Notes

i Abbreviations in the glosses are used throughout the thesis as follows:

nom for nominative case
acc for accusative case
gen for genitive case
sg for singular number
pl for plural number
cl for clitic
m for masculine gender
f for feminine gender

Case, number, gender, tense and aspect specifications are used only when these are morphologically distinguishable in the language.

The label –te is used for what is traditionally called ‘medio-passive’ suffix in Greek. A more extensive discussion of the suffix –te is included in chapter 2.

ii Verbs or phrases like vrehi ‘it is raining rain’, prepi ‘must’, ine efkolo ‘it is easy’ are called ‘impersonals’ or ‘3rd personals’ (i.e. the subject is obligatorily in the 3rd person) – cf. the grammar book by Clairis & Babiniotis (1999). The term ‘impersonals’ is used here in a very different way: it captures constructions with arbitrary subject interpretation.

iii The determiner ton ‘the-acc’ / o ‘the-nom’ is obligatorily present in (6) but not in (7c). The possibility of using the determiner in both examples makes the comparison valid. Further research is required to determine what kind of relation exists between the Greek determiner and arbitrary interpretation, if any at all.

iv My first attempt to analyse impersonals is discussed in Papangeli (2003).

v For suggestions regarding the EPP checking in Greek (and other languages) see Philippaki-Warburton (1987), Alexiadou & Anagnostopoulou (1998).
vi French has examples like:

(1a) Il se mange des spaghettis
he se eat-3sg the spaghettis
‘He is eating spaghettis’

It could be that se absorbs dative in (1). This type of dative is possibly absorbed also in the following Spanish example:

(1b) Ella se come la sopa
she se eat-3sg the soup
‘She is eating the soup’

Such examples are not attested in Greek or Russian (suffix-languages, as will be elaborated in chapter 3).

vii Russian also seems to have an empty expletive (cf. Franks 1995). This is shown in (2).

(2) Možet byf’ čto ona ujedet
may-3sg be-infl that she leave-perf-3sg
‘It may be that she’ll leave’

viii The Russian data are due to Olga Borik, Galina Gordishevsky and Ora Matushansky, unless cited from the literature.

ix Note here that Polish, a language with very similar properties to Russian, displays a very different behaviour. Specifically, impersonals are attested in Polish with the clitic się. The contrast between Russian and Polish is attributed to the Polish się being a clitic versus the Russian sja being a suffix. Further research would be required to reach firm conclusions on this issue.

x Note here that the clitic se is attested with a raising verb, as illustrated below:

(3a) Se pare ca Ion este fericit
se seem-3sg that Ion is happy
‘Ion seems to be happy’
It is generally assumed that raising verbs don’t assign accusative case. In other words, raising verbs do not have an accusative feature that needs to be checked by Logical Form (LF). So, the presence of the clitic cannot be associated with the accusative case (feature).
Moreover, the Rumanian clitic *se* may appear with a raising verb and another (pronominal) clitic, when the latter is in dative case:

\[(3b) \quad \text{I} \quad \text{se} \quad \text{pare} \quad \text{ca} \quad \text{Ion} \quad \text{este} \quad \text{fericit} \]
\[
\quad \text{to-him} \quad \text{se} \quad \text{seem-3sg} \quad \text{that} \quad \text{Ion} \quad \text{is} \quad \text{happy}
\]

‘It seems to him that Ion is happy’

The presence of the clitic *se* with the raising verb *pare* ‘seems’ above could perhaps simply be taken as an idiosyncratic property of this verb (Dobrovie-Sorin p.c.); i.e. whether the clitic *se* appears with all raising verbs or not would be an issue in this respect. The clitic *se* cannot be associated with the accusative case in (3a) and (3b), given that raising verbs do not assign accusative. Moreover, the clitic *se* cannot be associated with the dative case in (3b), given that it appears together with the pronominal dative clitic *i* ‘to-him’. It would be hard to assume that we have two dative cases in one derivation. The only possible option is that *se* absorbs nominative. What remains unexplained is the contrast between the Rumanian data here and the Italian data in (35) in the main text. The Rumanian clitic is compatible with raising verbs, while the Italian clitic is not.

\[\text{x}i\] The only exception would be nominative in Icelandic infinitival constructions (Marantz p.c.). In Icelandic, nominative appears as the subject of infinitives, an unexpected phenomenon. However, this could be a language-specific idiosyncracy.

\[\text{x}ii\] An outline of the behaviour of Greek reflexive verbs can be found in Papangeli (2003a).

\[\text{x}iii\] Everaert (1998) discusses whether Binding Theory relies on principles inside the Computational System (Syntax) or whether it refers to principles that belong to the Conceptual-Intentional System and he opts for the former.
Fillmore (1968) argues that a two-place predicate is reflexive if, whenever the same object is mentioned in both positions, the predicate necessarily holds (a predicate is a term, which identifies some property of an object or some relation between two or more objects). According to Fillmore, the English verb *equal* is reflexive, because everything equals itself. The verb *differ-from* is anti-reflexive, because *a* cannot differ from *a*, while the verb *love* is mesoreflexive, because it is possible, but not restrictive, that a person loves himself.

Fillmore argues for a Lexicon that is the list of minimally redundant descriptions of the syntactic, semantic and phonological properties of lexical items, accompanied by a system of redundancy rules, the latter viewed as a set of instructions on how to interpret the lexical entries. He points out the necessity to specify the number and the nature of the roles, what he calls the ‘cases’ that are conceptually inherent to the basic sense of the verb. According to Fillmore, these roles can be identified by terms like Agent, Instrument, Object Place, etc.

There is a distinction in the literature between proper reflexive verbs and “pseudo-reflexive” verbs. The distinction is based on syntactic grounds (cf. Channon 1974: 72).

*When two identical noun phrases are dominated by different argument nodes, and, in particular, when the nodes are an Agentive and an Objective, the verb is a proper reflexive verb.*

*When two identical noun phrases are dominated by identical argument nodes, the verb is a “pseudo-reflexive” verb – i.e., it will have the same form as a reflexive verb, but will not have a reflexive meaning.*

In the case of a proper reflexive verb, one argument is performing an act upon another, and the two arguments are co-referential. That is, an agent is performing an act upon itself. In the case of a “pseudo-reflexive” verb, nothing is performing an act upon itself.

The diatheses can also be expressed with analytic expressions (4a) and (4b) or with compounds (4c) and (4d) (Setatos 1997):

(4a) Misun o enas
    hate-3pl the-nom one-nom
    ton alon (middle diathesis)
    the-nom other-acc

‘They hate each other’
(4b) Misun i men hate-3pl the-nom ones-nom tus dhe the-acc others-acc (middle diathesis) ‘They hate each other’

(4c) Alilo-misiumunde each-other-hate-te-3pl (middle diathesis) ‘They hate each other’

(4d) Afto-katastrefome self-destroy-te-1sg (middle diathesis) ‘I destroy myself’

xvii The term ‘middle’ is used here for constructions with a theme structural subject and arbitrary interpretation of the agent (cf. Sioupi 1998). For example:

(5) To krasi pine te efharista the-nom wine-nom drinks-te-3sg pleasantly ‘The wine drinks with pleasure’

xviii The following example is reported by Setatos (1997: 206) as a reflexive construction without the suffix -te:

(6) Jlitono = jlitono ton eafto mou save-1sg save-1ag the-acc self-acc mine-gen ‘I save = I save myself’

Tzartzanos (1946:245) also reports that few reflexive verbs appear without the suffix -te, such as jirizo ‘to turn’. However, it is hard to tell whether such verbs are reflexives or unaccusatives. Theofanopoulou (1981) also observes that the following verbs may have a reflexive reading, although they appear without the te-suffix: ktizo ena spiti “I build a house for myself or for someone else”, ravo ena forema “I sew a dress for myself or for someone else”. Due to the lack of any systematic patter underlying these facts, I take such options to be attributed to semantic vagueness (note here that also in English “I cook pasta” can mean that I cook pasta for myself or for someone else).
The following example is reported by Setatos (1997: 206) as a passive construction without the suffix -te:

(7) Trizi to patoma apo ta vimata
    creak-3sg the-nom floor-nom by the-acc footsteps-acc
    ‘The floor creaks by the footsteps’

Note here that the term ‘impersonal passive’ appears in the Greek literature for constructions of the type:

(8) Ipenthimizete oti apajorevete to
    remind-te-3sg that forbid-te-3sg the-nom kapnisma
    smoking-acc
    ‘It is reminded that smoking is forbidden’

Tzartzanos (1945) suggests that example (8) is a fixed expression and that the embedded sentence is the subject of the verb. The term ‘impersonal passive’ and ‘impersonal’ is used in a very different way here. The first refers to passive constructions with arbitrary interpretation, while the second refers to constructions with arbitrary subject interpretation and absorption of nominative case – cf. chapter 1.

The following example is reported by Setatos (1997) as a reciprocal construction without the suffix -te:

(9) Pou tha antamosoun;
    where will meet-3pl
    ‘Where are they meeting (with each other)?’

Unaccusative verbs are hard to define in traditional grammar. They are characterized as active verbs (Babiniotis-Kontos 1967) or as passive verbs (Tzartzanos 1946).

Rivero (1992) distinguishes between adverbs functioning as complements (directional/manner/aktionsart) and adverbs functioning as predicates or non-complements (time/aspect). Rivero argues that adverbs of the first class may incorporate into the verb by head movement - Baker (1988):
Adverbs of the second class are, according to Rivero, external to the VP and they cannot incorporate:

(10b) *O Yanis tha akomi+milai
the-nom Yanis-nom will still+speak-3sg
‘Yanis will still be speaking’

Non-argument adverbs may form a compound with the verb, which differs from incorporation.

As further argument to her claim Rivero takes (11b) to be derived from (11a) through Noun Incorporation:

(11a) I kinotita dhini
the-nom community-nom give-3sg
fajito stus ftohus
food-acc to-the-acc poor-ac
‘The community gives food to the poor’

(11b) I kinotita trofodhoti
the-nom community-nom food+give-3sg
tus ftohus
the-acc poor-acc
‘The community gives food to the poor’

Manney (1995, 1999) argues for a number of semantic differences between examples (12a) and (12b):

(12a) Kitaksa ton eafto mu ston
looked-1sg the-acc self-acc cl-1sg-gen to-the-acc
kathrefti
mirror-acc
‘I looked at myself in the mirror’
Kitahthika ston kathrefi
saw-te-1sg to-the-acc mirror-acc
‘I looked at myself in the mirror’

Manney refers to construction (i) as a noun phrase active reflexive, along the lines of Faltz (1977) and to construction (ii) as a verbal inflection middle reflexive. Manney argues that (i) has the following characteristics: the construction is emphatic, the subject is an agent and thus acts volitionally. In addition, there is some psychological distance between the agent subject and the ‘self’-object. In (ii) Manney suggests that three distinct readings are attested: on the first reading, no agency is implied. On the second reading, the subject is viewed as partly agentive (responsible for the action denoted by the verb). On the third reading, the subject is agentive. The agentive reading is not emphatic when the inflectional middle verb is used, but greater personal involvement is observed (than in the active construction).

The adjunct apo moni tus ‘on their own’ may appear with the transitive form of the verb and the full anaphor. However, the adjunct seems to be semantically redundant:

(13) ?I anthropi plenun apo
the-nom men-nom wash-3pl by
moni tus tus eafortus tus
own-nom their-gen the-gen selves-gen their-gen
‘Men wash themselves on their own’

We also find examples of the type:

(14a) I Maria irthe me to
the-nom Maria-nom came-3sg with the-acc
aftokinito car-acc
‘Maria came on her own with the car / by car’

The phrase me to aftokinito ‘with the car / by car’ is not an instrument but a ‘manner’ phrase. Similarly, the PP me mia dhiadhilosi in (14b) is the cause and not the instrument:
(14b) I kivernisi epese me mia
  the-nom government-nom fell-3sg with a-acc
dhiadhilosi
demonstration-acc
  ‘The government fell with a demonstration’

Another test would be examples of control:

(15a) He shaved [without PRO cutting himself]

(15b) *He was shaved [without PRO cutting himself]

However, it is not clear whether Greek has instances of control (PRO): the embedded verbal form (i.e. the equivalent of the English ‘cutting’) always agrees with its subject.

Note however that verbs of the ‘love’-type (ajapo ‘love’, miso ‘hate’, latrevo ‘adore’) cannot usually reflexivize in Greek (or in some other languages like Serbo-Croatian). Only the passive reading is available when these verbs bear the suffix –te:

(16) Latreňike ap’ olon ton kosmo
  adored-te-3sg by all-acc the-acc world-acc
  ‘He was adored by the whole world’

Note, though, that the verb thavmazo ‘admire’, which is of the same type, seems to have reflexive and reciprocal variants.

Technically, it has only two spell outs: [+c+m] and [+c-m], but the latter is interpretable as either a cause or an instrument (Reinhart 2003).

The following example is acceptable in some contexts:

(17) I vrohi epline
  the-nom rain-nom washed-3sg
to aftokinito
  the-acc car-acc
  ‘The rain washed the car’
The point here is that the verb *pleno* ‘wash’ cannot take three types of subjects, whereas the verb *keo* ‘burn’ can take three types of subjects, as was illustrated earlier.

Zevgoli (2000) distinguishes between reflexive verbs formed in the Lexicon (intrinsic reflexive verbs) and reflexive verbs formed in the Syntax (extrinsic reflexive verbs). This division is based on Reinhart & Reuland (1993). A predicate is extrinsically reflexive if one of its arguments is a complex anaphor that denotes an identity relation between two arguments. In intrinsically reflexive predicates, the heads (verbs) are marked as such in the Lexicon. Reflexivization here is an operation on the verb’s theta-grid, absorbing one of its theta-roles. Languages vary in whether the absorbed role is realized in the overt Syntax (as in Dutch) or not (as in English).

For example:

**Syntax:**

(18a) *Ipostirizume o enas ton alo*

\[support-1pl \text{ the-nom one-nom the-acc other-acc}\]

‘We support each other’

(18b) *Vrizi o enas ton alo*

\[swear-3sg \text{ the-nom one-nom the-acc other-acc}\]

‘We swear at each other’

**Lexicon:**

(19a) *Filame o enas ton alo*

\[kiss-1pl \text{ the-nom one-nom the-acc other-acc}\]

‘We kiss each other’

(19b) *Ajapai o enas ton alo*

\[love-3sg \text{ the-nom one-nom the-acc other-acc}\]

‘We love each other’

For example:

**Syntax:**

(20a) *Aliloipostirizomaste*

\[each-other-support-te-1pl\]

‘We support each other’
(20b) *Alilovrizomaste
each-other-swear-te-1pl
‘We swear at each other’

Lexicon:
(21a) *Alilofiliomaste
each-other-kiss-te-1pl
‘We kiss each other’

(21b) *Aliloajapiomaste
each-other-love-te-1pl
‘We love each other’

xxxv For example:
Syntax:
(22a) Ipostirizomaste
support-te-1pl
‘We support each other’
OR ‘We are being supported (by… )’ (passive)

(22b) Vrizomaste
each-other swear-te-1pl
‘We swear at each other’
OR ‘We are being swore at (by… )’ (passive)

Lexicon:
(23a) Filiomaste
kiss-te-1pl
ONLY ‘We kiss each other’

(23b) Ajapiomaste
love-te-1pl
ONLY ‘We love each other’

xxxvi Note here the obscure picture of Greek with respect to the following verbs: *kitazo* ‘look’ has the reflexive variant *kitazome* ‘look-te’. For example:
Reflexivization into ECM is arguably possible:

(24b) O Yani kitazete na
the-nom Yanis-nom look-te-3sg to / subj
kani grimatses
make-3sg grimaces-acc
‘Yanis looks at himself making grimaces’

The verb *akuo* ‘hear’, on the other hand, does not have a reflexive alternate *akujome* ‘hear-te’ can only mean ‘I am being heard’ and not ‘I hear myself’. Reflexivization into ECM is also ruled out:

(24c) O Yanis akujete na
the-nom Yanis-nom hear-te-3sg to / subj
trajudhai sing-3sg
‘People listen to Yanis singing’
* Yanis listens to himself singing’

The contrast between these two verbs, namely the observation that *kitazo* ‘look’ has a reflexive alternate, while *akuo* ‘hear’ does not is problematic for the idea that Greek is a language of the syntax type. However, in section 2.3, I explain that a language has the syntax setting of the parameter as long as it displays enough evidence for the child to set the parameter.

Another explanation would be that Greek is in a transit stage, i.e. it is changing from syntax to lexicon setting of the parameter. Possibly such a process happened in Romance, namely the parameter switched from lexicon (Latin) to syntax (French, Italian). Portuguese would be a more unclear case (cf. a discussion of Portuguese in chapter 3).

Note here that examples like ‘John cooked pasta’ can have a reflexive reading ‘John cooked pasta for himself’ given the right context.

There are few exceptions (Theophanopoulou 1981):
One could argue that the basic verbal entry is (25c). In (25a) and (25c) the preposition can be empty. According to Tsimpli (1989) the nominal phrase receives the accusative case inherently.

Hulk & Cornips (2000) distinguish two types of languages: Romance, German and Heerlen Dutch use the reflexive marker to indicate aspectual differences, whereas Standard Dutch and English resort in other means.

Grimshaw (1982) argues that in reflexive verbs, the external role is bound in the lexical entry.

More precisely, Vassilaki (1989) takes the reflexive use of the suffix -te as the most dominant one, contrary to other approaches. According to Vassilaki, the function of the inflection (suffix) is to show the establishment of a reflexive predicative pattern in which only the second argument slot is filled. This leads to a non-active relation.

Zevgoli (2000) points out, along the lines of Tsimpli (1989), that the suffix -te checks the theta feature / role of the direct object but not the one of the indirect object. The te-suffix also checks the accusative case feature of v. Zevgoli observes that, if the suffix checked the theta-feature of the indirect object, a nominal phrase in accusative would enter the derivation. However, it would not be possible for the nominal phrase to check its accusative case given that light v would have the accusative
case features already checked and erased. Note here that Zevgoli does not provide any empirical evidence for this hypothesis. In the case of all reflexive verbs, Zevgoli argues that the suffix is a lexical category, which is fully specified for nominal features and it recovers the missing phi-features via its fusion with the AgrS morpheme of the verb. Because it lacks an inherent specification for phi-features, the suffix is referentially defective and so it is interpreted as bound by a subject antecedent, giving rise to a reflexive interpretation. The te-suffix in passives, on the other hand, is functional, according to Zevgoli, and, therefore, it cannot be interpreted as an argument. In order to be assigned content it is associated with the nominal complement of an apo-phrase (‘by-phrase’).

Embick (2003) observes certain differences between reflexive, unaccusative and passive constructions, which would presumably explain the ambiguities. For example, he argues that reflexives (in Greek and Romance) are formed by cliticization of an anaphoric external argument to the v-head, satisfying the case feature of v. The object is then raised to a position from which it binds the anaphor and checks nominative case. Unaccusatives and reflexives thus differ: only reflexives are agentive because they have an external argument in the initial stages of the derivation.

Tsimpli (1989) observes that the subject of a reflexive verb can control the subject of a purposive clause in Greek. This is a characteristic behaviour of unergative verbs and not of unaccusative verbs:

(26) I Maria htenistike ja na the-nom Maria-nom comb-te-3sg for subj vji ekso go-3sg out ‘Maria combed herself to go out’

Specifically, Tsimpli argues that, in Syntax, the te-suffix absorbs the external theta-role. Given the Visibility Hypothesis (Chomsky 1981), which requires categories, which are assigned a theta-role to also have case, the suffix -te receives the accusative case of the verb, due to V-movement to I. The object NP subsequently moves to a case position (Spec IP). Note here that Philippaki-Warburton (1985, 1990) has argued that there is no movement for case in Greek i.e. the suffix –te is not an
element in need of case. Philippaki suggests that the suffix \(-te\) absorbs the agent theta-role.

Tsimpli gives a similar analysis for some experiencer verbs (cf. Pesetsky’s 1995 analysis, who assumes that the experiencer must also be internal for English) and for middles. In particular, she argues that these are derived by an internal argument that moves to the subject position.

Note here that according to Sioupi (1997, 1998), middles with the mediopassive suffix \(-te\) are derived in the Lexicon, by the presence of a generic operator in the lexical entry (GEN). Specifically, Sioupi suggests that the verb is always selected from the Lexicon with the suffix \(-te\) and it is the word order that gives rise to different readings. Middles, for example, occur in SV order.

The reciprocal reading is also attested with the anaphor \(o\ \)enas\ ton\ alo\ ‘each other’, with an adverbial or with the prefix \(alilo\ ‘each other’\) (Sinopoulou 2001):

\[(27a)\] Ta\ pedhia\ pirazun\  
the-nom\ children-nom\ tease-3pl\  
\(to\ \) ena\ \(to\ \) alo\  
the-acc\ one-nom\ the-acc\ other-acc\  
‘The children tease each other’

\[(27b)\] O\ Nikos\  ke\ o\  
the-nom\ Nikos-nom\ and\ the-nom\  
Hristos\  tsakothikan\ metaksi\ tus\  
Hristos-nom\ fought-te-3pl\ between\ them-gen\  
‘Nikos and Hristos fought with each other’

\[(27c)\] I\ sinadherlf\ aliloipostirizonde\  
the-nom\ colleagues-nom\ each-other-support-te-3pl\  
‘The colleagues support each other’

There are also few verbs that have a reciprocal reading without bearing the suffix \(-te\), such as \(malonume\ ‘we are fighting with each other’, \(miazume\ ‘we look like each other’, \(teriazume\ ‘we get along with each other’, \(horizume\ ‘we are splitting’, \(antalasume\ ‘we are exchanging’\) (Sinopoulou 2001). In addition, there are a few reciprocal verbs that do not have an active alternate, such as \(sinenoumaste\ ‘we are reaching an understanding’, \(tsakonomaste\ ‘we are fighting’\) (Theofanopoulou 1981).
Other constraints suggested by ter Meulen (2000):

Speaker constraint 2: Using words cost effort (the more complex they are, the more they cost).

Hearer constraint 2: Use default constraints when ambiguities arise.

Speaker constraint 3: Be consistent and coherent.

Hearer constraint 3: Avoid contradictions.

Similar is the situation in French:

(28a) Jean et Marie écrivent des lettres
      l’un à l’autre
      ‘Jean and Marie write letters to each other’

(28b) Jean et Marie achètent des livres
      l’un pour l’autre
      ‘Jean and Marie buy books for each other’

Reciprocalization of the possessor is also ruled out:

(29a) *O Yanis ke i Maria
      filithikan ta heria
      ‘Yanis and Maria kissed each other’s hands’

(29b) *O Yanis ke i Maria
      plithikan ta podhia
      ‘Yanis and Maria washed each other’s feet’

Reciprocalation of the possessor is possible, if an anaphor is used:
(30a)  O  Yanis  ke  i  
the-nom  Yanis-nom  and  the-nom  
Maria  filisan  ta  heria  
Maria-nom  kissed-3pl  the-acc  hands-acc  
o  enas  tu  alu  
the-nom  one-nom  the-gen  other-gen  
‘Yanis and Maria kissed each other’s hands’

(30b)  O  Yanis  ke  i  
the-nom  Yanis-nom  and  the-nom  
Maria  eplinan  o  enas  
Maria-nom  washed-3pl  the-nom  one-nom  
ta  podhia  tu  alu  
the-acc  feet-acc  the-gen  other-gen  
‘Yanis and Maria washed each other’s feet’

\footnote{Note that at least some instances of the benefactor can passivize in a language like English (for example “John was sent a letter by the police”), which possibly indicates that it is the argument of the verb.}

\footnote{The accusative case on adjuncts is a fact, although unexplained within current linguistic theories that assume that a main distinction between arguments and adjuncts is that the former but not the latter have case.}

\footnote{The Greek possessive example below is taken by Tsimpli (1989) to support the claim that reflexives are intransitives:}

(31a)  *O  Yanis  plithike  
the-nom  Yanis-nom  washed-3sg  
to  prosopo  tu  
the-acc  face-acc  his-gen  
‘Yanis washed his face’

Note that examples with a possessive pronoun together with a reflexive element on the verb are ruled out also in French:

(31b)  *Jean  s’est  lavé  ses  mains  
Jean  se  has  washed  his  hands  
‘Jean washed his hands’
Thus, reflexivization into inalienable possessive constructions is unavailable in both French and Greek, if a possessive pronoun appears as part of the object DP. This requires an independent explanation. A thought would be that both the operation of reflexivization and the use of a possessive pronoun aim to the same interpretive effect, namely to identify the possessor / benefactor with the subject. It is thus not necessary to make use of both means.

Note here that Ancient Greek differs from Modern Greek: a DP in accusative may appear with a reflexive verb in inalienable possessive constructions:

(32) Luete tas hiras
wash-te-3sg the-acc hands-acc
‘He washes his hands’

However, Ancient Greek is a language that allows for adjuncts in (morphological) accusative. Therefore, the transitive alternate of (32) could be something like ‘he washes himself the hands’, where the two DPs are “himself” and “the hands” are in accusative and the DP ‘the hands’ modifies the object of the verb ‘himself’. We would thus opt here for an analysis of the DP tas hiras ‘the hands’ as an adjunct (and not an argument of the verb). This would perhaps explain why it is possible to say ‘Jean s’est lavé les mains’ but not ‘*Jean s’est lavé la voiture’. The DP ‘the car’ cannot modify the reduced object ‘himself’, because it is not a part of it. In section 4.2, we will discuss further the obscurity of the argument – adjunct distinction in a language like Greek (and in other languages). If there is an adjunct involved in inalienable possessive constructions, then Modern Greek lacks the equivalent of French (and Ancient Greek examples), because the adjunct appears as a PP.

Note here that such constructions may also have a reflexive reading, as shown clearly by the example: O Yanis kerastike ena poto ‘Yanis treated himself a drink’. The DP ena poto ‘a drink’ appears in the accusative.

There are few verbs like kano ‘do / make’, treho ‘run’ that only have an active voice.

The verb in (33a) is used instead of the unavailable passive reading of (33b) and the periphrastic expression in (33c) is used instead of the unavailable passive reading of (33d) (Babiniotis–Kontos 1967: 228):
The Russian suffix -sja differs from the Greek suffix –te in that it does not change form depending on person, number, mood, aspect and tense.

Channon (1974) analyzes Russian reflexive verbs by using two rules, the subject-copying rule and the noun-phrase reduction rule. Channon argues that, in proper reflexive verbs, the ‘agentive’ argument is fronted as the subject. The “objective” argument is reflexivized. In “pseudo-reflexive” verbs, on the other hand, i.e. verbal forms with passive reading, the “objective” argument is fronted and thus occupies the subject position. The suffix –sja is assumed to originate from a copy of the objective argument, by application of the subject-copying and noun-phrase reduction rules. In sum, Channon argues that all instances of reflexive verbs (i.e. proper reflexive verbs, passive “pseudo-reflexive” verbs and intransitive “pseudo-reflexive” verbs) follow from a unique analysis that is based on Fillmore (1968) and subsequent work.

The European Portuguese data in this section are due to Victor Pinto and Hose Nuno Meira Santos.
Lastly, a prediction is made with respect to the interaction of two arity operations. Due to the need for further research on this issue in order to clearly explain the facts, I only include this here as a footnote. In languages that use verbal morphology, the reflexive marker obligatorily absorbs the accusative only. Given that the operation of passivization also eliminates the accusative, we do not expect to have both *se*-reflexivization and passivization. Either the passive or the reflexive reading is possible but the two are not attested simultaneously (this has been discussed for Romance – cf. for example Rizzi 1986). This is borne out in Greek:

(34a) O Yanis tripiete the-nom Yanis-nom pinch-te-3sg

   ‘i. Yanis pinches himself’

   OR  ‘ii. Yanis is being pinched’

Moreover, it is predicted that, in syntax languages, the operations of reflexivization and passivization can apply simultaneously if reflexivization targets the dative rather than the accusative argument: passivization existentially binds the external argument and eliminates the accusative. This is borne out in German:

(34b) ?Ein Haus wurde *sich gekauft a-nom house-nom was-3sg se bought

   ‘A house was bought for him (by him)’

The (?) is used to indicate that context is necessary for the example to be acceptable. The context is given as follows: “Johann and Mary got married. They got kids, a house was bought for themselves.” (The judgements are attributed to Patrick Brandt, Silke Hamann and Thomas Wolle). Note that German (like Italian and French) displays the characteristics of a syntax language, as argued by Reinhart & Siloni (2003a, 2003b). For example, reflexivization of the benefactor/goal is possible: *Hans schickte *scheinen ‘Hans sent himself a letter’.

German differs from Italian. In the latter, two arity operations are banned from applying simultaneously. This is illustrated in the following example (from Rizzi 1986):

(34c) *Gianni si è stato affidato Gianni se has-3sg been entrusted

   ‘Gianni was entrusted to himself’
The example is acceptable if a full anaphor is used instead of the clitic *si*:

(34d) Gianni è stato affidato a sé stesso
Gianni has-3sg been entrusted to himself
‘Gianni was entrusted to himself’

The difference between the German example and the Italian example is the following. The theta-clusters of the benefactor are identified with the theta clusters of an (implied – existentially bound) agent (but not with the theme *ein Haus* ‘a house’ that has undergone passivization). In the Italian example, however, the theta clusters of the benefactor are identified with the theta clusters of an (implied – existentially bound) agent. In this case, the theme argument moves to the subject position. In order to get the intended reading we would expect the moved DO argument to bind the IO argument. However, the clitic *si* not an argument and thus cannot be bound. A full anaphor, on the other hand, is an argument that is bound by the moved theme *Gianni*.

1\textsuperscript{xii} Incorporation could mean case-checking, i.e. by incorporation the clitic checks the accusative case.

1\textsuperscript{xiii} For suggestions on the movement of clitics and their hosts in Greek, see Philippaki (1999) and Terzi (1999).

1\textsuperscript{xiv} This idea is compatible with analyses that assume a DefP (Definiteness Phrase) merged on top of the DP in Greek. According to such analyses (Stavrou 1996, Tsimpli & Stavrakaki 1999) the full pronoun *aftos* ‘he’ is generated as a Def head when it functions as a demonstrative (cf. also Marinis 2001).

1\textsuperscript{xv} The double-specifier analysis (cf. 144a) resembles very much to Abney’s (1987) analysis of possessives:

(35) \[ \begin{array}{c} \text{DP} \\
\text{DP} \\
\text{John} \\
\text{D} \\
\text{D}’ \\
\text{NP} \\
\text{‘s} \\
\text{book} \end{array} \]
There is, however, a crucial difference between clitic doubling and possessives: in possessive constructions, following Abney (1987), the possessor-possessee complex is assigned one theta-role (if it is an argument of the verb) and the possessor is assigned another theta-role DP-internally either from the D-head or from the N-head. This does not seem to hold for clitic doubling: the clitic-double complex is assigned one theta-role from the verb, but there does not seem to be any other operation of theta-role assignment DP-internally.

In the same vein, it is predicted that the clitic always has the same categorial feature as its “double”. This is borne out in the Greek indirect objects. In particular, the IO is expressed either with a DP carrying genitive case or with a PP. However, it is only possible to double a reduced pronoun by an IO DP:

\[(36a) \quad Tu \text{ edhosa tu Yani} \\
\quad \text{cl-3sg-gen gave-1sg the-gen Yani-gen} \\
\quad \text{ta lefta} \\
\quad \text{the-acc money-acc} \\
\quad \text{‘I gave Yani the money’} \]

\[(36b) \quad *To \text{ edhosa sto Yani} \\
\quad \text{cl-3sg-gen gave-1sg to-the-acc Yani-acc} \\
\quad \text{ta lefta} \\
\quad \text{the-acc money-acc} \\
\quad \text{‘I gave Yani the money’} \]

The presence of a P-head c-commanding the pronominal clitic (but not the verb) would prevent incorporation of the clitic to its host (due to the Head Movement Constraint).

A preposition may precede a full pronoun:

\[(36c) \quad Edhosa s’ aifon ta lefta \\
\quad \text{gave-1sg to him-acc the-acc money-acc} \\
\quad \text{‘I gave him the money’} \]

The presence of a P-head that c-commands the full pronoun is fine, because full pronouns stay in situ. That is, there is no incorporation of the pronoun into the verb and so there is no movement that the P-head would block.
Extraction from the DP-double of a clitic is ruled out in Italian and in Spanish:

\[(37a) \quad L' \quad \text{abbiamo} \quad \text{vista} \quad \# \quad \text{la} \]
\[
\text{cl-3sg-f-acc have-1pl seen-f the} \\
\text{sorella di} \quad \text{Maria} \\
\text{sister of Maria} \\
\text{‘We have seen # the sister of Maria’}
\]

\[(37b) \quad *Di \quad \text{Maria} \quad l' \quad \text{abbiamo} \quad \text{vista} \quad \text{la} \]
\[
\text{of Maria cl-3sg-f-acc have-1pl seen-f the} \\
\text{sorella} \\
\text{sister} \\
\text{‘We have seen the sister of Maria (not of someone else)’}
\]

\[(37c) \quad \text{La} \quad \text{vimos} \quad \text{a} \quad \text{la} \quad \text{hermana} \]
\[
\text{cl-3sg-f-acc saw-1pl to the sister} \\
\text{de} \quad \text{Juan} \\
\text{of Juan} \\
\text{‘We saw Juan’s sister’}
\]

\[(37d) \quad *De \quad \text{Juan} \quad \text{la} \quad \text{vimos} \quad \text{a} \]
\[
\text{of Juan cl-3sg-f-acc saw-1pl to} \\
\text{la} \quad \text{hermana} \\
\text{the sister} \\
\text{‘Juan’s we saw the sister’}
\]

Extraction is easier in the absence of a clitic: the PP is no longer a “double”, but presumably the complement of the verb. The fact that extraction is possible here suggests that the preposition \textit{a} does not project a real PP (PPs normally are strong islands and thus do not allow extraction). Note also that the preposition can be omitted (and, therefore, appears in brackets in the examples below):

\[(37e) \quad \text{Vimos} \quad (a) \quad \text{la} \quad \text{hermana} \quad \text{de} \quad \text{Juan} \]
\[
\text{saw-1pl to the sister of Juan} \\
\text{‘We saw Juan’s sister’}
\]

\[(37f) \quad ?De \quad \text{Juan} \quad \text{vimos} \quad (a) \quad \text{la} \quad \text{hermana} \]
\[
\text{of Juan saw-1pl to the sister} \\
\text{‘Juan’s we saw the sister’}
\]
Coordination facts also seem to indicate that the clitic originates from the object position: extraction from one conjunct is banned as illustrated in (38):

(38) *Ton idha ke ti Maria
cl-sg-m-acc saw-1sg and the-acc Maria-acc
‘I saw him and Maria’

Holton, Mackridge & Philippaki-Warburton (1997) provide further examples where the pronoun aftos ‘he’ functions as a demonstrative.

Note here that the situation is different in other languages, like Italian: the only available option is that clitic and full pronouns are co-referential with a DP in apposition. Moreover, a demonstrative in Italian can only precede a NP (not a DP), unlike Greek:

(39) Ho visto quell’uomo
have-1sg seen this man
‘I have seen this man’

Some speakers find this marginally acceptable. All speakers, though, agree that (159b) is worse than (159a) and (159c).

Note that the following example is acceptable:

(40) O Yanis edhose tis
the-nom Yanis-nom gave-3sg the-gen
Marias to vivlio tu Chekhov
Maria-gen the-acc book-acc the-gen Chekhov-gen
ke o Vasilis ekane to
and the-nom Vasilis-nom did-3sg to
idhio
same-n-acc
‘Yanis gave Maria Chekhov’s book and Vasilis did the same’