.3PL have.3PL already RECIP eksipireti- θi. service PFV.NACT 3SG

'The customers don't need us - they've already assisted each other.' eventive

stative

b. pelates ðe mas xriazonde - ine (*allilo-) the.NOM.PL customer.NOM.PL NEG 1PL.ACC need.3PL - be.3PL already RECIP eksipireti- men- i. $\sqrt{\text{SERVICE}}$ PTCP PL

'The customers don't need us - they are already mutually assisted.'

Examples (97) to (101) utilize a variety of Roots to clarify that the impossibility of afto-/alilo- in the b. examples is in no sense a lexical quirk of some kind. It is rather a fully systematic fact of the language that predicative stative passives in -men can never undergo reflexivization/reciprocalization. Importantly, this contrast does not seem straightforwardly reducible to some sort of interpretive deviance associated with the b. examples: it is not clear that any deviance should follow exclusively from what it means to hold a state resulting from a self-oriented (or reciprocally oriented) event.

The implications of these facts should be clear: if afto-/alilo- are Voice elements, then their impossibility in the stative passive furnishes an argument against the inclusion of Voice in the stative

Note that the impossibility of afto- and alilo- is not easily attributable to factors involving state relevance. Even in contexts where self-action or reciprocal action is evidenced from the state, afto-/alilo- modified statives are judged as deviant:

(102) [We see customers leaving the self-checkout line.]

> pelates (*afto-) eksipiretimeni. ine DEM.NOM.PL the.NOM.PL customer.NOM.PL be.3PL REFL VSERVICE.PTCPPL

'These customers are self-serviced.'

The two enemies are lying on the ground, each holding the sword that has pierced the other's armor.

I ðio exθri ine (*alilo-) eksondomeni. the.nom.pl enemy.nom.pl be.3pl Refl $\sqrt{\text{EXTINGUISH.PTCP.PL}}$

'The two enemies are mutually extinguished.'

If these generalizations are correct, the inclusion of Voice in Greek stative passives is counterevidenced independently of the discussion in the last section.

6 CONCLUSIONS AND NEXT STEPS

This paper's empirical goal has been to elucidate the event and argument structure of Greek –menstatives. By deploying a range of novel diagnostics, we have seen that the stative passive differs from its eventive counterpart on both fronts: the event is not directly modifiable, and the core argument of the stative is fully external to the verbal projection, yielding a case of adjectival predication. On the way to these generalizations, we have uncovered new insights on secondary fronts, including the question of the presence of Voice in Greek statives, the issue of a structurally rooted target/resultant state ambiguity, and the nature of the effects subsumed under the label of state relevance. It is hoped that the new diagnostic tools developed here, along with various questions left open, will stimulate future work on stative passives cross-linguistically.

The facts uncovered here have been argued to suggest a complex head analysis of Greek –*men*-statives, and this type of analysis has been argued to be superior to syntactic analyses positing phrasal verbal syntax inside the stative passive. Alongside the open questions already noted in connection with the details of the complex head analysis, two deserve mention as a concluding note.

A first question, briefly alluded to above, concerns the scope of the complex head analysis. Such structures have recently been argued to be involved in the formation of some stative passives, as in this paper alongside Biggs and Embick (2023), Embick (2021a, 2023); and of some nominalizations (Benz 2023; Wood 2023). If these conclusions are on the right track, one might wonder how intimate is the connection between the 'small' syntax entailed by this type of analysis on the one hand, and the syntax of recategorization more broadly. Whether the connection here is deep or incidental remains to be seen.

A related question concerns cross-linguistic variation. The claim here has been that Greek – menstatives demand a complex head analysis; not that every instance of what has been called a stative passive must be made to fit this analysis. Assuming that 'bigger' syntaxes are, indeed, found for stative participles elsewhere, we may wonder what principled factor, if any, governs this dimension of variation.

Such open questions aside, it is hoped that this study of Greek —*men*— statives helps illuminate the space of possibilities to be considered in the study of word formation. It seems that a two-way opposition between lexical rules and phrasal syntactic word formation far from exhausts the space of conceivable analyses. In particular, it has been argued above that Greek —*men*— statives necessitate an analysis that is syntactic yet does not posit phrasal verbal structure; this dissociation between the notions 'syntactically constructed' and 'phrasal' deserves further exploration in future work.

REFERENCES

- ALEXIADOU, A. (2001). Functional structure in nominals: Nominalization and ergativity. Linguistik Aktuell/Linguistics Today. Amsterdam: John Benjamins.
- ALEXIADOU, A. (2014). Roots in transitivity alternations: Afto-/auto-reflexives. In A. ALEXIADOU, H. BORER, & F. SCHÄFER (Eds.), *The Syntax of Roots and the Roots of Syntax* (pp. 57–80).
- Alexiadou, A., & Anagnostopoulou, E. (2008). Structuring participles. In C. B. Chang & H. J. Haynie (Eds.), *Proceedings of the 26th west coast conference on formal linguistics*, Somerville, MA: Cascadilla Proceedings Project.
- ALEXIADOU, A., ANAGNOSTOPOULOU, E., & SCHÄFER, F. (2015). External arguments in transitivity alternations: A layering approach (First edition). Oxford Studies in Theoretical Linguistics. Oxford; New York: Oxford University Press.
- ALEXIADOU, A., & MÜLLER, G. (2008). Class features as probes. In J. F. BACHRACH & A. NEVINS (Eds.), *Inflectional identity* (18, pp. 101–155). Oxford Studies in Theoretical Linguistics. Oxford; New York: Oxford University Press.
- Anagnostopoulou, E. (2001). Two classes of double object verbs: The role of zero morphology. In E. Anagnostopoulou & M. van Oostendorp (Eds.), *Progress in Grammar. Articles at the 20th Anniversary of the Comparison of Grammatical Models Group in Tilburg.* Dutch Royal Academy Publications.
- Anagnostopoulou, E. (2003). Participles and Voice. In A. Alexiadou, M. Rathert, & A. von Stechow (Eds.), *Perfect Explorations* (pp. 1–36).
- ARAD, M. (1998). Are Unaccusatives Aspectually Characterized? (and other related questions). In H. HARLEY (Ed.), *Papers from the UPenn/MIT Roundtable on Argument Structure and Aspect* (32, pp. 1–20). MIT Working Papers in Linguistics.
- ARREGI, K., & PIETRASZKO, A. (2021). The Ups and Downs of Head Displacement. *Linguistic Inquiry*, 52(2), 241–290.
- BAGLINI, R. (2012). The scalar source of stative passives. In *Proceedings of Sinn und Bedeutung 16* (pp. 26–41).
- BAGLINI, R., & KENNEDY, C. (2019). Adjectives and Event Structure. In R. TRUSWELL (Ed.), *The Oxford Handbook of Event Structure* (pp. 367–392).
- BAKER, M. (1985). The Mirror Principle and Morphosyntactic Explanation. *Linguistic Inquiry*, 16(3), 373–415. JSTOR: 4178442
- Baker, M. (1988). *Incorporation: A theory of grammatical function changing*. Chicago: University of Chicago Press.
- Baker, M. (2022). On Agree without agreement as a source of reflexive voice constructions. *Glossa: a journal of general linguistics*, 7(1).
- Benz, J. (2023). The syntax of the content reading in German nominalizations. In *Proceedings of NELS 53*, Amherst, MA: GLSA.
- Bešlin, M. (2021). *No such thing as a 'verbal participle'*.
- Bнатт, R., & Pancheva, R. (2017). Implicit Arguments. In H. van Riemsdijk & M. Everaert (Eds.), *The Wiley Blackwell Companion to Syntax* (2nd ed., pp. 558–588).

- Biggs, A. (2021). The *Done*-State Derived Stative: A Case Study in Building Complex Eventualities in Syntax. *Syntax*, *24*(3), 297–333.
- BIGGS, A., & EMBICK, D. (2023). On the interpretation and structure of English stative passives. Conference presentation, LAGB 2023.
- BORER, H. (1984). Parametric syntax: Case studies in Semitic and Romance language. Dordrecht: Foris.
- BORER, H. (2003). Exo-Skeletal vs. Endo-Skeletal Expla- nations: Syntactic Projections and the Lexicon. In J. Moore & M. Polinsky (Eds.), *The nature of explanation in linguistic theory* (pp. 31–67). Stanford: CSLI Publications.
- Bresnan, J. (1982). The passive in lexical theory. In J. Bresnan (Ed.), *The mental representation of grammatical relations* (pp. 3–86). Cambriddge, MA: MIT Press.
- Bresnan, J. (1995). *Lexicality and Argument Structure*. Conference presentation, Paris syntax and semantics conference.
- Bruening, B. (2010). Ditransitive Asymmetries and a Theory of Idiom Formation. *Linguistic Inquiry*, 41(4), 519–562.
- Bruening, B. (2013). By-phrases in passives and nominals. *Syntax*, 16(1), 1–41.
- BRUENING, B. (2014). Word formation is syntactic: Adjectival passives in English. *Natural Language* & *Linguistic Theory*, 32(2), 363–422.
- BRUENING, B. (2018). Word formation is syntactic: Raising in nominalizations. *Glossa: a journal of general linguistics*, 3(1).
- Bruening, B. (2019). Verbal Morphology: Not Head Movement, Not Mirror Theory, Just External Merge. Ms, University of Delaware.
- Сномsку, N. (1970). Remarks on nominalization. In R. Jacobs & P. Rosenbaum (Eds.), Readings in English Transformational Grammar. Waltham, Mass: Ginn.
- Сномѕку, N. (1981). Lectures on government and binding. Dordrecht: Foris.
- Сномsку, N. (1994). Bare phrase structure. MIT Working Papers in Linguistics, 5.
- Сномѕку, N. (1995). The Minimalist Program. Cambridge, Mass: MIT Press.
- Сномsку, N. (2001). Beyond explanatory adequacy. In *MIT Occasional Papers in Linguistics* (Vol. 20). Cambridge, Mass: MIT Working Papers in Linguistics.
- Dowty, D. (1991). Thematic Proto-Roles and Argument Selection. *Language*, 67(3), 547. JSTOR: 415037
- EMBICK, D. (2004a). On the Structure of Resultative Participles in English. *Linguistic Inquiry*, 35(3), 355–392.
- EMBICK, D. (2004b). Unaccusative Syntax and Verbal Alternations. In A. Alexiadou, E. Anagnos-Topoulou, & M. Everaert (Eds.), *The unaccusativity puzzle: Explorations of the syntaxlexicon interface* (5, pp. 137–158). Oxford Studies in Theoretical Linguistics.
- EMBICK, D. (2021a). Smaller structures for stative passives. Presentation, Abralin ao vivo.
- EMBICK, D. (2021b). The Motivation for Roots in Distributed Morphology. *Annual Review of Linguistics*, 7(1), 69–88.
- EMBICK, D. (2023). Smaller syntax for English stative passives: A first report. Ms. University of Pennsylvania.

- EMBICK, D., & NOYER, R. (2001). Movement Operations after Syntax. *Linguistic Inquiry*, 32(4), 555–595.
- Epstein, S. D., Kitahara, H., & Seely, D. (2016). Phase cancellation by external pair-merge of heads. *The Linguistic Review*, 33(1).
- FRUEHWALD, J., & MYLER, N. (2015). I'm done my homework—Case assignment in a stative passive. *Linguistic Variation*, 15(2), 141–168.
- Fu, J., Roeper, T., & Borer, H. (2001). The VP within Process Nominals: Evidence from Adverbs and the VP Anaphor Do-So. *Natural Language & Linguistic Theory*, 19(3), 549–582. JSTOR: 4048023
- GEHRKE, B. (2011). Stative Passives and Event Kinds. In *Proceedings of Sinn & Bedeutung 15* (pp. 241–257).
- GEHRKE, B. (2013). Still Puzzled by Adjectival Passives? In R. Folli, C. Sevdali, & R. Truswell (Eds.), *Syntax and its Limits* (pp. 175–191).
- GEHRKE, B. (2015). Adjectival participles, event kind modification and pseudo-incorporation. *Natural Language & Linguistic Theory*, 33(3), 897–938.
- Grestenberger, L. (2018). Deponency in finite and nonfinite contexts. *Language*, 94(3), 487–526. Grimshaw, J. (1990). *Argument structure*. Cambriddge, Mass: MIT Press.
- HALE, K. L., & KEYSER, S. J. (1993). On Argument Structure and the Lexical Expression of Syntactic Relations. In K. L. HALE & S. J. KEYSER (Eds.), *The View from Building 20: Essays in Linguistics in Honor of Sylvain Bromberger* (24). Current Studies in Linguistics. Cambridge, Mass: MIT Press.
- Harizanov, B., & Gribanova, V. (2019). Whither head movement? *Natural Language & Linguistic Theory*, 37(2), 461–522.
- HARLEY, H. (2005). How Do Verbs Get Their Names? Denominal verbs, Manner Incorporation, and the Ontology of Verb Roots in English. In N. ERTESCHIK-SHIR & T. RAPOPORT (Eds.), *The Syntax of Aspect* (1st ed., pp. 42–64).
- HARLEY, H. (2013). External arguments and the Mirror Principle: On the distinctness of Voice and v. *Lingua*, 125, 34–57.
- HASPELMATH, M. (1994). Passive Participles across Languages. In B. A. Fox & P. J. Hopper (Eds.), *Typological Studies in Language* (Vol. 27, p. 151).
- HORN, L. R. (2011). Almost forever. In E. Yuasa, T. Bagchi, K. P. Beals, & J. M. Sadock (Eds.), Pragmatics and autolexical grammar: In honor of Jerry Sadock (76, pp. 3–22). Linguistik Aktuell/Linguistics Today (LA). Amsterdam; Philadelphia: John Benjamins Pub. Co.
- HORVATH, J., & SILONI, T. (2008). Active lexicon: Adjectival and verbal passives. In S. Armon-Lotem, G. Danon, & S. D. Rothstein (Eds.), *Linguistik Aktuell/Linguistics Today* (Vol. 134, pp. 105–134).
- IPPOLITO, M. (2004). An Analysis of "Still". Semantics and Linguistic Theory, 14, 127.
- Kastner, I. (2017). Reflexive verbs in Hebrew: Deep unaccusativity meets lexical semantics. *Glossa:* A Journal of General Linguistics, 2(1), 1–33.
- Kratzer, A. (1996). Severing the External Argument from its Verb. In J. Rooryck & L. Zaring (Eds.), *Phrase Structure and the Lexicon* (pp. 109–137).

- Kratzer, A. (2001). Building statives. In *Proceedings of the Berkeley Linguistics Society 26*.
- Krejci, B. J. (2012). Causativization as antireflexivization: A study of middle and ingestive verbs (MA report, University of Texas at Austin).
- KRIFKA, M. (1998). The origins of telicity. In S. D. ROTHSTEIN (Ed.), *Events and grammar* (pp. 197–235). Dordrecht: Kluwer.
- LABELLE, M. (2008). The French reflexive and reciprocal se. *Natural Language & Linguistic Theory*, 26(4), 833–876.
- LEE, S.-H. (2024). *No escape from syntax: Evidence from Gîkũyũ subject nominalizations.* Ms, NYU and University of Pennsylvania.
- LEVIN, B., & RAPPAPORT, M. (1986). The Formation of Adjectival Passives. *Linguistic Inquiry*, 17(4), 623–661. JSTOR: 4178511
- MAIENBORN, C. (2009). Building event-based ad hoc properties: On the interpretation of adjectival passives. In A. Riester & T. Solstad (Eds.), *Proceedings of Sinn und Bedeutung 13* (pp. 35–49). Stuttgart.
- MAIENBORN, C., GESE, H., & STOLTERFOHT, B. (2016). Adverbial Modifiers in Adjectival Passives. *Journal of Semantics*, 33(2), 299–358.
- MARANTZ, A. (1995). "Cat" as a phrasal idiom. Ms. MIT.
- MARANTZ, A. (1997). No Escape from Syntax: Don't Try Morphological Analysis in the Privacy of Your Own Lexicon. In *University of Pennsylvania Working Papers in Linguistics* (Vol. 4.2, pp. 201–225).
- MATEU, J. (2002). Argument Structure: Relational Construal at the syntax-semantics interface (Doctoral dissertation, Universitat Autònoma de Barcelona).
- McCawley, J. D. (1971). Prelexical syntax. In R. J. O'Brien (Ed.), Report on the 22nd annual Round Table Meeting on Linguistics and Language Studies (pp. 19–33). Washington, DC: Georgetown University Press.
- McGinnis, M. (2022). Reflexive clitics are verbal, not pronominal. *Canadian Journal of Linguistics/Revue canadienne de linguistique*, 67(3), 328–352.
- McIntyre, A. (2013). Adjectival passives and adjectival participles in English. In A. Alexiadou & F. Schäfer (Eds.), *Linguistik Aktuell/Linguistics Today* (Vol. 205, pp. 21–42).
- McIntyre, A. (2015). Event modifiers in (German) adjectival participles: Remarks on Gehrke (this issue). *Natural Language & Linguistic Theory*, 33(3), 939–953.
- MELTZER-ASSCHER, A. (2011). Adjectival passives in Hebrew: Evidence for parallelism between the adjectival and verbal systems. *Natural Language & Linguistic Theory*, 29(3), 815–855.
- Meltzer-Asscher, A. (2012). The subject of adjectives: Syntactic position and semantic interpretation. *The Linguistic Review*, 29(2).
- MICHELIOUDAKIS, D. (2012). *Dative arguments and abstract Case in Greek* (Doctoral dissertation, University of Cambridge).
- MICHELIOUDAKIS, D., & KAPOGIANNI, E. (2013). Ethical Datives: A Puzzle for Syntax, Semantics, Pragmatics, and their Interfaces. In R. Folli, C. Sevdali, & R. Truswell (Eds.), *Syntax and its Limits* (pp. 345–369).
- Myler, N. (2016). Building and Interpreting Possession Sentences (1st ed.).

- NAESS, Å. (2011). The Grammar of Eating and Drinking Verbs. *Language and Linguistics Compass*, 5(6), 413–423.
- NEDJALKOV, V. P., & JAXONTOV, S. J. (1988). The Typology of Resultative Constructions. In V. P. NEDJALKOV & B. COMRIE (Eds.), *Typology of Resultative Constructions* (Vol. 12, p. 3). Typological Studies in Language.
- NEWMAN, J. (Ed.). (2009). *The linguistics of eating and drinking*. Typological Studies in Language. Amsterdam; Philadelphia: John Benjamins Pub. Co.
- NISSENBAUM, J. (2018). Four compositional puzzles: An argument against the existence of passive morphemes.
- ODA, H. (2022). *The NP/DP-language distinction as a scale and parameters in minimalism* (Doctoral dissertation, University of Connecticut).
- Oikonomou, D., Rizou, V., Bondarenko, D., Özsoy, O., & Alexiadou, A. (2022). Scalar and Counterfactual Approximatives: Investigating Heritage Greek in the USA and Germany. *Languages*, 7(1), 11.
- Paparounas, L. (in press). Phrasal layering versus complex heads: Evidence from Greek stative passives. In *NELS 53: Proceedings of the 53rd annual meeting of the Northeast Linguistics Society.* Amherst, MA: GLSA.
- Paparounas, L. (2023). *Voice from syntax to syncretism* (Doctoral dissertation, University of Pennsylvania).
- Parsons, T. (1990). *Events in the semantics of English: A study in subatomic semantics*. Current Studies in Linguistics. Cambridge, Mass: MIT Press.
- PIGGOTT, G., & TRAVIS, L. D. (2013). Adjuncts Within Words and Complex Heads. In R. Folli, C. Sevdali, & R. Truswell (Eds.), *Syntax and its Limits* (pp. 156–174).
- RAPP, I. (1996). Zustand? Passiv? Überlegungen zum sogenannten "Zustandspassiv". Zeitschrift für Sprachwissenschaft, 15(2), 231–265.
- RAPP, I., & von Stechow, A. (1999). Fast 'almost' and the visibility parameter for functional adverbs. *Journal of Semantics*, *16*(2), 149–204.
- RIVERO, M.-L. (1992). Adverb Incorporation and the Syntax of Adverbs in Modern Greek. *Linguistics and Philosophy*, *15*(3), 289–331.
- SADOCK, J. (1981). Almost. In Radical pragmatics (pp. 257–271). New York: Academic Press.
- SAKSENA, A. (1980). The Affected Agent. Language, 56(4), 812–826. JSTOR: 413490
- SPATHAS, G., ALEXIADOU, A., & SCHÄFER, F. (2015). Middle Voice and reflexive interpretations: Aftoprefixation in Greek. *Natural Language & Linguistic Theory*, *33*(4), 1293–1350.
- TENNY, C. L. (1994). *Aspectual Roles and the Syntax-Semantics Interface* (G. CHIERCHIA, P. JACOBSON, & F. J. Pelletier, **typeredactors**). Studies in Linguistics and Philosophy.
- Tomioka, N. (2006). Resultative Constructions: Cross-Linguistic Variation and the Syntax-Semantics Interface (Doctoral dissertation, McGill University).
- TSIMPLI, I. M. (1989). On the properties of the passive affix in Modern Greek. *UCL Working Papers in Linguistics*, 1, 235–260.
- WILLIAMS, E. (1981). Argument Structure and Morphology. *The Linguistic Review*, 1(1).

- WOOD, J. (2014). Reflexive -st verbs in Icelandic. *Natural Language & Linguistic Theory*, 32(4), 1387–1425.
- WOOD, J. (2015). *Icelandic Morphosyntax and Argument Structure*. Studies in Natural Language and Linguistic Theory.
- WOOD, J. (2023). *Icelandic nominalizations and allosemy*. Ms. Yale University.
- Wood, J., & Marantz, A. (2017). The interpretation of external arguments. In R. D'Alessandro, I. Franco, & Á. Gallego (Eds.), *The Verbal Domain* (64, pp. 255–278). Oxford Studies in Theoretical Linguistics.
- ZOMBOLOU, K., & ALEXIADOU, A. (2014). The canonical function of the deponent verbs in modern Greek. In F. RAINER, F. GARDANI, H. C. LUSCHÜTZKY, & W. U. DRESSLER (Eds.), Morphology and Meaning: Selected papers from the 15th International Morphology Meeting, Vienna, February 2012 (327, pp. 331–344). Current Issues in Linguistic Theory. Amsterdam: John Benjamins.