Implicit arguments and Relativized Minimality

Dimitris Michelioudakis

Aristotle University of Thessaloniki

1. Introduction

The presence of implicit arguments (henceforth IAs) in syntactic representations, especially the syntactic representation of short passives, has been a controversial issue for decades (see Roberts 1987, Jaeggli 1986, Roeper 1987, Williams 1985, 1987, Bhatt & Pancheva 2006 and references therein). Recent approaches to passives (e.g., Bruening 2014, Alexiadou, Anagnostopoulou & Schäfer 2015) seem to converge in assigning no syntactic status to the implicit agent and cast doubt on the syntactic nature of most of its alleged effects, reanalyzing them as mainly semantic effects. Empty categories, though, can safely be diagnosed only through their competition with other objects for the same position or intervention effects. The argument then would go as follows: if an IA occupies a position in syntax, then establishing dependencies such as Move/Agree across such a position should be sensitive to the features of the IA. Especially following standard (featural) relativized minimality considerations (Rizzi 2001) and/or Chomsky's (2000/2001) assumption that Agree can only take place if the features of the probe are fully matched, one would expect Agree/Move to go through only as long as the features of the intervening IA are not the same or a superset of those involved in establishing a probe-goal relationship. In other words, in passives and passive-like constructions, an IA can only be represented syntactically as long as it does not block promotion of the internal argument.

Looking at a number of A-dependencies in Greek, it turns out that control relationships that are seemingly licensed by an IA are sometimes impossible. I will take this behavior to suggest that in such examples the IA is actually absent, as its presence would block the A-dependency. If the IA were always there (or always absent), the constructions/control relationships in question would not be expected to be licensed selectively. The very existence of such asymmetries suggests that IAs intervene in syntactic, and not merely semantic, configurations. Such effects must be attributed to the varying, as it turns out, feature specification of IAs and A-probes. The implications of these findings are twofold: (i) the syntactic, rather than merely semantic, status of IAs which can control into non-finite subordinate clauses is reinforced, while at the same time (ii) not all non-active constructions with agentive readings have syntactically realized IAs.

In section 2, I present the empirical pattern that supports this kind of analysis. In section 3 I draw a parallelism between the possible interpretations of IAs in Greek and the different types of arbitrary pronouns identified by Cinque (1988) and investigate all the possible configurations that involve all sorts of A-probes in Greek and all types of intervening IA, drawn from the abovementioned typology. In section 4, I offer an account in terms of (Featural) Relativized Minimality and/or Minimal Search and conclude.

2. A puzzling pattern in Greek: some passives allow implicit control and some do not

The core tenet of the argument is that implicit control is sometimes successful and sometimes it is not. All cases under discussion involve an A-dependency across the presumed position of an IA. Those A-dependencies are obligatory: (a) promotion (to subject) of the internal argument in verbal passives, episodic and generic; (b) promotion (to a unique Case position) of the internal argument in passive nominals. Successful implicit control is in principle compatible with two explanations: (i) either the IA is not syntactically represented and implicit control is semantic anyway; or (ii) implicit control is syntactic and therefore the IA is indeed projected syntactically, but its features are such that they cannot give rise to minimality effects in Agree/Move dependencies across the IA. Given the fact that implicit control is not successful in some other cases points towards the latter explanation: in such Agree/Move dependencies the features of the probe are such that the potential intervention of an IA would trigger a minimality violation.

Consider the following paradigm:

(1)   *Opos dhiapistosa, i   porta tus dhen klidhothike [PRO engatalipondas to
       As   I-found-out the door their not   was-locked   leaving   the
       ktirio].
       building
       'As I found out, their door was not locked when leaving the building.'

(2)   I   porta prepi na   klidhonete   IAi [PROi vjenondas apo   to
       The door must SUBJ be-locked.3SG.IMPERF   getting-out from the
       ktirio].
       building
       'The door must be locked when leaving the building.'

(3)   Na,   afti i   fotografia   travixtike IA$_i$ [PRO$_i$ fevghondas apo   tin   poli].
       Here, this the   picture   was-shot   leaving   from the   town
       'Look/here, this picture was taken when leaving (=as we were leaving) the town.'

In (1), which is an episodic passive, the agent(s) of the locking cannot be the same person or group of people as the one(s) leaving the building. On the contrary, in generic passives such as the one in (2), the person(s) locking the door has to be the same as the one(s) leaving the building. An even more intriguing case is the one in (3), which is an episodic passive again: whoever took the picture is part of the group of people leaving the town and the speaker necessarily has to be one of them. In other words, (3) gives rise to a mysterious 1st plural reading.

   Before moving to the argument itself, a crucial distinction needs to be drawn first, regarding the control properties of gerunds in Greek, a rather murky area. I will adopt and adapt a broad bipartite classification of Greek gerunds (see, e.g., Tsimpli 2000), which recognises absolute/temporal gerunds as one category and manner gerunds as the other relevant type. The former can usually be rephrased as an adverbial clause introduced by 'while', whereas the latter can be rephrased as adjuncts introduced by 'by means/virtue of'. Absolute gerunds license null subjects which are obligatorily controlled by some argument of the matrix clause. In fact, absolute gerunds can be controlled by any core or non-core argument of the matrix predicate. In (4), the null subject of the gerund can be co-indexed with either the null subject of the matrix clause or the (cliticized) object. In (5), it is co-indexed with the indirect object of the matrix, and in (6) it is shown that it can be co-indexed with object experiencers of any type, namely, either dative or accusative experiencers. Cliticization of non-subject antecedents may be preferred or even required but I will put this aside for now.

(4)   *pro*$_i$ ton$_j$ pirovolisan, $e_{i/(?)j}$ vjenondas apo   to   peripoliko.
             him.CLITIC shot.3PL   getting-out of   the   patrol car
        'They shot him, as {he was/they were} getting off the police car.'

(5) e_i telionondas ti   thitia tu,
         ending   the   term his
       pro tu$_i$ edhosan   vravio   ja   tis   ipiresies tu.
             him.DAT.CLITIC gave.3PL prize   for the   services   his
       'As he was ending his term, they gave him a prize in recognition of his work.'

(6) e_i akughondas afta, archise   {na   mi mu$_i$ aresi} /
         hearing   these started   SUBJ not me   appeal
       {na   me$_i$ enochli} afti i   istoria.
        SUBJ me   annoy   this   the story
       'As I was hearing those things, that story started to bother/annoy me.'
        (adapted from Anagnostopoulou 1999)

Crucially, there is clear evidence that nothing prevents null subjects of such gerunds from taking IAs as their antecedents. In (7), the subject of the adjunct clause is obligatorily coreferential with the understood experiencer of the evaluative adjective of the matrix CP.

(7) e_i grafondas to   vivlio, itan [enoxlitiko EXP$_i$] pu i aftoptes martires
       writing the book was annoying   that the eye-witnesses
       dhen milusan ja   ta mavra chronia tis   hundas.
       not talked about the black years of-the dictatorship
       'While writing the book, it was annoying that the eye-witnesses did not talk about
       the dark period of the dictatorship.' (adapted from Kotzoglou 2016)

These examples suggest that absolute gerunds can indeed be controlled by any type of argument, regardless of its theta-role–also putting aside irrelevant considerations regarding the feature makeup/size of overt antecedents. If this is so, then the fact that existentially bound understood agents, as well as overt by-phrases, can never be the antecedent of gerundival subjects is a noteworthy exception (8).

(8) pro_i pirovolithike (apo tus astinomikus$_k$/ARB$_m$), $e_{i/*k/*m}$ vjenondas apo to
       was-shot   by the policemen   getting-out from the
       peripoliko.
       patrol car
       'He was shot as he was getting out of the police car.'

It is important to note that only temporal/absolute gerunds display this behavior. Manner gerunds allow their understood subject to be coindexed with any individual involved in the event denoted by the predicate that is modified by the gerund, even if the predicate is unaccusative, as long as this individual plays an agent-like role in the event (see Kotzoglou 2016). It is reasonable to assume that control in such cases is rather semantic/pragmatic, along the lines of Tsimpli 2000 as it involves individuals which are clearly not represented in syntax. This leaves us with temporal/absolute gerund as the only construction which potentially involves obligatory syntactic control. The blocking of implicit control under certain syntactic conditions also lends support to the syntactic status of this dependency.

3.   Different types of IA in different types of passive

The data from control into absolute/temporal gerunds seem to suggest that a crucial variable is the interpretation of the implicit pronominal element. Covert pronominal elements of the sort discussed here have arbitrary reference and it appears that Cinque's (1988) broad distinction between two types of arbitrary pronominal elements is reflected in the facts under discussion. Thus, the success of implicit control often correlates with the type of arbitrary reference involved. Cinque identifies these two broad types of ARB: (i) *quasi-existential ARB*, which is compatible with the existence of a unique referent (cf. the interpretation of *they* in '*They have called for you; I think it was your brother*') or (ii) *quasi-universal ARB*, the interpretation of generic arbitrary arguments that necessarily includes more than one individual, potentially every relevant individual (cf. the interpretation of *you* in '*In Spain you eat well*'). Existentially bound agents in (short) episodic verbal passives have the properties of Cinque's (1988) *'quasi-existential'* arbitrary pronominal elements (ARB): (i) they are compatible with specific time reference (9a), (ii) they are compatible with the existence of a single individual satisfying the description (9b), (iii) they are incompatible (on the existential interpretation) with generic time reference, (iv) they are restricted to external theta-roles, and (v) they are necessarily [+human] (9c).

(9) a. This question was answered yesterday afternoon.
   b. This question was answered rudely (I think it was Fred).
   c. Strangers were barked at for fun. (adapted from Roberts 2014)

These properties are all present in the agentive readings of non-active constructions of transitive predicates in Greek. But, as shown in (1) and (8) above, such understood agents fail to control into absolute gerunds. To make sure that they are not syntactically realized in such constructions and that there is no mysterious/independent ban on control by this specific type of IA in Greek, it would suffice to find some other construction with demoted/unpronounced agents that does allow them to control into a non-finite clause. Indeed, event nominalizations with objects as (non-iterable) genitives can license absolute gerunds whose null subject is successfully controlled by the understood agent (10).

(10) (Context: Speaking of the crusaders and the places they went through…)
   I   oloklirotiki katastrofi   ton   poleon IMP$_i$ [PRO$_i$ pijenondas pros Ierusali…]
   The total   destruction of-the cities   heading   to   Jerusalem
   itan   meghalo   eglima.
   was   huge   crime
   'The cities' total destruction (by the crusaders) while heading to Jerusalem was a huge crime.'

Alexiadou, Anagnostopoulou and Schäfer (2015), who concede that implicit agents of nominals need to be syntactically projected, note that "nominals differ from [episodic] passives in that the implicit argument cannot be existentially bound" (*ibid.*: 238). IAs in nominals seem to behave more like Principle B pronouns: they can be bound by a DP outside their binding domain or they can serve as variables bound by a quantifier (11).

(11) Every journalist$_i$ hopes that a conversation IA$_i$ with the president will be forthcoming.
   (from Bruening 2014, via Alexiadou, Anagnostopoulou & Schäfer 2015:238)

Notwithstanding Alexiadou et al's observation regarding binding, we can establish a certain striking similarity between quasi-existential ARB in episodic verbal passives and syntactically projected null pronominal IAs in Greek nominals: they are both restricted to external theta-roles. As we show in (12), the internal argument of an unaccusative predicate is not a licit controller.

(12) Pliroforithika   enan thanato [PRO   diefthinontas orchistra]
   Learnt/heard-of.1SG   a   death   conducting   orchestra
   'I heard of a death while conducting the orchestra' (PRO=hearer/*the deceased)

Crucially, non-agents can control only as long as the interpretation is generic, not episodic (13).

(13)   O   thanatos [PRO diefthinontas (tin) orchistra]…
         The   death   conducting   the orchestra
         ine   to kalytero telos ja   enan / ton maestro.
         is   the best   end for a / the conductor
         'The best death for a conductor is while conducting the orchestra'

The contrast between generic and episodic nominals points to the different categorial/featural status of IAs in the former. Arguably, the controller in (13) is an arbitrary, non-referential element, and more specifically a *quasi-universal* ARB, following Cinque's (1988) dichotomy. Such ARB elements are known to be (i) compatible with all theta-roles/not restricted to external arguments, (ii) compatible with generic time reference, and (iii) incompatible with specific time reference. All of these properties are manifested in (13). Roberts (2014) derives the thematic restrictions (and the absence thereof) on arbitrary arguments from potential intervention effects between ARB and its licenser: there can be no dependency between T and ARB if the latter is (i) in an internal argument position of the passive, as the external argument in Spec-vP would intervene (14b); (ii) in an internal argument position of a non-stative unaccusative, as an Event argument would intervene (14c), or (iii) in an internal argument position of a stative unaccusative, as a Loc argument would intervene (14d).

(14)   a. T_i [vP arb_i [VP ..
         b. *T_i [vP EA [VP .. arb_i …
         c. *T_i … Ev … [VP .. arb_i …
         d. *T_i … Loc … [VP .. arb_i ….   (from Roberts 2014:5)

That (13) is no exception to Roberts' licensing principle is shown by the fact that such nominals, containing an ARB internal argument, would be illicit in object position. Such a dependency between a GEN operator in C and ARB within DP would violate the Phase Impenetrability Condition (Chomsky's (2001) 'weak' PIC if DP/nP is a phase or his (2000) 'strong' PIC if it is not).

The fact that non-generic IAs in nominals are subject to the same restriction as quasi-existential IAs of episodic verbal passives suggests that a similar licensing mechanism is at play. I propose that the relevant licensing head is the lowest functional projection c-commanding the agent in event nominals, arguably *n* (15). Then the same intervention effects arising in the possible verbal configurations in (14) will have to arise within nominals. Also, if T as a licenser is responsible for some of the interpretive effects of the IA in episodic verbal passives (e.g., existential binding), the absence of T in the DP also explains the lack of such readings for IAs in passive nominals.

(15)   [nP (R-argument) *n* [vP EA *v* …]   ]

To sum up our findings so far, in Greek nominals both generic and non-generic IAs can be licensed and both can control into temporal gerunds. On the contrary, in episodic verbal passives, existentially bound IAs cannot be controllers of null subjects in temporal gerunds. We have not explored the status of generic/quasi-universal IAs in verbal passives yet. Interestingly, generic verbal passives are *not* incompatible with an IA controlling into absolute gerunds. Such IA arbitrary elements are clearly quasi-universal:

(16)   (?Didaskontas), i   antidrasis   ton   mathiton prepi na lamvanonde
         Teaching   the reactions   of-the students must be-taken
         ipopsi   (?didaskontas)
         into-account teaching
         'When teaching, the students' reactions must be taken into account.'

Even more interestingly, notwithstanding the ban on existentially bound controlling IAs, recall that episodic sentences like (3) above, are also possible. This surprising effect is reminiscent of so-called non-argumental impersonal *si* in Italian. Non-argumental si, being compatible with non-external theta-roles is necessarily quasi-universal (Cinque 1988). However, in the context of specific temporal reference, a paradoxical, 1st plural, interpretation arises (17b).

(17)   a. Oggi, a Beirut, si nasce senza assistenza medica.
             'Today, in Beirut, one/babies can be born with no medical assistance.'

         b. #Oggi, a Beirut, si è nati senza assistenza medica.
             'Today, in Beirut, we were born with no medical assistance.'

So, this 1PL interpretation arises when the arbitrary argument typically receives a quasi-universal interpretation but this is blocked by factors such as specific time reference (see Cinque 1988 and Roberts 2014 for explanations of this phenomenon).
    Nevertheless, looking more closely at the properties of genitive/possessivised themes in Greek, it turns out that they are not always possible in the presence of an IA. Implicit control is licit when the genitivised theme is a full lexical DP (see (10) above), but this kind of co-indexation is impossible when the theme is realised by a clitic attaching to an adjective within the DP, typically the leftmost one (18), even though such cliticization is unproblematic when no implicit control is intended (19).

(18)   I   oloklirotiki tus   katastrofi [PRO pijenondas pros Ierusalim]…
         The total   their destruction   heading   to   Jerusalem
         'Their total destruction on their way to Jerusalem' (their = *the cities/OK = the
         crusaders as patients, but not agents)

(19)   I   oloklirotiki tus   katastrofi
         The total   their destruction
         'Their total destruction' (their = the cities or the crusaders, but only as patients)

    In Greek process nominals, only one argument can be realised as a genitive DP, unlike, for example, in Latin. This suggests that there is a unique functional projection licensing such genitives (see Alexiadou et al. 2007 and references therein) and therefore a unique probe for DPs above the thematic domain. Attraction of a genitive argument to the relevant functional projection is followed by movement of *n* (or nP) immediately above the genitive:

(20)   [… n F_{GEN}^0 [nP n̶ [ext.argument [int.argument … N̶ …]]]]

Apart from the genitive realization of one of the arguments, as we saw, Greek also allows for the realisation of adnominal arguments as possessive clitics. In fact, a (unique) genitive DP, which realises one of the arguments, can co-occur with a possessive clitic realising an

additional argument. Such co-occurrence obligatorily obeys Superiority, such that the higher argument is realised as a clitic, while the genitive DP necessarily realises a lower, internal argument (21).

(21)   i   oloklirotiki/lisalea   tus   katastrofi   ton   exthron
        the total/brutal   their.CLITIC   destruction   of-the enemies.GEN
        'their total/brutal destruction {of/*by} the enemies'

When the two cooccur, the clitic is realised higher than the head noun. Therefore, the probe for possessive clitics is higher than the landing site of the moved head noun (22).

(22)   [… F_{PossCl}^0 [n F_{GEN}^0 [nP n̶ [ext.argument   [int.argument …N̶…]]]]]

As we saw, movement of an internal argument genitive DP to F_{GEN} across the external thematic position seems to be fine, but movement of a clitic is out. This indicates that the intervention of the implicit agent gives rise to minimality effects relativised to the features of the probe. F_{GEN} can attract full lexical DPs, so its probe consists of both phi-features ([number] and [gender]) and some additional feature, probably [+D/+NP]. F_{PossCl}^0 instead, which can at most attract clitics, comprises no more than a bundle of phi-features. I follow Featural Relativized Minimality (Starke 2001, Rizzi 2001), summarized in (23) below, or equivalently Chomsky's (2001) framework regarding Minimal Search, according to which a probe cannot bypass a goal that matches all of its features, but it can bypass a goal that does not. Then, the features of the IA must be such that they make it an offending intervener when the probe is F_{PossCl}^0, but not when the probe is F_{GEN}^0 (24). In other words, the feature makeup of a non-generic IA is that of a (possessive) pronominal clitic.

(23)   **Featural Relativized Minimality:** A local relation cannot hold between X and Y when Z intervenes, and Z is somehow a potential candidate for the local relation. The features of X should not be a subset of the features of Z.

(24) F_{PossCl}^0 F_{GEN}^0 ext.arg.   int.arg.
        $+\varphi$ $IA_{+\varphi}$ $clitic_{+\varphi}$ *
        $+\varphi$ $clitic_{+\varphi}$ ok
                        $+\varphi, +D/+NP$ $IA_{+\varphi}$ $DP_{+\varphi, +NP}$ ok

Turning to verbal passives, it is necessary to explain the contrast between qu-∃ and qu-∀ arbitrary IAs. The feature makeup of existentially bound IAs is arguably the same as that of non-generic IAs in nominal passives, namely a simple bundle of phi-features. This is in line with the fact that Greek is a null subject language and, thus, its T needs to match non-lexical/weak pronominal elements such as *pro.* In fact, this requires us to accept the strong claim that the subject is always *pro* and that any preverbal subjects are just left-dislocated DPs (Alexiadou & Anagnostopoulou 1998), while postverbal subject DPs simply double *pro*, understood as a subject clitic in T (Spyropoulos & Philippaki-Warburton 1999). The ungrammaticality of implicit control in episodic verbal passives then follows if qu-∃ ARB fully matches T's uninterpretable features, thus blocking further probing downwards. Therefore, in Greek episodic verbal passives, existentially bound EAs are not syntactically projected but the agentive reading arguably comes from Spathas et al's (2015) Spec-less Middle Voice. Qu-∀ ARB on the other hand must have a reduced/defective feature makeup. Indeed, unlike in episodic passives, in generic passives the IA cannot be matched/doubled

by a by-phrase. Also ARB in generic passives can marginally bind an anaphor, but that has to be (generic) 2nd person singular (which is also its default person when realised overtly) or 1st person plural (25a), as opposed to non-generic IAs which are compatible with any [Person] value (25b). Thus, it can be argued that qu-∀ ARB lacks an interpretable/lexically valued person feature (and possible also gender), as its person is valued by default. This makes its feature specification a proper subset of T's probing features and its intervention is not enough to block T from probing and matching the internal argument.

(25)   a. ? i   antidrasis ton   allon prepi na lamvanonde
              the reactions of-the others must   to   be-taken
              ipopsi   IA$_i$ PRO$_i$ milondas ja   ton   eafto su$_i$/mas$_i$/*tu/*tus.
              into-account   talking   about the   self your/our/*his/*their

        b. i   efarmoji   tis   therapias IA$_{i/j/k/l/m/n/p}$ ston   eafto
            the application   of-the therapy   to-the self
            mu$_i$/su$_j$/tis$_k$/tu$_l$/mas$_m$/sas$_n$/tus$_p$ itan terastio lathos.
            my/your/her/his/our/your.PL/their was huge   mistake

Note that this treatment of generic 2SG/1PL, as bearing defective/no [Person], has the interesting consequence of equating such a pro(noun) with a qu-∀ IA featurewise and predicts that such IAs cause a minimality violation when the promoted element is a generic *pro* (thanks to Patrick Elliott for drawing this issue to my attention). The prediction is indeed borne out, as shown in (26).

(26)   Se afto to simio {o   listis   silamvanete}/{*pro silamvanese} IA$_i$ efkola
        At-this   point the robber is-arrested   you are-arrested   easily
        PRO$_i$ vjenondas apo to   peripoliko.
                getting-out of   the patrol car
        '(A policeman speaking:) right here it is easier for us/one to arrest the robber/you, as one/we get(s) out of the patrol car.'

To conclude, when manipulating a number of variables concerning the behavior of implicit arguments intervening in an Agree relationship, namely their generic/non-generic interpretation and the nature of the probe, it turns out that IAs do cause relativised minimality effects, thus providing a clear argument that they are syntactically projected in cases of successful implicit control. The table below lists all the conceivable combinations of the factors discussed and their Relativized Minimality-based analysis.

(27)   A-dependencies with and without intervening implicit external arguments

Passive Nominals				
F$_{PossCl}$	**F$_{Gen}$**	**External argument**	**Internal argument**	
+φ		non-generic	clitic$_{+φ}$	*
+φ		generic/qu-∀	clitic$_{+φ}$	OK
+φ		none	clitic$_{+φ}$	OK
	+φ, +D/+NP	non-generic	DP$_{+φ,+D, +NP}$	OK
	+φ, +D/+NP	generic/qu-∀	DP$_{+φ,+D, +NP}$	OK
	+φ, +D/+NP	none	DP$_{+φ,+D, +NP}$	OK
Verbal passives				

T	External argument	Internal argument	
+φ	Qu-∃, +φ	pro$_{+φ}$	*
+φ	Qu-∀, +#, uPerson	pro$_{+φ}$	OK
+φ	none	pro$_{+φ}$	OK

References

Alexiadou, A., & Anagnostopoulou, E. 1998. Parametrizing AGR: Word order, V-movement and EPP-checking. *Natural Language & Linguistic Theory*, 16(3), 491-539.

Alexiadou, A., E. Anagnostopoulou and F. Schäfer. 2015. *External arguments in transitivity alternations: A layering approach.* Oxford: Oxford University Press.

Alexiadou, A., L. Haegeman and M. Stavrou. 2007. *Noun phrase in the generative perspective*, Berlin: de Gruyter.

Anagnostopoulou, E. 1999. On experiencers. In *Studies in Greek syntax*, ed. by A. Alexiadou, G. Horrocks and M. Stavrou, 67-93. Dordrecht: Springer.

Bhatt, R., and R. Pancheva. 2006. Implicit Arguments. In *The Blackwell Companion to Syntax*, Volume 2, ed. by Martin Everaert and Henk Van Riemsdijk, 558-588. Oxford: Blackwell Publishing.

Bruening, B. 2014. Word formation is syntactic: Adjectival passives in English. *Natural Language and Linguistic Theory*, 32(2), 363-422.

Chomsky, N. 2000. Minimalist Inquiries. In *Step by step: Essays on minimalist syntax in honor of Howard Lasnik*, ed. by R. Martin, D. Michaels, J. Uriagereka and S. J. Keyser. Cambridge MA: The MIT Press.

Chomsky, N. 2001. Derivation by phase. *Ken Hale: A life in language*, ed. by Michael Kenstowicz, 1-52. Cambridge MA: The MIT Press.

Cinque, G. 1988. On si-constructions and the theory of Arb. *Linguistic Inquiry* 19(4), 521-581.

Jaeggli, O. 1986. Passive. *Linguistic inquiry*, 587-622.

Kotzoglou, G. (2016). Control in Greek gerunds: Implicit arguments and other factors. *Selected papers on theoretical and applied linguistics*, ed. by M. Mattheoudakis and K. Nicolaidis, 21, 166-185. Thessaloniki: Prothiki Open Journal Systems.

Landau, I. 2010. The explicit syntax of implicit arguments. *Linguistic Inquiry* 41: 357-388.

Rizzi, L. 2001. Relativized minimality effects. *The Handbook of Contemporary Syntactic Theory*, 4, 89-110.

Roberts, I. 1987. *The representation of implicit and dethematized subjects*. Dordrecht: Foris Publications.

Roberts, I. 2014. On the Interpretation of Certain Arbitrary Pronouns. Paper presented at the Uni of Frankfurt, 6/2014.

Roeper, T. 1984. *Implicit Arguments*, ms., University of Massachusetts Amherst.

Spathas, G., Alexiadou, A., & Schäfer, F. 2015. Middle Voice and reflexive interpretations: afto-prefixation in Greek. *Natural Language & Linguistic Theory*, *33*(4), 1293-1350.

Spyropoulos, V., & Philippaki-Warburton, I. (2001). 'Subject'and EPP in Greek: the discontinuous subject hypothesis. *Journal of Greek Linguistics*, 2, 149-186.

Starke, M. 2001. *Move reduces to merge: A theory of locality*. Doctoral dissertation, University of Geneva.

Tsimpli, I. 2000. Gerunds in Greek. *Journal of Greek Linguistics* 1, 133-169.

Williams, E. 1985. PRO and the subject of NP, *Natural Language & Linguistic Theory* 3:3, 297–315.

Williams, E. 1987. Implicit Arguments, the Binding Theory, and Control, *Natural Language & Linguistic Theory* 5:2, 151–180.

Dimitris Michelioudakis
dmichel@lit.auth.gr