The Middle Voice in Ancient Greek. A study in Polysemy
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CHAPTER 2

The Middle Voice as a Complex Network Category

In the first chapter, I set out Langacker's *Complex Network Category Model*. The most important components of this model were *abstract schema*, *elaboration*, *extension*, and *prototype* (sections 1.2.1, 1.2.2). In section 1.2.2, it was argued that the Greek middle voice category may be analyzed insightfully as a complex network category. In this approach, the middle voice is seen as a polysemous network of interrelated meanings. The abstract schema, embodying the semantic commonality of all middle meanings, can be characterized as *affectedness of the subject*. The different middle meanings can, in turn, be viewed as elaborations of this abstract schema.

In this chapter, the structure of the network of the middle voice in Ancient Greek will be analyzed. I will propound a classification of middle uses, and I will describe the semantics of each middle meaning in more detail. We will see that the most essential semantic properties relate to the subject, and especially to the subject's semantic role. Furthermore, for each middle meaning I will try to ascertain to which other middle meaning it is related. The main criterion for establishing a relation between two middle types is to assess whether or not they have salient semantic properties in common. In some cases, subsidiary criteria are used. For example, semantic changes can indicate semantic relatedness; when it can be established that a certain verb first belonged to type A, and then to type B, it can be assumed that type A and B are semantically related. This analysis will finally result in a semantic map of the Greek middle voice, representing a network consisting of the various middle uses and their semantic interrelations. The final issue that will be addressed in this chapter concerns the category prototype. It will be investigated which of the middle uses can be regarded as the most salient member of the category.

The middle uses to be discussed are the passive middle (2.1.1), the spontaneous process middle (2.1.2), the mental process middle (2.1.3), the body motion middle (2.1.4), the collective motion middle (2.1.5), the reciprocal middle (2.1.6), the direct reflexive middle (2.1.7), the perception middle (2.1.8), the mental activity middle (2.1.9), the speech act middle (2.1.10), the indirect reflexive middle (2.1.11). The uses that are discussed first (2.1.1 - 2.1.5) predominantly have a passive aorist form in -(TH)η-, whereas the uses discussed last (2.1.6 - 2.1.11) generally have a sigmatic middle aorist.


2. A Classification of Middle Usage Types

2.1 Passive Middle

In a typical passive clause, the patient is assigned subject-status. The agent is rarely expressed by an explicit noun-phrase. Essential is, however, that an agent-participant is conceptually present, but pragmatically deemphasized.

(1) ἔγω δ' ὑπ' ἐχθρού (...) ὑβριζόμην (Dem. 21.74)
I was assaulted by an enemy.

(2) ὁ μῆ δαρεῖς ἀνθρωπος οὐ παίδευται (Men. Mon. 422)
The man that has not been thrashed gets no education.

Example (2) is a proverb, and it has a generic agent. Generic agents are typically left implicit. Yet, the presence of an agent is still conceived of, due to the inherent lexical semantics of the verbs δέρω and παίδευω which both denote events that are externally initiated.

Passive clauses can also contain an instrument or a cause.

(3) τούτων δή οὖν τῶν Ἀττυν σημαίνει τῷ Κροίσῳ ὁ δνειρος, ὃς ἀπολέει μιν αἰχμῇ σιδηρετῇ βληθέντα (Hdt. 1.34.3)
It was concerning this Atys that the dream communicated with Cyrus, namely, that he would lose him stricken by an iron spear-point.

(4) νόσῳ τε γὰρ ἐπέζοντο (...) (Th. 7.47.2)
For they were distressed by sickness (...).

The passive interpretation of these clauses is primarily based on the lexical semantics of the verbs βάλλω and πιέζω that necessarily imply an external initiating agent. In (3), the dative constituent must be interpreted as an instrument. The identity of the future slayer of his son Atys - the implicit agent of βληθέντα - is not revealed to Croesus in his dream. In this way, the audience is deliberately kept in suspense by the narrator. This type of expression, with an instrument and an unspecified agent, resembles expressions in which

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69 In Classical Greek, there are passives of which the subject corresponds with a genitive or dative complement in the active construction, e.g. ἐπιβουλέω τινι, ἀρχω τινός, βοηθεώ τινι, καταγγέλω τινός, ὀλυμπέω τινός, πολεμεώ τινι, ἐρούεσθα τινός (cf. K-G, I: 124-5, Mulder 1988, Rijksbaron 1994: 136, Conti Jiménez 1998). It is noteworthy that the second arguments are typically human, i.e. entities that are natural discourse topics. This possibly explains that they are capable of being selected as subjects. In addition, the semantic feature of affectedness may be relevant. Many verbs that allow this type of passives designate a 'negative' emotional attitude towards the second participant (φθονεύο τινι), or imply an exertion of force/power (πολεμεώ τινι, ἀρχω τινός). Thus, the second participant can be said to be affected ('patient-like').

70 The infrequency of explicit agent-phrases is born out by the figures given by Rijksbaron (1994: 138): of the 22 passive instances in Herodotus, the agent is expressed only twice. For a discussion, from a diachronical perspective, of the different morphosyntactic alternatives of expressing the agent in a passive clause, I refer to Jankuhn (1969: 101-11).

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an external agent is not conceived of altogether, as in (4). The cause-participant νόσος can be considered the ultimate initiating entity. This peripheral type of passive clause lies at the boundary between the passive use and the spontaneous process type (cf. τήκεται πυρί ‘It is melting because of the fire’). I will discuss the latter middle usage next (2.1.2).\(^{71}\)

Passive clauses may or may not involve a change of state of the subject. The notion change of state implies that an entity is in a certain state at moment \(T_1\) that is different from the state it was in at \(T_0\). For instance, a verb like βάλλομαι (υπό) ‘I am being hit (by)’ does not denote a change of state, since the direct object may be in exactly the same state after it was hit as it was before. A verb like τίκομαι (υπό) ‘I am being destroyed (by)’, on the other hand, necessarily implies a change of state. The subject undergoes a transition from being solid to being liquid. Other passive verbs that denote changes of state are ἀπολλύμαι (ὑπό) ‘I am being destroyed (by)’, ῥηγνύμαι (ὑπό) ‘I am being broken (by)’, πείθομαι (ὑπό) ‘I am being persuaded (by)’ (see also note 3).

2.1.2 Spontaneous Process Middle

The spontaneous process middle involves subjects that undergo an internal, physical change of state. The subject has the semantic role of patient (cf. the passive middle). An essential property of the spontaneous process type is that it is conceptualized as occurring without direct initiation by an agent. In this respect, it is different from the passive type that implies a - mostly unspecified - agent.

\[(5)\quad (... \piέλας τῶν κῆπων (...), ἐν τοίσι φύεται αὐτόματα ρόδα (Hdt. 8.138)\]

(...) near the gardens (...), wherein roses grow of themselves, (...).

The absence of any agent is explicitly expressed by αὐτόματα.

Almost all middles denoting spontaneous processes have an active causative counterpart. Examples of middle verbs denoting spontaneous processes are:\(^{72}\)

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\(^{71}\) Note that also active forms may express a passive meaning, e.g. ἐδέλλων ‘I was caught’, θνήσκω υπό ‘I am being killed by’ (see section 1.1.4). This phenomenon supports the claim that the active voice is semantically unmarked.

\(^{72}\) The subdivision below is meant to give an impression of the semantic variety of the verbs at issue. The subdivision is not clear-cut: many verbs fall under more than one heading. Note in passing that the spontaneous process middles have either a root, a thematic or a passive aorist, that is, never a sigmat ic middle form. I will deal with this morphological issue in chapter 3. Note, further, that many verbs of the spontaneous type have an active root perfect (with intransitive meaning): (ἀπ)δέλλω, γέγονα, τέτροφα (Hom.), ἔφθορα (Hom.), πέφυκα, πέπιγα, ἔρρωγα, τέτηκα, πέφυγα.
Physiological processes

Involving organic entities
(ἀπ)όλλυμι 'die, perish'73
αὐξάνω 'grow (intr.)'
γίνομαι 'be born, come into being, become'
σήματι 'rot'
τρέφομαι 'grow up'
φθείρομαι 'perish'
φύομαι 'grow'

(ἐπ)όλλυμι 'destroy, kill'
αὐξάνω 'increase, grow (trans.)'
σήκω 'make rotten'
τρέφω 'cause to grow, bring up, rear'
φθείρω 'destroy, ruin'
φύω 'bring forth, produce, beget'

Involving inorganic entities
καίωμαι 'burn (intr.)'
πῆγγομαι 'get stuck, become solid'
πίσταλαμαι 'become full'
ῥήγγομαι 'break, burst (intr.)'
τήκομαι 'melt'
χέσομαι 'flow, melt'
καίω 'burn (trans.)'
πῆγγομαι 'stick in/on, make solid'
χέσομαι 'fill'
ῥήγγομαι 'tear, break, burst (trans.)'
τήκω 'melt (trans.)'
χέω 'pour out, let flow'

Changes in physical properties75
λευκαίνομαι 'grow white'
ἐρυθραίνομαι 'become red, blush'
ξηραίνομαι 'become dry'
θέρμαμαι 'become warm'
τέρσομαι [Hom., Hp] 'become dry'
ψύχομαι 'grow cold, become dry'

λευκαίνω 'make white'
ἐρυθραίνω 'make red'
ξηραίνω 'parch, dry up'
θέρμαμαι 'become hot'
ψύχω 'make cold, make dry'77

Appearing and disappearing
ἀφανίζομαι 'disappear'
φαίνομαι 'become visible, appear'78
φαντάζομαι 'become visible'

ἀφανίζω 'make unseen, remove'
φαίνω 'cause to appear, show'
φαντάζω 'make visible'

73 The glosses mostly refer to the most typical meaning(s) of the verb. Needless to say, glosses can never perfectly render the complexity of the semantics of the target-word.

74 The sigmatic aorist ἐγείρομαι functions as a causative in the specific sense 'bring forth, beget'. The middle inflection expresses that the subject, as a result of the action, has children, i.e. the subject is a beneficiary.

75 These verbs are frequently derived from adjectives designating states (λευκός, ξηρός etc.). Some are derived from the same root as adjectives (e.g. θερμός and θέρμος, from the root θερ-,)

76 In Homer, causative τερσάεινω occurs.

77 The original sense of the active verb ψύχω was 'blow'.

78 Φαίνομαι in the sense 'seem' (construed with infinitive complement) does not denote a change of state, but rather a state proper (see also ch. 4). This use has diverged from the typical spontaneous process.
Verbs of happening and occurring

- τελέσται 'it is being fulfilled'
- τεύχεται [Hom.] 'it arises, occurs'
- συμφέρεται 'it happens, turns out'  

Other terms found in the literature that refer to approximately the same event type as spontaneous process are: anticausative (Geniušiene 1987, Haspelmath 1987, 1990, 1993, Andersen 1989, 1994), processual decausative (Gerritsen 1990), and pseudo-passive (Rijksbaron 1994). I have adopted the term spontaneous process (Kemmer 1993), because it is more specific than the other terms, and it does not suggest - as anticausative, decausative and pseudo-passive do - that this type is secondary in relation to the causative and the passive. Rather, I would contend that the contrary is true, at least as far as Greek is concerned (see section 1.3.2, and below). Indeed, of most verbs, the active causative construction is better viewed as secondary with respect to the intransitive spontaneous middle construction. Langacker uses the term absolute construal for "[t]he construal of a relationship (especially a conceptually autonomous thematic relationship) without reference to causation or the energy that drives or sustains it" (Langacker 1991: 543). According to Langacker, this situation type is conceptually basic compared to its causative counterpart. This becomes clear when one considers the fact that we can conceive of the entity as autonomously undergoing the change without external causer, whereas the causer can only be imagined in relation to a causee. Langacker (1991: 287) illustrates this with the following examples:

(6)  
a. The wind caused the tree to fall over.  
b. The tree fell over.  
c. *The wind caused.

The situation can be described with reference to both the causer and the causee (a), or autonomously, i.e. only with reference to the entity undergoing a change (b). (c) does not make sense, as it does not refer to a change induced to some entity. Similarly, the other intransitive middle types body motion middle and mental process middle can be considered conceptually basic as compared to their (active) causative counterparts. I will discuss these middle usage type in sections 2.1.3 and 2.1.4. The basicness of the spontaneous event middles in relation to their causative active counterparts is also revealed by their actual frequency of use. In most cases, the middles have a higher token-frequency than the actives (see section 1.3.2).

The spontaneous event type is semantically middle (as opposed to active and passive) "in that the affected entity is not only an Endpoint, but is also conceptualized as

79 E.g.: Λ 671 Ἡλείωσι καὶ ἠμὲν νείκος ἔτυχθη/ ἄμφι βοηλοκαίθη ("(...) strife arose between the Eleans and us about the stealing of cattle, (...)').

80 For more on the terminology found in the literature, see Haspelmath (1987: 8-10).

81 By the notion thematic relationship, Langacker means "A comparatively simple, conceptually autonomous relationship involving just a single participant (a theme)". As to theme: "The notion is schematic with respect to a number of role archetypes, including patient, mover, (non-initiative) experience, and zero" (Langacker 1991: 554).
an Initiator" (Kemmer: 145 [the italics are mine]). According to Kemmer, the event can be portrayed as occurring spontaneously in two different cases. In the one case, no salient entity is available that might be presented as an initiator of the event. For example, an apple is seen as rotting spontaneously, because no clearly identifiable, salient cause can be conceived of. Examples in Greek are verbs like σήμαι 'rot' and ίδομαι 'rust'. In the other case, there is an entity present in the scene that can be viewed as a cause(r). However, the speaker wishes to deemphasize this entity's role in the event for pragmatic reasons.82

A considerable number of middle verbs can both denote events that are initiated by an external (volitional) entity, and events coming about autonomously. Examples of this type are: καίομαι 'burn (intr.)' (spontaneous process) and 'be burnt' (passive); ὀλλομαι 'perish' (spontaneous process) and 'be destroyed' (passive); πηγνυμαι 'stick (intr.)' (spontaneous process) and 'be stuck' (passive); ῥήγνυμαι 'burst, break (intr.)' and 'be broken' (passive); τήκομαι 'melt (intr.)' (spontaneous process) and 'be melted' (passive). The transition between the two meanings is gradient.83 It is often very difficult to decide whether we are dealing with a spontaneous process or with a true passive. An example is

(7) νῦν ὄλετο πᾶσα κατ' ἄκρης
"(Illos αἰσιενή (Ν 772-3)
Now is all steep Illos utterly destroyed.

In such cases, the absence of an overt agent implies either that the agent is present somewhere in the background of the speaker's conception of the situation - in this case, the Greeks? -, or that the agent is pragmatically irrelevant, or even that the event is conceptualized as lacking an agent altogether (see Sicking & Stork 1996: 133). This means that the predicate is totally neutral as to the existence of an initiator. An example that explicitly attests to such an initiator-neutral meaning is:

(8) Ἡν δὲ μὴ δύνηται πολλοῦ χρονοῦ ῥαγῆναι, μήτε ἀπὸ ταῦτα τόματος, μήτε ὑπὸ φαρμάκων, τήκεται ὁ ἄσθενεις ὑπὸ ὀδυνέων ἰσχυρῶν, (...) (Hp. Morb. 1.19)
If the turbicl e fails to rupture for a long time, either spontaneously or by drugs, the weakened patient melts away as the result of his violent pains, (...).

The verb ῥαγῆναι is used here in an ambiguous way, as can be inferred from the following clause which explicitly refers to both possible readings of ῥαγῆναι. On the one hand, the adverbial phrase ἀπὸ ταῦτα τόματος refers to the spontaneous meaning. On the other hand the phrase ὑπὸ φαρμάκων implies a more passive-like meaning of ῥαγῆναι. I use the term 'passive-like' since the drugs are not a prototypical volitional agent. The drugs could also be interpreted as a cause.84

82 An example in English would be the utterance: "The vase broke", when it is said by a little child playing with a football inside the house, answering to a parental question "What's happened here?". Note that the passive can be used for similar reasons (see 2.1.1).

83 This point has also been made by Jahnkuhn (1969: 97-8) and García Gual (1970: 87-8)

84 In general, of these potentially ambiguous middle verbs, the intransitive spontaneous process meaning is far more frequent, whereas the true passive meaning can only be established with certainty in a small number of cases. Thus, for these middles the passive meaning can be considered as a somewhat peripheral
2.1.3 Mental Process Middle

The mental process middle involves an animate subject that experiences a mental affectedness. The subject, accordingly, has the semantic role of *experiencer*. This affectedness can be of an emotional kind, as in φοβοῦμαι 'fear', or of a cognitive kind, as in μνημοσύνει 'remember', ἐπιστομέαί 'know'. In the present stem, these middle verbs designate states, that is to say, they do not involve change over time. However, mental states are typically temporary. As such, mental states are different from states that have a more permanent character such as 'be king', 'be small', 'be red'. The aorist forms of these verbs generally designate that the subject *entered* a mental state (progressive meaning of the aorist). For instance, aorist ἐφοβήθην 'I became afraid' vs. φοβέομαι 'I am afraid'.

The mental affectedness may be caused by an external *stimulus*. This stimulus-participant can have a genitive, dative and an accusative case. The semantic implications of the different cases will be discussed below. Many mental state middles have active causative counterparts that designate that a stimulus-subject causes an experiencer to enter into a mental state. With these verbs, the speaker has a choice to assign either the experiencer or the stimulus to subject-status. I shall elaborate on this issue below. Examples of mental process middle verbs are:

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Semantic extension of the more typical spontaneous meaning. In this connection, one may speculate about the following: the fact that the spontaneous meaning of these ambiguous verbs generally occurs more frequently than their passive meaning probably implies that the spontaneous use is entrenched more deeply in the memory of the language-user. This deeper entrenchment may bring about that the spontaneous meaning is activated first (as a default-interpretation) upon hearing an ambiguous form such as μὴ γινομαί 'break (intr.)' or 'be broken'. Only if there are positive signals from the context that there is some external initiator present, the default-interpretation is overruled in favour of the passive interpretation.

85 Although, typically, the verbs designating mental processes lack agentivity and volition - the experiencer-participant can not intentionally fear/love/hate/get angry, etc. -, agentivity appears to be a matter of degree. The experiencer is partially involved in the event in an active way in that s/he makes mental contact with the stimulus, and focusses her/his attention on it. Furthermore, the experiencer can, at least to a certain extent, improve or deteriorate the conditions that are beneficial to the emotional or cognitive process. For example, a person can increase the chances that s/he remembers something by focusing his/her mind.

86 As was noted in section 1.1.4, verbs that denote a more permanent state (often denominative formations) tend to be active in Greek, e.g. βασιλεύω 'be king', ἔρυθραν 'be red'.

87 The perfects of these mental state middles often express the highest degree of that state (intensive perfect, see Rijksbarin 1994: 36), e.g. πεφώβημαι 'I am terrified'; πέποιθα 'trust, rely on' (cf. πείθομαι 'believe, obey').

88 Observe that, in Classical Greek, all middles designating mental processes have root, thematic or passive aorists, but never sigmatic middle aorists. In Homer, however, the sigmatic middle aorist does occur with mental process middles, e.g. ὁδοιποίημαι, ἐτερψάμην. I will deal with the aorist morphology in more detail in ch. 3. Notice also that a number of the middles below have an 'active' perfect form, e.g. ἔγραψα (ἐγέρθωμαι); ἔστρωσα (ἐλεμοίμαι); πέποιθα (πείθομαι); μένημα (μαίνομαι).
There is also a significant number of media tantum designating mental processes:

<table>
<thead>
<tr>
<th>Greek Word</th>
<th>English Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>ἀγαμαται (+ acc.) 'admire'</td>
<td>ἀκομαται/αιδεμαται (+ acc.) 'respect'</td>
</tr>
</tbody>
</table>

89 In Herodotus, also construed with a genitive, compare ἁκονω + gen. 'hear, listen to, obey'.

90 For a study of the semantic field 'joy' in Homer, see Latacz (1966).

91 For a study of the verbs of thinking in Homer, I refer to Bertolín Cebrián (1996). Φράξομαι can also refer to volitional mental activity (section 2.1.9) and, especially in Homer, perception (2.1.8). This polysemy shows the close relatedness of mental activities, mental processes and perception. A polysemous relation mental process - perception is also found with active verbs, e.g. νοεῖν 'perceive; think'. The perceptual meaning is generally older than the cognitive meaning. The historical development from vision verbs to mental verbs is discussed in Sweetser (1990: 28-34). A nice example of this historical development is the relation between aorist εἶδον 'I saw' and perfect οἶδα 'I know' (< *'I have seen'). Another example is ὁσομαται. 'Osomatai must originally have been the present form that corresponds to the perfect ὁσωμα 'I have seen', future ὁσωμα 'I will see' (and sigmatic aorist ὃσαμην 'I saw', as in τοὺς ἦν ἐγκεφαλομαι, oi ἐκ πάθεσθων (1 167) ('Whomever I shall look upon, let them obey'), and also Pl. Fr. 88.6 [Schroeder] ἐπιέρασα, and Pl. Lg. 947c ὁσωμαται). In historical Greek, however, ὁσομαται acquired a mental meaning 'see in one's mind's eye, presage', e.g. ὁσομαται γὰρ ἀλγα ἔθιμα (Σ 224) ('Since they saw woe in their hearts'), cf. also ο 115.

92 The causative active sigmatic aorist ὅσε appears first in Anacreon (148); later also the active present occurs.

93 Only the reduplicated aorist functions as a true causative formation to λανθάνομαται and its older variant λήθομαται. The active verb λανθάνω 'escape one's notice' is not causative.

94 πνευθάνομαι (+ gen.), in its original sense 'learn, hear of', is a boundary-case between a mental middle and a perception middle. Since it designates a mental process 'acquire knowledge' it is not a true mental state middle; it is not a true perception middle since the element of cognition is more prominent in the lexical meaning of the verb than the element of perception. The post-Homeric meaning 'ask', which I would consider a speech act middle (see further below), is almost completely restricted to the present stem. In Homer, the verb πενθομαται - probably the older form - is more frequent than πνευθάνομαι. In the Cretan dialect, a causative verb πέφω 'give notice' is found.

95 For an etymology of ἄγαμαται, original meaning *'consider great' (from root *megh, 'great'), see Ruijgh (1996: 383).
The mental process middle is related to the passive middle. In both types, the subject passively undergoes the event. The difference between the two middle types relates to whether or not the event is initiated by an external agent. In many contexts, however, the initiating entity is irrelevant and remains unexpressed. In those cases one cannot decide whether the middle verb is to be assessed as a true passive or as a mental process middle. This can be exemplified by:

(9) Ταύτα είπονσα, (...), ἐκεῖνη μὲν ἀπηλλάγη, ἐγὼ δὲ εὐθέως ἐπαραττόμην, καὶ πάντα μου εἰς τὴν γνώμην εἰσῆλε (Lys. 1.17)

With these words, (...), she took herself off; I was at once perturbed; all that had happened came into my mind, (...).

The middle ἐπαραττόμην could both be interpreted as a true passive (the woman being the external agent), or as an spontaneous mental process. The only relevant thing is that the subject experiences a mental affectedness, and the initiating entity (be it an agent or a cause) is backgrounded. In such cases it can, however, be assumed that the interpretation that is activated first and foremost is the mental process interpretation. This assumption is based on the fact that the mental process use is far more frequent - and is therefore more entrenched - than the passive use. The intransitive meaning thus functions as a default-interpretation, only overruled when explicit indications of a true passive meaning are present in the context. This is a form of processing-economy: 'if the most typical and frequent interpretation makes sense, do not look any further.'

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96 ἔραμαι may be a 'Narten-present' (see Narten 1968), assuming that it has an e-vocalism *h₂erh₂* in the root. Like many other middle 'Narten-presents', ἔραμα has a stative meaning, cf. εἶμαι 'be clad', ἦμαι 'be seated', κείμαι 'lie'. In the Classical language, ἔραμα is replaced (only in the present stem) by the active verb ἐρᾶω which has a passive ἔρᾶμα 'be loved'.

97 Μέμπομαι has two (related) meanings, (i) 'be angry' (mental state), (ii) 'blame, rebuke' (speech act). In the aorist stem, these meanings are formally distinguished: ἐμεμφῶμην means 'I blamed, rebuked', whereas ἐμεμφήθην 'I became angry' (see also section 3.2.3.3).

98 In Homer, we also find an older active verb ὕπτω that appears to have the same meaning. For a discussion of (quasi)-synonymous active and middle verbs, see chapter 5.

99 This principle is similar to Levinson's Q2-heuristic: "What is simply described is stereotypically and specifically exemplified" (Levinson 1995: 97). An example Levinson gives (p. 105): when someone says "Sue moved the car", the hearer will interpret the utterance as Sue moved the car by driving it, since driving
interpretation was assumed in the case of clauses that are ambiguous between a passive meaning and a spontaneous process interpretation (see section 2.1.2).

The relatedness between mental processes and passives is also borne out by the following example:

(10) (...) ἃ ντοι ὑπ' ἄλλων πεισθέντες ἀπῆλθον (...) (Pl. Thet. 150e)

(...) they left, either of their own accord, or persuaded by others (...).

The elements ἃ ντοι and ὑπ' ἄλλων refer explicitly to an autonomous mental process and a passive meaning, respectively. The form πεισθέντες itself is ambiguous.

Mental processes are also related to spontaneous processes. Both types involve subjects that non-volitionally undergo an internal affectedness. Important differences are: (i) the subject of a mental process is, obviously, animate; (ii) mental processes may involve a second participant, the stimulus.

Mental processes are morphosyntactically coded in highly variable ways, both from one language to another, and within one language. The various coding-strategies especially regard subject/object-assignment and case marking. Generally, one can assume that a different linguistic structure will imply a different construal of the event. In other words, by means of the various formal structures the speaker is able to emphasize or de-emphasize certain aspects of a given situation, or to impose a certain imagery onto the conceptualization of the situation that s/he wishes to portray. For example (from Croft 1991: 214, exx. (68) and (69)),

(11) a. Ed fears the police.
    b. The police frighten Ed.

The two clauses may refer to the same objective scene in the real world. However, the perspectives from which the scene is viewed are different. In (11a) subject status is assigned to the experiencer, in (11b) to the stimulus. This difference in linguistic structure has certain implications. For example, the fact that (in b.) the police is coded as a subject conveys that the police is conceived of as intentionally causing Ed to fear them, or at least, that the police is somehow responsible for Ed's fear. As for (a.), there are no such implications.

In Greek, the alternation of the transitive active voice and intransitive middle voice can be employed similarly to express alternative perspectives from which a scene is viewed. For instance, an oppositional pair such as φοβέω + acc. 'cause to fear, alarm' vs. φοβείμαι (+ acc.) 'fear' involve alternative construals of the situation described. The active transitive verb highlights the initiating role of the fear-inducing stimulus (cf. English frighten above), by 'promoting' the stimulus to subject status. Typically, this stimulus-subject is more topical in the discourse. In the intransitive middle the experiencer

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Middel verbs that designate spontaneous mental and physical changes are subsumed under the pseudo-passive use by Rijksbaron (1994: 148).

of the fear is made prominent, whereas the stimulus is pragmatically deemphasized. The stimulus may even lack overt expression altogether, as does the agent of a passive construction. Consider the following contrastive pair:

(12) [Croesus' son speaks to his father] φῆς τοι τὸ ὄνειρον ὑπὸ αἰχμῆς σιδηρῆς φόναι ἐμὲ τελευτήσειν. ὑς δὲ κοίται μὲν εἰσὶ χεῖρες, κοιὴ δὲ αἰχμὴ σιδηρῆτ
τὴν σὺ φοβέει; (Hdt. 1.39.2)
You say the dream declares that I shall die by an iron spear-point. What hands have a boar? Where is the iron spear-point you fear?

Technically, the alternative active causative construction αἰχμῆ σιδηρῆτι σὲ φοβεῖ would have been possible. However, it is more natural that Croesus (σὺ), being a speech act participant, is chosen as the subject of φοβεῖ, whereas a participant like σιδηρῆς, being a non-active, inanimate entity, is not likely to be selected as a subject.

(13) [How the Scythians kill the soothsayers] ἀπολλάντοι δὲ αὐτοὺς τρόπῳ τουφδε-ἐπεάν ἁμαξαίν φρυγάνον πλήσσας καὶ ὑποζεύξας βοῦς, ἐμποδίσαντες τοὺς 

The Scythians, being human agents, are the primary topic of this stretch of discourse. It is therefore natural that they are consistently selected as clause-subjects (e.g. φοβήσαντες), and that the oxen, being actors of a secondary prominence in the discourse, are coded as direct objects.

Between the two alternative constructions, active causative vs. middle intransitive, there is an asymmetrical relation. Consider, for instance, the frequencies of active causative φοβέω and middle φοβέωμαι in Herodotus: 2 against 21. This difference in frequency is found in almost all active causative - middle intransitive pairs (see also the frequency-figures in section 1.3.2). This asymmetrical relation can be explained as follows. Conceptually, the mental process can be considered more basic (less complex) than its causative counterpart. Mental processes can be conceived of as occurring without reference to an external cause that brings it about or sustains it (cf. spontaneous processes, section 2.1.2). For example, he suddenly got very angry is a complete expression. Conversely, in the corresponding causative, the causation cannot be described without reference to the causee, e.g., *he made very angry. In discourse, the conceptually more complex causative construction is only used in the case that the stimulus outranks the experience in salience and topicality. However, this will not be the case very often since experiencers are typically human, and therefore tend to be important discourse participants.

Apart from the variation between active causative and middle intransitive constructions discussed above, we find another type of variation in the class of mental process verbs. This concerns the case marking of the stimulus-participant. In Greek, the stimulus can be marked with the genitive, dative, and accusative case. Some verbs can be construed with more than one case. In addition, many verbs can also be construed with prepositional

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102 This way of conceptualizing events is termed absolute construal by Langacker (1991: 287-91).
objects. The variability of case-marking can be explained by Croft's model of the structure of mental events (Croft 1991: 213-25, Croft 1993). This model accounts for the various case-marking patterns and voice-phenomena that are typically associated with the expression of mental events. According to Croft, mental events typically involve two participants - an animate experiencer and a stimulus -, and two causal relations between these participants. On the one hand, the experiencer directs his/her attention to the stimulus (or a mental representation thereof). The stimulus, on the other hand, causes a mental affectedness in the mind of the experiencer. The configuration of experiencer and stimulus and the two causal chains between them is represented in the following figure (cf. Croft 1991: 219, Croft 1993: 64, Kemmer 1993: 128):

Fig. 1: The Conceptualization of Mental Events

The dashed arrows indicate that the interactions are of a mental kind (as opposed to the physical interaction of the prototypical transitive event, see chapter 1).

There is a great variety of case-marking patterns of mental verbs in Greek. Although these case-marking patterns are not entirely predictable, they are not completely arbitrary either. My claim is that they are motivated by the conceptual structure that is inherent to mental events, as it is proposed by Croft. Cases highlight one particular facet inherent in this causal relation at the expense of others. In other words, the alternative case constructions present the scene by means of different images.

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103 Mental event is used here as a general term. It includes mental processes, mental activities, and perceptions.

104 Mental events are semantically middle (as opposed to active and passive) in that the subject is both Initiator of the action chain (by making mental contact), and the Endpoint (undergoing a change of state), see also Kemmer (1993: 129).

105 See Langacker (1987: 39-40, 110). On page 110, he gives the following illustrative examples of different sentences that could be used to describe the same objective situation, but evoke substantially different images to do so: (a) The clock is on the table; (b) The clock is lying on the table; (c) The clock is resting on the table; (d) The table is supporting the clock. "Lexicon and grammar are storehouses of conventional imagery, which differs substantially from language to language. For if one language says I am cold, a second I have cold, and a third It is cold to me, these expressions differ semantically even though they refer to the same experience, for they employ different images to structure the same basic conceptual content" (Langacker 1987: 47). A similar example from the domain of emotions is: (i) English to be angry WITH; (ii) French être fâché CONTRE ('to be angry AGAINST'); (iii) Dutch boos zijn OP ('to be angry ON').
Stimulus-participants of verbs of emotion are frequently coded by a genitive, or a dative. The genitive can be interpreted as a genitive of source, and the dative can be taken as either a dative of cause (in the case of inanimate entities), or as an experiencer-dative (animate entities). For example, the oblique objects of κηδοματι + gen. ‘worry about, care about s.o.’ and ἔρωματι + gen. ‘love s.o.’ can be interpreted as the sources of the respective emotions, worrying and loving. The dative of ἔρωματι + dat. ‘I enjoy s.th.’ can be interpreted as cause of the joy. The dative of verbs of anger, e.g. μέμφομαι + dat. ‘be angry with, rebuke s.o.’, ὄργηζοματι + dat. ‘be angry with s.o.’ can be considered a dative of cause, as well. Alternatively, the dative might be interpreted as an experiencer-dative. In that case, the animate object of the anger can be viewed as mentally involved in the anger. Especially μέμφομαι + dat. can be analyzed in this way since the verb can also involve verbal activity on the part of the subject (i.e. ‘rebuke’) that is directed to the dative-participant.

As has been stated above, I assume that the different case-markings highlight different aspects of the mental event. The genitive of source and the dative of cause can be thought of as highlighting the Initiator-aspect of the stimulus, and thereby the causal chain which runs from stimulus-object (viewed as a source or cause) to the experiencer-subject. This case-marking strategy is in harmony with the middle-marking of these verbs. Since the middle-marking expresses that the subject is affected, the causal chain from stimulus to experiencer-subject is highlighted. For example, in the case of ἔρωματι + gen.,

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107 The use of the dative of cause with animate entities is an extension of the prototypical use of the dative of cause with inanimate entities. This extension can be explained by form of metonymy. In expressions like ἔρωματι σοι ‘I am delighted at you’, the dative-participant metonymically stands for his activities, which are the actual cause of the delight that is felt by the subject-participant.

108 This dative, then, is not the successor of the Indo-European instrumental case, but of the PIE dative. The fact that also in Sanskrit, some verbs of anger are construed with a dative (instead of an instrumental) may confirm this point, e.g. Skt. krudh- ‘be angry with’ and hr- (hṛṇāte) ‘be angry with’.

109 Note that many mental process verbs can be construed with more than one case. For example, μέμφομαι occurs with the genitive, dative, and accusative case; πείθομαι occurs with both genitive and dative. Moreover, most mental verbs can occur with prepositional phrase (for a study of these alternations, see Moreux 1978). This variety of constructions is a strong indication that the speaker has several ways at his disposal to describe the scene. It all depends on the way the scene is construed by the speaker, which facets he prefers to highlight, and which facets are backgrounded. Consider, for example, μέμφομαι ‘be angry with, rebuke’. The accusative-object can be both animate and inanimate, and it expresses about whom or what one is angry. Further, there is a tendency for animates to be marked by the dative, and for inanimates to be marked by the genitive. For instance (animate dative), Ἀρπάκηρ (... μεμφόμενος (Hdt. 1.117.1) [Astyages is furious with Harpagus because he did not kill Astyages’ grand-son]; (inanimate genitive) τυμηγε κιβῷ (E. Hippi. 1402) [Phaedra is angry about the slight to her honour]. Probably animate participants more often take the dative since the experiencer-dative implies that the participant is mentally involved, whereas the genitive merely expresses the source of the anger (genitive of source). Similarly, Homeric χολόματι + gen. [things or persons] ‘be angry about’, or + dat. [only persons] ‘be angry with’.

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both the middle inflection and the genitive case express that there is a (metaphorical) transmission of force from the stimulus to the affected subject. A number of middle verbs of emotion, however, occur with an accusative-object, e.g. ἥρωμαι, οὐδέωμαι (see Kühner-Gerth, I: 298-9). The accusative-marking with this type of verb clearly does not have its prototypical function, since objects of these verbs are not patients. I assume, however, that the accusative does have a semantic contribution in that it imposes a certain image on the scene that is described by highlighting a particular facet of the scene at the cost of others. Consequently, I would suggest that the accusative case emphasizes the Endpoint-aspect of the stimulus-participant, thereby highlighting the causal chain from the experiencer-subject towards the stimulus-object. In this fashion, the rather abstract concept of the mental event is structured as an analogon of the more concrete concept of the prototypical transitive event. As was set out in section 1.1.2, the prototypical transitive involves a physical energy transmission from an initiating animate subject to an affected object. A relation of a mental kind, however, such as 'A fears B' does not involve a physical transmission of energy, nor does it entail any affectedness of the object. This extension - from the prototypical transitive event to the mental event - is of a metaphorical kind. Its motivation can be found in the abstract commonality that is inherent in both types of events. On the one hand, we see the transmission of energy from an active Initiator (the agent) to a passive Endpoint (the patient), and on the other hand, there is the concept of a metaphorical mental path leading from a more active conscious participant (an experiencer) to a more passive object-participant (the stimulus). Furthermore, the fact that mental events are coded as transitive might also be motivated by the active involvement of the subject in the event. For example, in the semantics of ἥρωμαι ‘flee in panic (Hom.), fear’, it can be seen that the

110 In this connection, it is interesting to compare ἦρεμαι + gen. ‘love’ with the near-synonymous active transitive ἅλει + acc. ‘love’. In the case of the latter, both the active voice and the accusative-case of the object contribute in expressing that there is a (metaphorical) transmission from the subject towards the object, i.e., it shows the reversed state of affairs as compared to ἦρεμαι + gen. Indeed this different construal is manifested by their respective uses. ἦρεμαι typically refers to a feeling of sexual desire which is apparently conceived of as originating from the object of desire. ἅλει refers more generally to the feeling of affection towards someone, and it very often refers more specifically to the acts one performs as a token of one’s affection. Thus, ἅλει can have the meaning ‘treat affectionately, cherish’ (e.g. when entertaining a guest) or ‘kiss’. In sum, the subject of ἅλει can be viewed as an agent, and its object as a patient. In the case of ἦρεμαι, it is the subject that is the most affected, whereas in the case of ἅλει the object is seen as the most affected participant. This analysis of the two verbs and their constructions is similar to that of the ancient grammarian Apollonius Dyscolus (Synt. 418-9 Uhlig; see Lallot, 1997, I: 263, II: 262-3).

111 Apollonius Dyscolus notices the unusualness of non-energetic verbs (οὐδέμας ὃτα ἐνεργείας) that are construed with an accusative-complement. He explains this type of accusative by means of an ellipse of δίκω (+ acc.). Apollonius' explanation shows, in my view, that he conceives the object-participant as a cause-like partipant, regardless of its accusative case.

112 The verbs of emotion with an accusative object can be compared to the verbs of seeing (e.g. ὄρχεω + acc.) that also involve a metaphorical path from perceiver to perceived object (see section 2.1.8). An alternative explanation for the accusative-marking of the stimulus would be to ascribe the accusative marking to a more general similarity of the stimulus-participant to a direct object, instead of taking the stimulus as an endpoint in a metaphorical source-path-goal configuration. The accusative, then, marks that the stimulus is viewed as the most salient participant after the subject (see Langacker 1991: 240).
physical action of turning to flight (cf. also φεύγω + acc. ‘flee’) is closely associated with the emotion of fear.

The double causal relationship that is inherent in the conception of mental events (see Fig. 1) is also manifest when they are construed with prepositional objects. Many verbs in Greek can be construed both with complements in ‘pure’ cases and with prepositional objects. The semantic difference between these strategies is probably that the prepositional variant evokes a more concrete, ‘plastic’ imagery. For example, besides φοβείομαι with an accusative, we also find - albeit marginally - constructions with prepositions:

(14) a. Δίδαξον, εἰ διδακτόν, εξ οὗ φοβή (S. Tr. 671)
Explain, if you can, the cause of your fear.

b. ἦτοι πρὸς ἀνδρός ἤ τέκνων φοβούμενη (S. Tr. 150)
(...) feeling fear on the account of husband and children.

The prepositions ἐκ and πρὸς + gen. express the source of the fear, not the entity that is feared itself. Through the use of prepositions, the image of a concrete spatial source is evoked, and the causal chain from source to experiencer-subject is highlighted. On the other hand, consider the following constructions:

(15) a. Συ δ’ εἰς τὰ μητρός μὴ φοβοῦ νυμφεύματα (S. OT 980)
Have no fears in the direction of a marriage with your mother.

b. ἀλλ’ εἰ φοβή πρὸς τοῦτο, (…) (S. Tr. 1211)
But if you have fears with respect to that, (…).

In example (a.), the marriage with his mother is, of course, the entity that is feared in a direct way by Oedipus. It is not merely the source of his fear. The meaning of this construction is, subsequently, similar to one with a pure accusative. The difference is that the direction of his anxious thoughts is referred to in a more concrete way by means of εἰς ‘toward’. In a similar fashion, in (b.) the phrase πρὸς τοῦτο seems to convey the image of the mind directed towards the object of fear (in this case, Hyllus is frightened by the idea of having to set Heracles on fire).

In this section, I have described the mental process middle type. Additionally, the relation of the intransitive middles denoting mental processes with their transitive active counterparts was discussed. Finally, a model was proposed to account for the various case constructions that the mental process verbs occur with. It was argued that the notions of construal and imagery are of crucial importance to the semantic structure of mental events.

2.1.4 Body Motion Middle

Body motion involves an animate entity that volitionally brings about a change of state to himself. Thus, the subject is both agent and patient.\(^\text{113}\) This change of state typically

\[\text{113}\] The body motion type is semantically middle (as opposed to active and passive) since the subject is both the initiating entity (Initiator) and the affected entity (Endpoint).

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consists of either a change of location or a change in body posture. Many middles that designate body motion have a transitive causative counterpart. Examples of middles of motion are:

<table>
<thead>
<tr>
<th>Nontranslational motion</th>
<th>Translational motion</th>
</tr>
</thead>
<tbody>
<tr>
<td>(άπ-)έχομαι [+ gen.] 'keep oneself back from'</td>
<td>(άπ-)έχω [+ gen.] 'keep s.o. away from'</td>
</tr>
<tr>
<td>ορέγομαι 'stretch oneself out, reach out'</td>
<td>ορέγω 'stretch out (one's arm(s))'</td>
</tr>
<tr>
<td>στρέφομαι 'turn around (intr.)'</td>
<td>στρέφω 'turn around (trans.)'</td>
</tr>
<tr>
<td>τάνυμαι 'stretch oneself out'</td>
<td>τονύω 'stretch out'</td>
</tr>
<tr>
<td>τείνωμαι 'stretch oneself out'</td>
<td>τείνω 'stretch out'</td>
</tr>
<tr>
<td>τρέπομαι 'turn (intr.)'</td>
<td>τρέπω 'turn'</td>
</tr>
</tbody>
</table>

In ch. 5, I will argue that a tendency can be discerned for middle verbs of motion to designate change of body posture and non-translational motion, whereas active verbs of motion tend to designate manner of motion verbs. This tendency may be explained by the fact that in the case of manner of motion verbs the element of change is deemphasized to a certain degree. Therefore, the subject is conceived of as less affected by the motion.

Translational motion is motion along one dimension in space; non-translational motion is motion that is neither translational, nor change in body posture (see Kemmer 1993: 67-70). Note, further, that almost all body motion verbs, at least in Classical Greek, have a root, thematic or passive aorist form. Only a few middle-only verbs have a sigrmatic middle aorist, e.g. ἄλλομαι - ἡλάμυν, χάζομαι - ἔχασάμην. However, both ἄλλομαι and χάζομαι have a poetical and archaic ring. For ἄλλομαι, this point will be made in ch. 5. I will return to aorist morphology extensively in ch. 3. There is also a considerable number of activa tantum that designate body motion, for instance, βαίνω 'make a step, go', εἰμί 'go', ἔρχομαι 'creep, go', τρέχω 'run'. In chapter 5, it will be argued that there is a semantic difference between active and middle verbs of body motion.

It is interesting to note that many verbs of motion have a metaphorical mental meaning, e.g., ἀπέχομαι 'keep oneself back from' > 'abstain from'; ἔμεμα 'speed' > 'desire'; ορέγομαι 'stretch oneself out' > 'yearn for'; ὁμόλογος 'start off' > 'be eager'; σέλομαι 'speed' > 'be eager'; τρέπομαι 'turn' > 'change one's mind'; φοβόμαι 'flee' > 'be afraid'. Mental processes are understood as physical motions. Notice also the etymology of the word e-motion and the figurative sense of 'be moved'.

The difference between τάνυμαι/τείνωμαι and ορέγομαι is that the latter is restricted to the arms, whereas the two former verbs involve the entire body.

Change in body posture

'στημαι 'stand still, stand up'
(κοθ)ίζομαι 'take one's seat, sit down'\textsuperscript{118}
κλίνομαι 'lean'

Translational motion
σέραμαι 'rise'
ἀνάγωμαι 'put out to sea, set sail'\textsuperscript{120}
ἀπαλλάττομαι 'depart from'
κομίζομαι 'travel'
ὁρμάμαι 'start off'
πορεύομαι 'go, walk'
σενόμαι 'rush, speed' (Hom./poetry)
στέλλομαι 'set out, journey'
σφάζομαι 'get back safe, escape'

'στημι 'set up, raise, make to stand'
(κοθ)ίζω 'make to sit down'\textsuperscript{119}
κλίνω 'cause to lean'

αἰρεσι 'raise'
ἀνάγω 'lead up to sea'
ἀπαλλάττω 'free s.o. off s.th., remove'\textsuperscript{121}
κομίζω 'carry, bring'
ὁρμάω 'set in motion'
πορεύο 'make to go'
σευσώ 'set in swift motion'
στέλλω 'make ready, send'
σφάζω 'save'

\textsuperscript{118} The verb (κοθ)ήμα synchrionically functions as a perfect to (κοθ)ίζομαι. There are more middles that serve as suppletive perfects: εἴμαι (perfect of ἐνυμα 'clothe oneself, be clothed'), κεῖμαι (perfect of τίθεμαι 'be set'), and κρέμαμαι (perfect of κρεμάνναι 'be hung'). From a synchronical point of view, the middle endings of these verbs express the affectedness the subject previously underwent - as a result of which the subject is in a certain state (cf. the stative-confective meaning of the Greek perfect). Historically, these verbs are relics of the PIE verbal category stative (for the PIE stative, see Narten 1968, Rix 1977, 1988, Oettinger 1976, 1993, Beekes 1995: 244). Other relics of this category in Greek are δέκατο (Hom.) 'seem', δέχαται 'await' (Hom.), σπέρρα 'boast'. Possibly also ἔρχαμαι 'be in love', ἔρχαται (Hom.) 'be shut in', εὐκτο (Theba Fr. 3.3) 'pray, boast', ἔνομαι 'blame', and πέταμαι 'fly'. Middles belonging to this category can be recognized by the e-vocalism in the stem, and their (originally) stative semantics.

\textsuperscript{119} In Homer, the active ἴξω often has its original intransitive meaning 'sit down'. ἴξω acquired its causative meaning after the emergence of the middle form ἴζομαι 'sit down', which was created by analogy with middle forms such as aorist ἔξετο 'sat down' and 'perfect' ἦλιμαι 'be seated'.

\textsuperscript{120} This middle started off as an elliptical indirect reflexive middle ἀνάγωμαι τὴν ναῦν 'lead the ship up to the high sea' (e.g. Hdt. 6.12.1), but it was subsequently reinterpreted as an intransitive which, in turn, led to a replacement of the older aorist ἀνηγογοῦμην by the passive aorist form ἀνήχθην (e.g. Hdt. 3.137.5).

\textsuperscript{121} The middle ἀπαλλάττομαι does not correspond to the typical meaning of the active ἀπαλλάττω + acc. + gen. 'free s.o. of s.th.'. I am aware of only one instance of the active with the meaning 'make s.o. go away from s.th.', being the true semantic counterpart to the middle 'go away from': (...) ἔκέλευε (...) τούς Πελοποννησίους ἀπαλλάξας ἐκ τῆς χώρας (Th. 8.46.4) ('He urged [him] to remove the Peloponnesians from this country').
Media tantum of body motion

The label body motion middle is used in this study because it is the most specific of the whole array of terms that is encountered in the literature. The term endoreflexive used (and coined?) by Haspelmath (1987) is also attractive, as it underpins the close relationship the body motion middle has with the semantics of reflexivity. On the other hand, it also reveals the crucial property that distinguishes it from the typical direct reflexive (type shave oneself), that is, internality (cf. the prefix endo-). By a number of scholars, the term pseudo-reflexive is employed (e.g. Dik 1983 [on reflexive verbs in modern European languages], Risselada 1987 [on Greek], Rijksbaron 1994 [on Greek]). For Greek, I find this term inadequate because it suggests that this middle type is somehow secondary to the 'true' (direct) reflexive (see section 2.1.7). This, however, seems unjustified, considering that the body motion middle has a considerably higher text-frequency than the direct reflexive middle (for frequency-figures, see section 2.3.2). Furthermore, the term body motion middle is attractive since it is specific and self-explanatory, unlike some of the aforementioned terms.

Body motion verbs are typically volitional. However, many body motion verbs can also be used non-volitionally. An example is the intransitive middle κινέομαι that can

122 The medium tantum ἐκοματι 'follow' may also be considered a body motion verb. C.J. Ruijgh pointed out to me (pers. comm.) that the verb might have had a causative active counterpart, like many other body motion middles. On one of the new Mycenaean tablets from Thebes (Fq 254+255.1), a form a-pi-e-ge can be found, which can be read as active ἐφί-θεοκτ 'make s.o. follow'. 'Ἐκοματι is a very old medium tantum, cf. Skt. sācate 'accompany', Lat. sequor 'follow'.

123 The different distributions of ἀλλοματι and its synonym πιδώματι are investigated in ch. 5.

124 Probably an ancient medium tantum, cf. Skt. nāsate 'join, unite'.

125 Often, οἶχομαι is used in a perfect-like sense 'be gone, be away'.

126 An active causative ἀνα-χάζω 'make to recoil' occurs once at Pi. N. 10.49; the simple active is found in Hesychius. The old (Homeric) causative formation was ἐκκόδος (with irregular -κ-).

127 A marginal class of media tantum that is related to the middle verbs of body motion are the verbs that designate physical functions such as ἐρέγομαι 'spit, disgorge, belch', πέρδοματι 'break wind', πτάρνυμαι 'sneeze', χρόπιομαι 'cough, clear one's throat', χασώμιατι 'yawn'. These verbs are semantically similar to the body motion verbs in that they also involve, to some extent, a movement of the body. The difference is that the verbs of body motion are completely volitional, whereas the middles of physical actions are often induced by an internal or external physical stimulus. Therefore, although the subject performs the action, it is not a prototypical agent. Another difference between these verbs and the typical body motion middles is that the former do not involve a change of state, or more specifically, there is no change of location or body posture. There are also a number of active verbs belonging to this semantic class, e.g., βδέω 'break wind', βῆττρι 'cough', ἐμπο 'vomit', ὀμίχω 'make water', οὐρέω 'make water', πταίρω 'sneeze' (secondarily after aorist ἐπταρον, cf. πτάρνυμαι), πτώω 'spit, throw up', χάσκω 'yawn', χεῖζω 'ease oneself'.

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have an animate subject (someone moving volitionally) as well as an inanimate subject (something moving spontaneously). For example,

(16) [The Greeks] (...) ои δὲ ως ἐκινήθησαν, ἐφευγον ἀσμένοι τὴν ὑπον πρὸς τὴν Πλαταιάς πόλιν, (...) (Hdt. 9.52) (...) and once they moved, they fled gladly from the cavalry to the city of the Plataeans, (...)

(17) [The island Chemmis] (...) λέγεται δὲ ὧν Αἰγυπτίων εἶναι αὐτή ἡ νῆσος πλατύτης. αὐτὸς μὲν ἔγονῃ οὔτε πλέονσαν οὔτε κινηθείσαι εἶδον, (...) (Hdt. 2.156.2) (...) and it is said by the Egyptians that this island floats. I myself have not seen it float nor move, (...)

These examples make clear that the body motion middle is related to the spontaneous process middle.

Before I proceed to the next middle use, I wish devote some space to a rather peripheral but interesting member of the body motion class. This construction-type is exemplified by the following Homeric lines:

(18) ἀμφοτέρησι δὲ χειρὶν ἐπεσυμένος λάβε πέτρης, τῆς ἔχετο στενόχων, (...) (e 428-9) On he rushed and seized the rock with both hands, and clung to it, groaning, (...)

(19) ἄλλα μεθορμηθεὶς ἐνι κύμασιν ἐλλάβετ' αὐτής [= σχεδής] (e 325) (...) but lunged after it amid the waves, and laid hold of it [= the raft].

Normally, active ἐχω and λαμβάνω govern the accusative, marking the direct object. This direct object is a patient in that the agent-subject exercises complete power over it. In the examples above, however, ἐχω and λαμβάνω have genitival complement. The verb may be active as well as middle, e.g. (active) λάβε πέτρης (e 428), and (middle) ἐλλάβετ' αὐτής (e 325). In this construction, the complement is not a patient, since the subject does not exercise complete power over it. The genitive case expresses that the agent-subject can only take hold of a part of the object (partitive genitive). The fact that both the active and the middle form occur in this genitive construction, is an indication of the unmarkedness of the active (see section 1.1.4), i.e., the active form can often be used when the affectedness of the subject is inferable from the context.128 Now the question remains as to what is the semantic contribution of the middle voice in this type of construction. In the construction at issue, the subject undergoes the major effect of the event. It is the subject that, by performing the action, becomes steady and stabilized, as opposed to the active

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128 Notice that the construction of ἔχωμαι + gen. in the sense 'take hold of' must be sharply distinguished from the construction of ἔχωμαι + gen. that means quite the opposite 'keep oneself back from', e.g.: αὐτοὶ μὲν ἔχωμαι δημοτῖς ἐκ βελίσκων (Σ 129) ('Then we will keep ourselves back from the fight, beyond the range of missiles'). The latter construction is an instance of the body motion middle, which can also be concluded from the existence of a causative active construction (e.g. B 275, N 687). 'ἔχωμαι + gen. in the sense 'be next to' has probably developed from the meaning 'take hold of'.
construction with an accusative object. Thus, the subject may be considered a (albeit somewhat untypical) patient.\textsuperscript{129}

2.1.5 Collective Motion Middle

This middle usage type concerns verbs that designate motion types that are naturally and necessarily performed by groups of (typically animate) individuals, namely gathering and dispersing. Examples are:

(20) πυθόμενοι δὲ οἱ Κάρες συνελέγοντο ἐπὶ Λευκάς τε στήλαις καλεομένας καὶ ποταμοῦ Μαρσύην (...) (Hdt. 5.118.1)
And when the Carians heard this, they assembled at the place called the White Pillars, by the river Marsyas (...)

(21) ὁς τῶν μισγομένων γένετο ἰαχὴ τε πόνος τε (Δ 456)
So from them, while they were joining in battle, came shouting and toiling.

The active transitive counterpart of the collective motion middle - like that of the body motion middles and the spontaneous process middles - has causative meaning. Examples are:\textsuperscript{130}

| ἀλίξομαι 'gather (intr.)' | ἀλίξω 'gather (trans.)' |
| ἀγείρομαι 'gather (intr.)' | ἀγειρόω 'gather (trans.)' |
| ἀθροίζομαι 'gather (intr.)' | ἀθροιζόω 'gather (trans.)' |
| ἀλλαξομαι 'gather (intr.)' | ἀλλαξοω 'gather (trans.)' |
| λύομαι 'dissolve (intr.)' | λύω 'dissolve (trans.)' |
| μίγγομαι 'disperse (intr.)' | μίγγω 'disperse (trans.)' |
| σκίδναμαι 'disperse (intr.)' | σκίδνειμ 'disperse (trans.)' |

\textsuperscript{129} This type of reflexive, mainly occurring with verbs of holding and grasping, is also known from modern languages that have reflexive systems. Compare, for instance, German den Stuhl festhalten vs. sich am Stuhl festhalten. The Russian counterpart of this construction is called consequential reflexive by Gerritsen (1990: 88ff.). Note further that in German, as in Greek, the construction does not govern a direct object (cf. am Stuhl).

\textsuperscript{130} I notice in passing that all middles of collective motion have passive aorist forms in Classical Greek. To this matter I will return in ch. 3.

\textsuperscript{131} E.g.: λύντο δ' ἦγὼν (Ο 1). Obviously, this is a metaphorical extension of the physiological meaning 'dissolve' (spontaneous process middle).

\textsuperscript{132} Μίσγομαι is often construed with a dative-complement, e.g., Τυδείδης δ' ἐξαίτως ιόν προμάχοσιν ἐμίχθη (Ε 134) ('The son of Tydeus returned again and mingled with the foremost fighters'). The semantic difference between the construction with dative and the construction without dative is that, in the former case, there is an asymmetrical relationship between the participants involved. In the construction with dative, one individual is singled out as the subject-referent. The dative case can be explained as a comitative dative (see Schwyzser, II: 160), cf. English mingle with, meet with. This type of construction is a departure of the collective motion middle since it may involve only one moving participant. However, it still resembles the typical collective motion middle in that it necessarily involves more than one individual.
Unlike the reciprocal event type (see next section), the participating individuals do not direct the action towards one another. Nevertheless, the collective motion type has in common with the reciprocal middle that the action can only take place by virtue of the individuals behaving in an identical and joint fashion. The difference between them is that in the reciprocal event micro-events are distinguishable to a certain degree: A acts on B as B acts on A. Collective motion cannot be analyzed into distinct micro-events: the entities involved necessarily act as an inseparable collective. A further difference is that a collective motion event involves a change of state of the subject: a number of separate individuals turns into a unified collective, or vice versa.\textsuperscript{133}

The subject of a collective motion is an agent since it initiates and performs the action. Yet, with respect to \textit{volition} the collective subject ranks lower than the subject of individual motion, since the actions of the individual participants in a collective motion event are not conceived of as separate actions. The collective event is viewed as a single action carried out jointly by a group of individuals, in which the individuals are completely dependent on one another if the action is to succeed. Clearly, the volition of such a collective is restricted as it cannot simply ‘make up its mind’ to carry out an action. Accordingly, collective motion events can, to some extent, be conceived of as processes which take place spontaneously. As a result, semantically, the collective motion middle is located in a continuum between the (individual) \textit{body motion middle} (section 2.1.4) and the \textit{spontaneous process middle} (2.1.2).\textsuperscript{134}

The collective motion middle is also related to the passive (2.1.1). In both types, the subject undergoes the effect of the event, and is thus a patient. The difference between the two types is the degree in which the subject can be regarded as the Initiator of the event. However, in many cases it is unclear or irrelevant who or what is the initiating entity. For example,

\begin{multline*}(22) \lambda \tilde{v} \theta \tau o \; \delta ' \; \alpha \gamma o \nu , \; \lambda \lambda o i \; \delta e \; \theta o \dot{a} \varsigma \; \epsilon \pi \; \nu \eta \varsigma a \xi a \; \epsilon k a \sigma t o i \; \epsilon \sigma k i \dot{d} \varsigma a n t o i \; i \epsilon \nu a i (\Omega \; 1-2) \\
\text{Then the assembly was broken up/broke up, and the men scattered, each man to go to his own ship.}
\end{multline*}

The verb \(\lambda \tilde{v} \theta \tau o\) can both be interpreted as a collective motion\textsuperscript{135} and as a true passive ‘be broken up’ since, in epic at least, assemblies are normally broken up by the leader. This is shown by a parallel in the active voice:

\begin{multline*}(23) \lambda \acute{s} e \sigma e n \; \delta ' \; \alpha \gamma o \tilde{r} \eta n \; \alpha i \psi \varphi r h \nu . \; \eta i \; \mu e n \; \dot{a} \rho \; \epsilon \sigma k i \dot{d} \varsigma a n t o i , \; \epsilon a \; \pi r o s \; \delta \omega i m a o \theta \; \epsilon k a \sigma t o s (\beta \; 257-8) \\
\text{And he broke up the assembly, brief as it was. They then scattered, each one to his own house; (...)}
\end{multline*}

In the case of \(\lambda \tilde{v} \theta \tau o\) at \(\Omega\; 1\), the role of the leader - probably Agamemnon -, and his order to break up the assembly remain completely implicit. If, however, we interpret \(\lambda \tilde{v} \theta \tau o\) as a collective motion, the participants themselves are viewed as taking the initiative to break

\textsuperscript{133} Because of their similarity, Kemmer (1993: 123-5) treats the naturally collective event type as a subtype of the reciprocal situation type (in her chapter 4.1).

\textsuperscript{134} Manney treats the collective type as a subtype of spontaneous changes of state (2000: 175).

\textsuperscript{135} Note that also \(\epsilon \sigma k i \dot{d} \varsigma a n t o\) ‘they scattered’ denotes a collective motion.
up the assembly. Of course, this difference in interpretation is very important to the overall interpretation of the narrative. What is relevant to the story is the fact that the assembly broke up, not who did it. This example shows, however, that the difference between passive middle and intransitive collective motion middle is a matter of degree, depending on the saliency of the role of the leader of the collective. The more salient the role of the leader as an Initiator is, the more we are entitled to regard the verb as passive.

2.1.6 Reciprocal Middle

According to Lichtenberk (1985: 21), reciprocal events involve contexts in which "there are two participants, A and B, and the relation in which A stands to B is the same as that in which B stands to A." In Greek, reciprocal middle verbs are rare. All reciprocal middle verbs denote natural reciprocal events, that is to say, events that normally involve more than one participant acting on each other. Most reciprocal middle verbs are media tantum, and, for the lion’s share, they relate to events that have to do with contending. Conversely, events that are normally not performed in a reciprocal configuration are expressed by an active verb and the reciprocal pronoun ἀλλὰ ἠλπίσης. This phenomenon is analogous to the use of the direct reflexive middle vs. the reflexive pronoun (see section 2.1.7).

The first type of reciprocal middle verbs I will discuss concerns the reciprocal verbs that have one argument. For example,

ἀγωνίζομαι ‘contend, fight’
ἀκροβολίζομαι ‘fight with missiles’
δηρίζομαι/δηριξόμαι (Hom.) ‘contend’

A typical example is the following:

(24) καὶ τὰ μὲν στρατόπεδα ἁμφότερα οὕτως ἠγωνίσθη (Hdt. 1.76.4)
So hard did the two armies fight.

The two armies are viewed as one holistic referential entity both initiating and performing the action (agent) and undergoing the action (patient).

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136 The reciprocal middle is semantically middle as the subject is both Initiator and Endpoint of the event. Reciprocal terms are semantically related to reflexives. In both types the subject (typically animate entities) performs the same action as it undergoes; the subject is both Initiator and Endpoint. The difference between the reciprocal middle and the direct reflexive middle is that the former involves a second participating entity, while the latter does not. The semantic similarity between reflexives and reciprocals is manifested by the fact that they are formally marked alike in many languages, as in French ils se regardent. This utterance is interpretable as ‘they look at themselves’ and as ‘they look at each other’. Langacker (1991a: 370) puts it in these words: ‘What motivates se’s extension from reflexive to reciprocal use is the shared conception of the same participant (necessarily plural in the case of reciprocals) functioning as both the head and the tail of an action chain or its analog.’ The relationship between reflexives and reciprocals across languages is discussed in several papers collected in Frajzyngier & Curl (2000a).
The second type of reciprocal concerns two-participant verbs. The individual entities involved are not fused into one subject-participant, but are expressed by separate constituents. In Greek the second argument has the dative-case.\(^{137}\) Examples are:

\begin{itemize}
  \item `\text{μιλλάμαι} (+ dat.) 'contend with'
  \item `\text{διακονίζομαι} (+ dat.) 'contend with others at throwing the javelin'\(^{138}\)
  \item `\text{διαλέγομαι} (+ dat.) 'converse with'\(^{139}\)
  \item `\text{ἐρίζωμαι} (+ dat.) 'strive, quarrel with' (Hom.)\(^{40}\)
  \item `\text{μάρνομαι} (+ dat.) 'fight, contend with' (Hom./poetry)
  \item `\text{μάχομαι} (+ dat.) 'fight, quarrel with'
  \item `\text{πληκτίζομαι} (+ dat.) 'exchange blows with' (e.g. \(\Phi 499\))
  \item `\text{κτίζομαι} (+ dat.) 'push s.o. and be pushed'
\end{itemize}

An example in context:

\begin{enumerate}
  \item (25) \(\text{ὢδα ποιεῖμεν, ἄνδρες Σκύθαι. δούλοι τοῖς ἰμετέρωσι μαχόμενοι (...) (Hdt. 4.3.3)}\)
  \item Men of Scythia, what are we doing? While we are fighting with our own slaves (...).
\end{enumerate}

The two reciprocal types mentioned above (with and without dative complement) involve a different conceptualization of the event. When the entities are coded as one participant (i.e. the subject), the individual entities involved are viewed as a single holistic entity (cf. \textit{the cats in The cats fight}). The event itself is conceived of as a cluster of symmetrical causal relationships. No prominence is given to either of the micro-events, i.e. individual A acting on B = B acting on A. The construction with a dative-complement, however, presents the subject-participant as being the most prominent participant (generally the discourse topic), and, as a consequence, the outgoing causal chain from subject to dative is highlighted. Consider the clause \textit{The cat fights with the dog}. The incoming causal chain, the fighting of the dog which affects the cat, is somewhat

\begin{footnotesize}
\text{\(^{137}\) Kühner-Gerth (I: 432) and Schwyzwer (II: 161) treat the dative with verbs of fighting as a subtype of the comitative dative. The dative may also express that the participant has the semantic role \textit{experiencer} in the sense as it is used by Langacker. According to Langacker the experiencer role has a dual nature. In some expressions the experiencer only passively registers sensations. However, there are also expressions in which the experiencer can be attributed some kind of initiative role (Langacker 1991a: 327-9, 2000: 31). In the same way, the dative participant with verbs of fighting has a dual character. On the one hand, s/he registers the acts of violence performed by the subject; on the other hand, s/he is actively involved in that s/he reciprocates these acts of violence. Interestingly, Apollonius seems to give a similar analysis of the meaning of the dative-case with verbs of fighting. He explains the occurrence of the dative by the idea that the dative-participant, like the subject-participant, is both actively and passively involved in the action (A.D. \textit{Synt.} 428 Uhlig; Lallo 1994; Lallo 1997, I: 267).}

\text{\(^{138}\) Simplex \text{ἀκοντίζω} 'hurl a javelin' is always active. The preposition \text{δια-} contributes a sense of dividedness and mutuality. Compare also \text{δια-λέγομαι} 'converse' and \text{λέγω} 'speak'.}

\text{\(^{139}\) Unlike the other reciprocal verbs \text{διαλέγομαι} has a passive aorist form, \text{διελέχθην}. In section 3.2.3.3, I will make an attempt to explain this rather remarkable form.}

\text{\(^{140}\) The active \text{ἐρίζω} has the same meaning, and occurs more frequently. Possibly, the active presents the event as a neutral activity 'make ἔρις', while the middle profiles the reciprocal facet.}
\end{footnotesize}
backgrounded. In Greek, the incoming action chain is, however, explicitly coded by means of the middle inflection of the verb.  

As was said before, the reciprocal middles are typically verbs of fighting, and most of them are *media tantom*. However, there appear to be sporadic cases of middle verbs with reciprocal meaning that correspond to non-reciprocal active verbs. An interesting example is:

\[(26) \text{άντι γὰρ τοῦ προσαγορεύειν ἀλλήλους φιλέονσι τοῖσι στόμασι, ἦν δὲ ἡ οὔτερος ὑποδεέστερος ὀλίγω, τὰς παρειάς φιλέονται (...) (Hdt. 1.134.1)}\]

Instead of greeting, they kiss one another on the mouth. If one of the two is a little humbler, they kiss on the cheek.

Remarkably, Herodotus first uses the expected construction of the active verb φιλέω ‘kiss’ with the reciprocal pronoun ἀλλήλους, but in the next clause the middle φιλέονται is used, apparently with a reciprocal meaning (the accusative τὰς παρειάς must be taken as an accusative of the body part affected). The use of the middle form to express a reciprocal meaning is possible here because a direct reflexive interpretation is precluded: kissing, like fighting, is not an activity one usually performs on oneself.  

Another case of a reciprocal middle verb in opposition to a non-reciprocal active is ἀμείβομαι in Homer. For example,

\[(27) \text{oἱ μὲν ἀμειβόμενοι φυλακάς ἔχον (I 471)}\]

They kept watch alternating with one another.

Consider further formulas such as αὐτὰρ ἐγὼ μιν ἀμειβόμενος προσέειτον. These middle verbs cannot be interpreted as passives, since their subjects are actively involved. The active ἀμείβω means ‘exchange s.th.’; the reciprocal middle originally must have meant

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141 With semantically related verbs like ἐρίξω ‘quarrel’, νεικέω ‘quarrel’, πολεμέω ‘quarrel’, and παλαίω ‘wrestle’, which can also have a dative complement, the reciprocity is not coded grammatically, and, as a consequence, deemphasized, e.g. παλαίω φιλαμηλείθ (‘I am wrestling with the son of Philomeles’). It is, however, still an inherent facet of the lexical semantics of the verb. If the speaker wishes to present the event as symmetrical, the construction with the reciprocal pronoun (in the dative) must be used, e.g. παλαίωσιν ἀλλήλοις (‘they are wrestling with each other’).

Note, further, that there is also a group of verbs with an accusative complement that may well be considered reciprocals, e.g., ἄγκαλιζομαι + acc. ‘embrace’, ἀσπάζομαι + acc. ‘welcome, greet’, δεξίομαι + dat./+ acc ‘greet with the right hand’ (ἀγκαλιζομαι and δεξιόμαι have a passive). The middles διαινέομαι and διαιτομαι/διαίτομαι ‘divide (among one another)’ are often claimed to be reciprocals (K-G, I: 90, Gildersleeve 1980: 67). However, I prefer to consider these verbs indirect reflexive middles since (i) they are - unlike typical reciprocals - transitive, and (ii) the subject also receives a share (i.e., the subject is beneficiary), e.g., (...) διενεμεῖντο τὴν ἄρχην ὁ Ζεὺς, ὁ Ποσειδών καὶ ὁ Πλοῦτος, ἐπείδη παρὰ τοῦ πατρὸς παρέλαβον. (Pl. Grg. 523a) (‘(...) Zeus, Poseidon, and Pluto divided the sovereignty among themselves, after they took it over from their father’).

142 Besides the reciprocal pronoun, the reflexive pronoun can also be used with a reciprocal meaning (see K-G, I: 573-5). The reflexive pronoun is preferred in cases where there is a contrast with a third group of individuals, e.g. φθονοῦντες ἑαυτοὺς μᾶλλον ἢ τοὺς ἄλλους ἀνθρώπους (Xen. Mem. 3.5.16) (‘they are more envious and bitter against another than against the rest of the world’). But often the reflexive pronoun seems to be used merely for the sake of variation, e.g. φθονοῦντες ἑαυτοὺς μισοῦσιν ἀλλήλους (Xen. Mem. 2.6.20) (‘envying each other, they hate one another’).
'exchange one another', i.e. 'swap over'. This meaning then developed into the idea of alternating with one another, as, for instance, in changing the guard and in answering one another (see also section 2.1.10).

2.1.7 Direct Reflexive Middle

The direct reflexive middle type involves a human agent that volitionally performs an action on him or herself. Many direct reflexive middle verbs relate to grooming activities such as 'bathing', 'dressing', etc. The action is typically executed on the surface of the body by means of the hands. Examples of direct reflexive middles are (see also K-G, I: 103-4).

Grooming
κείρομαι 'cut off one's hair, have a hair-cut'
λούμαι 'bathe oneself'
ἀλείφομαι 'anoint oneself'
ἀπομύττομαι 'blow one's nose'
ἀποψώκομαι 'wipe one's nose'
ἐνυμαί 'dress oneself'
ζόννυμαι 'gird oneself'
κοσμούμαι 'adorn oneself'

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143 Note that keeping watch in shifts may involve what Kemmer calls a chaining situation: "a chain of paired relations in an ordered series of participants. (...) Each participant is the Initiator in one relation and the Endpoint of a second relation of the same type" (Kemmer 1993: 100). In other words, in the chaining situation A acts on B, B acts on C, and so forth, whereas in the typical reciprocal situation A acts on B and vice versa.

144 The direct reflexive event type is semantically middle (as opposed to passive) in that the subject is both the Initiator of the action, and the Endpoint (affected entity).

145 A difference between the direct reflexive middle and the body motion middle is that the direct reflexive middle does not denote a total physical change of state. When one shaves oneself, for instance, one's body does not undergo a complete change of state, the affectedness is restricted to a particular zone, typically on the surface of the body. Conversely, activities like 'stand up', 'move' necessarily imply a complete change of state, or more precisely, a change of body posture or location. The direct reflexive middle καθαίρομαι 'purify oneself' (aor. ἐκκαθηράμην) may be the proverbial exception to the rule since the verb does denote a change of state ('become καθαρός'). This is, however, not a very striking exception to the rule, if we consider that λούμαι, although it does not denote that the subject becomes clean, will generally imply that the subject becomes clean. Therefore, an utterance such as /I washed myself, but I did not become clean/ is somewhat odd - though not impossible. Furthermore, a perfect like λέλυμενος 'be washed' necessarily implies that the subject is clean at the moment of utterance.

146 Note that all direct reflexive middle verbs have sigmatic middle aorist forms, e.g. ἐκκαθηράμην 'I had a hair-cut', ἀπομύττομαι 'I hung myself'. I will return to the aorist morphology extensively in ch. 3. Note, further, that the active counterparts of direct reflexive middles do not have a causative meaning, as opposed to the body motion middles (ἰστημι 'make s.o. stand' vs. ἵστομαι 'stand still'). Thus, λούω does not mean 'make s.o. wash himself', but 'wash s.o.'. Causation is expressed by the construction of ποιέω with an infinitive, e.g., ἀπογάζομαι με ποιεῖς (Theocr. 3.9) ('Thou'llt make me hang myself'). The same point is made by Rijksbaron (1994: 151n1).
νίζομαι ‘wash one’s hands/feet’
ζυρούμαι ‘shave oneself’

**Other types of direct reflexive actions:**

- ἀπόγχομαι ‘hang oneself’
- συμπόνωμαι ‘exercise oneself’
- δέρμομαι ‘masturbate’
- ἐντύνομαι (Hom.) ‘prepare oneself’
- καλύπτομαι ‘cover oneself’
- κνώμαι ‘scratch oneself’
- κόπτομαι ‘beat oneself’
- παρασκευάζομαι ‘prepare oneself’
- στεφανίζομαι ‘crown oneself’
- σφάττομαι ‘kill oneself’
- τύπτομαι ‘beat oneself’

**Direct reflexive middle designate actions that are normally performed on oneself.** Actions that are not normally performed on oneself are coded in an active construction with a reflexive pronoun (see also K-G, I: 111).

(28) ἰπτεῖ αὐτόν εἰς τὴν θάλασσαν (Dem. 32.6)

He throws himself into the sea.

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147 The original meaning of active δέσω was ‘make supple with the hand, knead’, cf. the derivative δέσω (Hdt. 4.64.2).

148 Cf. active plus pronoun: ἐν εντύνασαν ἐν αὐτήν (Ξ 162) ‘(...), when she had beautuously adorned herself, (...’).

149 As an act of mourning (likewise τύπτομαι). The frequent use of these verbs in contexts of grief eventually effected a lexical semantic shift as they gradually came to be used as actual verbs of mourning that are construed with an object of the person being mourned for (cf. ὁλοφύρομαι), e.g. τύπτομαι τινα ‘I mourn for s.o.’.

150 More examples in Gildersleeve (1900: 67-8). A look at the frequency ratios of actives vs. direct reflexives is illustrative. Δίδωμι ‘give’ denotes an event of which subject and object are usually not co-referential. Therefore, direct reflexivity is expressed by an active verb form and a reflexive pronoun. A quick glance in Powell’s lexicon to Herodotus shows that only 20 instances (of a total of 270 active forms) of δίδωμι concern the reflexive construction with αὐτόν, i.e. less than 10%. Compare this figure with the ratio of active forms of ἀλέιφω, ἀπόγχω, γυμνάζω, λούω, νίζω vs. direct reflexive middles of the same verbs. The following figures are based on an index search with Pandora in the TLG. I have counted the 3rd person aorist forms of the simple and compound verbs. The aorist forms are used in order to be able to filter out the passive forms: ἀπέγχε 2x (2%) vs. ἀπέγχατο 81x (98%), ἠλείψε 98x (76%) vs. ἠλείψατο 31x (24%), ἐγκύμνασε 45x (78%) vs. ἐγκυμνάσατο 13x (22%), ἔλυσε 24x (39%) vs. ἔλυσατο 60x (71%), ἐνίψε 53x (48%) vs. ἐνίψατο 58x (52%). It can be concluded that the direct reflexive middles occur quite frequently as compared to their active counterparts (ranging from 98% [ἀπέγχατο] to 22% [ἐγκυμνάσατο]), whereas the active (pronominal) direct reflexive has a frequency of less than 10% (δίδωμι). The verb ἀπόγχομαι ‘to hang oneself’ is almost a medium tantum: the - rarely occurring - active never means ‘to hang s.o.’, but more generally ‘to strangple’. I have not taken κόπτομαι and τύπτομαι into account - of which the active forms are far more frequent than their (direct reflexive) middles -, because of their highly restricted, idiomatic use ‘beat oneself as a token of mourning’. 

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Although in the latter construction the subject-referent is affected (so in principle the middle form would be semantically possible), the middle form is not used. This is economically motivated: the speaker need not use the middle voice to express reflexivity, as this is already expressed by means of the reflexive pronoun.\footnote{As Kemmer puts it (1993: 235): "Don’t bother to mark semantic properties that are inherent in the event". In section 1.1.4, I have argued that the active form can be used in these reflexive contexts because the active voice is unmarked with respect to the feature of subject-affectedness.} An interesting example is found in Xenophon:

(29) ἐνωι γὰρ (...) προσποθήσκουσι υπὸ τοῦ φόβου, οἱ μὲν ρυθμοῦντες ἑαυτοὺς, οἱ δὲ ἀπαγχώμενοι, οἱ δً ἀποφαίτημενοι (Xen. Cyr. 3.1.25).

Some (...) die in terror before their time - some by hurling themselves over a precipice, others by hanging themselves, others by cutting their own throats.

Here, both an active verb with a reflexive pronoun, and two middle verbs occur side by side. To explain these different strategies, Gildersleeve (1900: 64) remarks "The only middle for self-murder is ἀπάγχωσθαι, to hang oneself [but what about ἀποσφαῖτομενοι?], which seems to have been the most natural form of suicide". This conclusion is not entirely correct. The conclusion should not be drawn from the fact that ἀπαγχωμαί is a middle that, to Greeks, hanging oneself is the natural way to commit suicide, as opposed to other means (e.g. ῥίπτειν ἑαυτόν). Rather, we should infer that it is equally or more natural to hang oneself as it is to to hang someone else, as it is equally or more natural to wash oneself than to wash another (λοῦω vs. λαύμα). Obviously, the same cannot be said of ῥίπτω ‘throw’. Indeed, this point is clearly supported by the frequency figures: the ratio active ἀπάγχω vs. middle ἀπάγχωμα is about 2 % vs. 98 %! (see note 150).

Likewise, σφάζομαι ‘kill oneself’ seems to be an action that is naturally performed with respect to oneself.\footnote{For a similar view, see Cock (1981: 8).} The example in Herodotus (1.45.3), which was already mentioned in section 1.1.4, of the active plus reflexive pronoun is a special case:  

(30) "Αδριστος δὲ (...), οὐτος δὴ ὁ φονεύς μὲν τοῦ ἑαυτοῦ ἀδελφοῦ γενόμενος, φονεύς δὲ τοῦ καθήραντος, (...) ἐπικατασφάζει τῷ τύμβῳ ἑαυτόν (Hdt. 1.45.3)

But Adrastus (...), he who became the slayer of his own brother and the slayer of his benefactor, (...) slew himself over the grave.

The fact that Adrastus kills himself is explicitly and emphatically contrasted with his killing his brother and the son of his benefactor, which was mentioned in the first part of the sentence.

Another type of context in which the active verb plus the reflexive pronoun occurs involves \textit{contrastive emphasis}. Consider

\footnote{In combination with a reflexive pronoun, the middle voice may also be used, e.g. Xen. An. 1.8.29: ἑαυτὸν ἐκσφαῖξαθαι. Again, the reflexive pronoun emphasizes that the subject (Artapates) slew \textit{himself}, rather than that someone was ordered to slew Artapates, as was mentioned in the preceding sentence. The middle voice here redundantly expresses reflexivity (see section 1.1.4).}
By means of the reflexive pronoun, the patient is presented as if it were a separate entity. This makes it possible for the patient - in spite of the referential identity with the agent-subject - to be contrasted with a second, external, patient-participant.

In the direct reflexive middle (λούωμαι), however, the Initiator-aspect of the subject is also, to some extent, conceptually distinguished from the Endpoint-aspect. A separation is conceived between the agent-mind of the subject, and the patient-body. This conceptual distinction of Initiator-aspect and Endpoint-aspect is facilitated by the salient outward manifestation of the action: the clearly visible activity of the hands on the body. By contrast, in the case of the body motion middle, the Initiator-aspect and the Endpoint-aspect are less clearly distinguishable. In an action such as ‘sit down’, the body as a whole is both performing and undergoing the event.

Above, I have discussed the differences between the direct reflexive middle, the direct reflexive active plus pronoun construction, and the body motion middle. These three construction types can be located on a scale that relates to the relative distinguishability of the agent and patient participants (see also Kemmer 1993: 73). This scale also includes the active transitive construction and the active intransitive construction. At the one extreme of the scale, the prototypical transitive is located. The prototypical transitive clause is characterized by maximal distinguishability of agent and patient, since they are clearly distinct participants referring to different entities in reality. Lower distinguishability is inherent in the pronominal direct reflexive since the two participants are coreferential. Positioned still lower on the scale is the direct reflexive middle. The distinguishability of the participants is lower because the agent and patient are fused into one participant (the subject). However, there still remains some conception of separateness of the agent and patient due to the middle inflection that codes the patient-role of the subject. At the other extreme of the scale, we find the active intransitive. In the active intransitive clause there are no agent and patient to be distinguished. One sole participant remains: the subject. This participant can be either like an agent (e.g. εἰμί ‘I am going’), or more like a patient (ἀποθνήσκω ‘I am dying’).

Interestingly, the conceptual distinguishability of participants is iconically reflected in the formal structure of the respective expressions: from a full noun that expresses the patient in the prototypical transitive expressing, via a reflexive pronoun that expresses the patient in the direct reflexive active, through an inflection that expresses the affectedness of the subject in the direct reflexive middle, and finally to the total absence of a separate patient-role in the active intransitive verb. This correlation between conceptual distinguishability and formal structure is represented in the following table:
Table 1: Correlation between conceptual distinguishability and formal structure

<table>
<thead>
<tr>
<th>Distinguishability of patient-participant</th>
<th>Construction</th>
<th>Formal expression of patient-participant</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIGH</td>
<td>TRANSITIVE ACTIVE</td>
<td>FULL NOUN</td>
</tr>
<tr>
<td></td>
<td>DIRECT REFLEXIVE ACTIVE</td>
<td>PRONOUN (εαυτόν)</td>
</tr>
<tr>
<td></td>
<td>DIRECT REFLEXIVE MIDDLE</td>
<td>INFLECTION (middle endings)</td>
</tr>
<tr>
<td></td>
<td>INTRANSITIVE ACTIVE</td>
<td></td>
</tr>
<tr>
<td>LOW</td>
<td>TRANSITIVE ACTIVE</td>
<td>FULL NOUN</td>
</tr>
<tr>
<td></td>
<td>DIRECT REFLEXIVE ACTIVE</td>
<td>PRONOUN (εαυτόν)</td>
</tr>
<tr>
<td></td>
<td>DIRECT REFLEXIVE MIDDLE</td>
<td>INFLECTION (middle endings)</td>
</tr>
<tr>
<td></td>
<td>INTRANSITIVE ACTIVE</td>
<td></td>
</tr>
</tbody>
</table>

The correlation between, on the one hand, the degree of conceptual separation between the two participants, and, on the other, the degree to which they are lexically or grammatically autonomous, has already been noted by Haiman (1983), Haiman (1985: 105), Langacker (1991a: 370), Croft (1990: 174), and Kemmer (1993).

The direct reflexive middle is related to the indirect reflexive middle. This is shown by the existence of a special construction that seems to occupy an intermediate position between the two middle types. This construction is exemplified by the following lines from Homer (taken from Chantraine 1963: 178):154

(32) a. νίψατο δ’ αυτός χείρας (Π 230)
   He himself washed his hands.

   b. χρόα καλόν ἀλειψαμένη (Ξ 175)
   After she had anointed her beautiful skin, (...

   c. τεύχεα τ’ ἐξεδόντο (Γ 114)155
   (....), and they took off their armour.

   d. κεραλήν δ’ ὁ γε κόψατο χερσί (Χ 33)
   He beat on his head with his hands.156

The middle verbs are to be interpreted as direct reflexives, i.e. νίψατο = 'he washed himself'. The active counterpart supports this analysis, compare:

(33) τῷ σε πόδας νίψω (τ 376)
   Therefore I will wash your feet [lit.: I will wash you the feet]

The active verb νίψω takes a complex direct object, consisting of a whole (σε) and a part (πόδας). The fact that the possessor of the feet is expressed in the accusative case (i.e. as a patient/direct object) confirms the analysis that the middle is to be viewed as a direct


155 Note that the use of the construction also extends to clothing (e.g. τεύχεα). After body parts, clothes are the things that are closest to the body.

156 Other examples are κατανεύετα χείρα (Ε 425) and δάκρυ' ὄμορξάμενον (Θ 88).
reflexive, and not as an indirect reflexive. In that case, we would expect a construction with a dative, i.e. *σοι πόδας νίψω (lit: 'I will wash the feet for you').\(^{157}\)

However, direct reflexives of the type νίψατο χείρας resemble the indirect reflexive middle in that it is construed with an accusative (χείρας). Originally, this accusative-constituent was a direct object (as in the active counterpart with a double (whole-part) object above). However, the accusative may have been reanalyzed as an accusativus respectus, i.e. 'I wash myself with respect to the hands'. This reanalysis possibly occurred after Homer when the active construction with a double (whole-part) object had disappeared.

Besides the presence of an accusative, the direct reflexive construction of the type νίψατο χείρας resembles the indirect reflexive construction in another respect. In general, the subject can be said to benefit from the action. In sum, although this special Homeric construction should, strictly speaking, be interpreted as a direct reflexive construction, it resembles, in some respects, the indirect reflexive.

2.1.8 Perception Middle

The middle of perception relates to events in which an animate subject perceives an object through one of the sensory organs. The perceiver is mentally affected by the perception. The subject can, therefore, be considered an experiencer. Perceptions can both volitional and non-volitional. However, it appears - as I shall argue below - that the middle perception verbs in Greek tend to express a volitional activity. The perceiving subject is typically actively involved in the perception. Examples are γενόμαι 'taste' and σκέπτομαι 'look at, consider'. The subject can thus be considered an agent. Most middle verbs of perception are media tantum, with the exception of γενόμαι that has an active causative counterpart γενώ 'make s.o. taste'.\(^{158}\) Before I continue with a discussion of the function

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\(^{157}\) K-G appear not to have understood this construction correctly. They give a concocted example, λάομαι τοὺς πόδας, and render it as "ich wasche mir die Füsse". Apparently, they take this type of construction as an indirect reflexive middle, with τοὺς πόδας as a direct object. It is, however, better to interpret the accusative in this type of construction as an accusative of respect. Furthermore, the correct Attic form should have been contracted λάομαι, and the verb only refers to washing the whole body, while washing hands or feet is expressed by the verb ἀπονίζω (see Ruijgh 1991: 696). Unfortunately, due to K-G's authority this example made its reappearance elsewhere several times, cf. Smyth 1920: 390, Schwyzer, II: 229, García Gual 1970: 25, Kemmer 1993: 1.

\(^{158}\) The verb φράζουμαι 'notice, consider, observe' also has a causative active φράζω 'indicate, tell'. However, μνημοσύνα is not a true perception verb since it more often denotes purely cognitive activities. The medical author Galen (12.795) has an isolated causative ὀνομάζω 'make one smell at a thing'. Yet, there is a clear tendency for mental process middles, as opposed to perception middles, to have active causative counterparts. So we have mental processes like μνημήσομαι 'remember' - μνημήσκω 'remind', φοβέομαι 'be afraid' - φοβέω 'frighten', etc., but only γενόμαι - γενώ. The explanation for this difference may be that it is more difficult to force a person to perceive something, than to cause someone to experience a change of mental state, since a perceiver (esp. in the case of middle perception verbs) has control of the action, and will be able to offer resistance to an external causer, whereas in the case of mental processes the experiencer is only passively involved in the event. The causer thus has more chance to succeed in his manipulation of the cause (see also Givón 2001a: 45, 48-9). Therefore, it is more likely that there is a lexicalized causative verb.
of the middle voice in the class of perception verbs, I shall dwell briefly on the various case-constructions that occur with verbs of perception.

The perceived object is can be marked by the accusative and the genitive. With verbs of seeing, the perceived object is in the accusative; with verbs of hearing and smelling the perceived object is in the genitive. This difference relates to different conceptualizations of the events. The accusative-case expresses that the event is viewed as being analogous to the prototypical transitive clause, i.e. the perceiver is viewed as an Initiator that directs his view to the perceived object (see section 1.1.2). By contrast, the genitive case with verbs of hearing and smelling can be interpreted as a genitive of source. The genitive case evokes the image that the perception emanates from the perceived entity towards the perceiver. Verbs of hearing may also be construed with an object in the accusative case which expresses the content of what is heard, e.g.,

(34) ταῦτα δ' ἐγὼν Καλυψώ κύκους (μ 389)
   This I heard from Calypso.

The distinction between genitive and accusative with verbs of hearing could be explained semantically by the idea that the content of the perception is ‘captured’ completely by the perceiver (hence the accusative), as opposed to the source of the perception, which is ‘captured’ only partially. The genitive can therefore be interpreted both as a partitive genitive, and as a genitive of source. The actual sound heard can be expressed both in the genitive and in the accusative, e.g. ὁκοῦν φωνῆς/φωνήν ‘I hear a voice’. Apparently, the perceived sound can be viewed either as partially or as completely ‘taken in’.

Having digressed on the various case-constructions of perception verbs, I return now to the role of the middle voice within the class of perception verbs. On the basis of lexicalization patterns in different languages, Viberg (1984) makes a tripartite distinction in the domain of perception verbs. The first involves perception in which the experiencer is actively involved: controlled activity in the terms of Viberg (e.g. ‘look at’, ‘listen’). The second relates to perception in which the experiencer is more passively involved: non-controlled experience (‘see’, ‘hear’). The third type includes verbs in which the source is marked as the subject: source-based copulative state construction), e.g. ‘the painting looks

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159 This idea of perception is related to one that is often found in folk-theories, namely that the eye is thought of as emanating rays of light. This kind of "naive physics" is found in Empedocles (Fr. 84). He compares the eye with a lantern from which rays of light are leaping forth. This passage is cited by Aristotle (de sensu 437b23ff.). Aristotle adds that Empedocles, in a passage now lost, expresses a contrary view, namely that vision is to be explained by effluences of the objects seen. Apparently, Empedocles thought of seeing as a two-way interaction.

160 Also Apollonius observes that there is a semantic difference between the verbs of hearing that are construed with a genitive, and the verbs of seeing that have an accusative. With regard to hearing, the subject, according to Apollonius, is passively involved. The body is, as it were, penetrated by the sensory experience. Conversely, seeing involves an active subject. The subject can control the event by closing his eyes. These semantic differences are reflected in their respective case-constructions (A.D. Synt. 417 Uhlig; see Lallo 1997, II: 262-3).
very old'. It appears that this trichotomy is also relevant for the voice marking of perception verbs in Greek.

In relation to the voice-marking of verbs of perception, Kemmer (1993: 136) remarks: "It remains to be seen whether the difference between more active and less active Experiencer verbs is supported by a difference in middle-marking patterns." I believe that, in Greek, a difference in middle-marking can indeed be discerned. Consider the following table:

Table 2: Greek verbs of perception: volitional vs. non-volitional

<table>
<thead>
<tr>
<th>+ VOLITION</th>
<th>- VOLITION</th>
</tr>
</thead>
<tbody>
<tr>
<td>ἰκονάζωμαι 'listen'</td>
<td>οἴσθονομαι 'perceive, notice, learn'</td>
</tr>
<tr>
<td>ἰκροῦθομαι 'listen, obey'</td>
<td>ὀσφραίνομαι 'smell'</td>
</tr>
<tr>
<td>γεύομαι 'taste'</td>
<td>ὃράομαι (esp. Hom.) 'see'</td>
</tr>
<tr>
<td>δέρκομαι (Hom./poetry) 'fix one's eyes, gaze'</td>
<td></td>
</tr>
<tr>
<td>θέαομαι 'look at (wondering)'</td>
<td></td>
</tr>
<tr>
<td>ματύομαι (Hom./poetry) 'seek for s.th. by touching'</td>
<td></td>
</tr>
<tr>
<td>σκέπτομαι 'look at'</td>
<td></td>
</tr>
<tr>
<td>ἰθρέω 'look at'</td>
<td>ὀίω (Hom./poetry) 'hear'</td>
</tr>
<tr>
<td>βλέπω 'look at'</td>
<td>ἰκτύω 'hear'</td>
</tr>
<tr>
<td>(διέκ)οπτεύο 'watch'</td>
<td>βλέπω 'see'</td>
</tr>
<tr>
<td>κλύω (Hom./poetry) 'listen'</td>
<td>κλύω (Hom./poetry) 'hear'</td>
</tr>
<tr>
<td>λεύσσω (Hom./poetry) 'look at'</td>
<td>λεύσσω (Hom./poetry) 'see'</td>
</tr>
<tr>
<td>σκοπέω 'look at'</td>
<td>ὄρω (aor. εἰδον) 'see'</td>
</tr>
</tbody>
</table>

161 It is hard to find examples of source-based perception verbs in Greek (i.e. 'X looks/ sounds/ smells/ feels/ tastes good'). The few examples I found seem to display a tendency to be active which may be connected to their stative semantics, cf. ὄξω 'smell' (sporadically middle ὄξομαι), πικρίζω 'taste bitter', ἐγγλύσσω 'taste sweet'. I am not aware of source-based verbs meaning 'taste' or 'feel' ('X tastes/feels good') in Greek.


163 Perhaps also ὀσφράομαι 'smell' belongs to the [-Volition] class, but this is difficult to assess due to its low frequency.

164 In Classical Greek, σκοπέω replaces σκέπτομαι in the present stem. There is also (albeit marginally) a middle form σκοπέω, probably contaminated by σκέπτομαι. Σκοπέω and -οπτεύο are denominatives (from σκοπός 'watcher' and -όπτης 'id.' respectively). The original meaning of both verbs was probably stative 'be a watcher'. Note that stative verbs are typically actives.

165 The etymologies of ὀκτύω and ὀξροῦμαι are similar to one another. The former is a compound of the root ὀκ- 'sharp' and the root of οὖς 'ear'; the latter is a compound of ὀξρος 'pointed' and οὖς. The verbs must, therefore, originally have meant 'have pointed/sharp ears, prick up one's ears' (see Chantraine 1968).

166 The presents κλύω and ὀίω are novel formations, created after a reinterpretation of the originally thematic aorists ἐκλύον and ὀίων as imperfects.
It can be observed that there appears to be a tendency for middle perception verbs to be volitional. Exceptions are αἰσθάνομαι, ὁσφαίνομαι and the special middle verb ὀφάνωμαι (see below). Non-volitional perception tends to be expressed by active verbs. There are, however, also active verbs that express volitional activities. Note that three of them also have a non-volitional use: βλέπω, κλώ, λέυσσα (the latter two are restricted to poetry in the Classical language). The phenomenon that active verbs are also used to express meanings that are typically expressed by the middle voice is in accordance with the claim that the active form is semantically unmarked (see section 1.1.4).

The verbs are classified according to their typical meaning. For instance, although ἀκούω and ἀιω sometimes denote a volitional activity (in the sense ‘listen, obey’), their prototypical meaning is non-volitional (‘hear’). Likewise, γεύμα means has a marginal non-volitional meaning ‘experience’, yet its prototypical meaning is volitional ‘taste’ (English taste is ambiguous in this respect). As to βλέπω, κλώ, and λεύσσα, both usages (+/- volition) are approximately equally frequent. Δέρκομαι is a Homeric word, typically meaning ‘fix one’s eye, gaze, look at’ (+ volition). In classical Greek, it is only rarely used in poetry, mostly in the sense ‘see’ (-volition).

The question remains as to how the tendency of middle perception verbs to designate volitional perception should be explained. At first glance, the pattern seems to contravene our intuitive convictions. We would expect that the more ‘passive’ or non-volitional the meaning of a verb is, the more likely it is to be marked by the middle voice. However, it should be kept in mind that the semantics of the middle voice is not directly related to the notion of volition. Instead, as we have seen in chapter 1, the crucial element of middle semantics is the notion of subject-affectedness. The proper question, therefore, regards why there should be a relation between volitional perception and affectedness. I will suggest here that the mental affectedness of the subject is the crucial element that explains the middle verbs of perception. The element of volition is to be regarded only as a side-effect of the mental affectedness. For example, σκέπτομαι - unlike active ὀφάνω - typically implies that the subject looks at something in order to acquire information about it. It is, therefore, not surprising that its meaning shades into the sense ‘consider, think about’. In other words, the perception brings about a lasting effect on the cognitive state of mind of the perceiver. Another example is ἀκούω which can mean ‘listen’ as well as ‘obey’. The latter meaning implies that the listener’s mental attitude is affected to such an extent that he obeys the person listened to. The stronger mental involvement of the subject in the case of volitional perception can also be of an emotional kind. For example,

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167 Interestingly, ὁσφαίνομαι has a passive aorist ὀφαίνομαι (besides a thematic aorist ὀφαράμαι), whereas the volitional middle perception verbs all have a sigmatic middle aorist (with the exception of ἔφασαν, e.g. ἔγνωσαν, ἔσκεψαν. In ch. 3, I will argue that the sigmatic middle and the passive aorist forms express, respectively, a low degree and a high degree of subject-affectedness. Incidentally, although the volitional middle perception verbs that have an accusative object resemble prototypical transitives, it is clear that they are not. In Classical Greek, none of these middle perception verbs can be passivized, which can be explained by the fact that their objects are not patients (but rather zeros). Perhaps also the tendency to avoid ambiguity (e.g. σκέπτομαι ‘look at’, as well as *be looked at’) may be operative. Note that an exceptional passive aorist form σκέβασαν ‘to be observed’ (which is formally distinct from ἔσκεψαν ‘I observed’) is found in Hp. de Arte 11.

168 Based on two studies in the verbs of perception by Prévo (Prévo 1935b, 1935c).

169 For δέρκομαι and its remarkable passive aorist forms ὀφάσαν and ὀφέρασα, see section 3.2.3.2.
Oedou mm ofte n implie s that one look s at somethin g with a sense of wondering. By contrast, the interaction between the perceiving subject and the perceived object of non-volitional perception verbs ('see', 'hear') is of a more mechanical character.

As was noted above, volition is only a side-effect of the mental involvement of the subject, and not an essential property that explains the middle voice of verbs of perception. This can clearly be seen in the case of ὧνα - ὧναμαι. The middle form ὧναμαι is the marked member of the oppositional pair. It occurs less frequently, and it marks an increased mental affectedness of the perceiving subject. In his in-depth investigation of the opposition ἰδεῖν vs. ἰδέοθαι in Homer, Bechert comes to the following conclusion:

(35) "Das Aktiv steht, wenn die Aktion hervorgehoben ist; (...)" (Bechert 1964: 424); "Das Medium steht, wenn das Subjekt und seine besondere Beteiligung an der Handlung hervorgehoben ist: etwa "selbst sehen", (...), "bei sich sehen", (...) - ferner, wenn die Wechselwirkung mit dem Objekt betont ist, (...), - und schließlich, wenn das Objekt und seine Rückwirkung auf das Subjekt hervorgehoben wird: bei übermächtigen, besonders göttlichen Objekten; lebhaft vergegenwärtigend zur Bezeichnung des starken Eindrucks, den das Objekt auf das Subjekt macht; bei erwarteten Objekten" (Bechert 1964: 426).

According to Bechert, the middle ὧναμαι expresses that the object leaves a strong (mental) impression on the subject. For example,

(36) ὠ πόσι, ἣ μέγα ἑαυτῷ τόδ' ὑφαλλοίστιν ὧναμαι (N 99)
Oh! Surely a great marvel is this that I look upon with my eyes.

In Homer, the verb always has middle ending when the object is ἑαυτῷ 'wonder', as in the formula ἑαυτῷ ἰδέοθαι ('a marvel to look upon').

In conclusion, the middle voice of verbs of perception marks that the subject is mentally affected. Active verbs of perception are unmarked with respect to the feature of affectedness. Middle verbs of perception are often volitional. This tendency may be explained by the fact that their subjects intend to acquire information about or from the perceived object.

2.1.9 Mental Activity Middle

The mental activity middle involves an animate subject that volitionally performs a mental activity, whereby the subject itself is mentally affected. In other words, the subject has two semantic roles: agent and experiencer. In some cases, moreover, the subject benefits

\[\text{\textsuperscript{170}}\text{In Homer, the active form occurs 471 times, the middle times 114 (see Bechert 1964: 42). In Classical Greek the middle form occurs only marginally, and in the fixed expression ἰδοῦ 'look!'.}\]

\[\text{\textsuperscript{171}}\text{Bechert's characterization of the uses of active and middle with ἰδεῖν readily fits in with the model set out by Croft (1991), in which the conceptualization of mental events involves two causal relations (see section 2.1.3). In the case of active ἰδεῖν the causal relation from perceiving subject to perceived object (die Aktion) is more prominent (hervorgehoben), whereas in the case of middle ἰδέοθαι the reverse relationship from object to subject is highlighted: the object somehow leaves a strong impression on the subject.}\]
from the mental activity so that the subject can also be assigned the role of beneficiary. Typical examples are:172

βουλέουμαι 'take counsel, plan, resolve'
λογίζομαι 'calculate, reason, consider' (MT)
μέδομαι/μήδομαι 'plan, contrive'173
μητίσαμαι 'devise, contrive' (Hom.) (MT)
σημαίνομαι 'infer from signs, conjecture'
σταθμόμαι 'measure, estimate, conjecture'
tεκμαίρομαι 'judge from signs, conjecture' (MT)

Many middles of mental activity are media tautum (MT). A number of them, however, do have an active form such as βουλέω and σημαίνω. These active forms, however, do not have a causative meaning with respect to the middles forms. It appears that the middle form expresses an increased mental involvement of the subject. Thus, active σημαίνω means 'give a sign', whereas middle σημαίνομαι may be roughly characterized as 'give oneself a sign' (similar to an indirect reflexive middle, see section 2.1.11), hence 'infer from signs'. The distinction between βουλέω and βουλέουμαι is less clear-cut. To all appearances, the active form has the same meaning as the middle. Only the static meaning 'to be a member of the βουλή' is limited to the active form βουλέω.174

In general, mental activity verbs designate that the subject conceives an idea by reasoning. This idea can relate to a thing (expressed as a direct object) or to an event (expressed by an infinitival complement). For example,

(37) (...) οί "Ελληνες δρησμόν βουλέουνται καταρρωθηκότες, (...) (Hdt. 8.75.2)
(...) the Greek are planning flight in their fear, (...)

(38) οί δὲ δὴ ἐπὶ τῶν Περσέων ὡς ἐβουλεύσαντο αὐτίκα ἐπιχειρείν τοῖς μάγοισι,
(...) (Hdt. 3.76.1)
The Seven, having resolved to attack the Magians at once, (...)

There is no sharp boundary between the mental activity type and the mental process type (section 2.1.3). The crucial difference is that mental activities are volitional. There are, however, several verbs that can designate both mental processes and activities, for example, ἐννοοῦμαι 'understand, intend, take thought for, be anxious' (mental process) and 'consider, reflect upon, invent' (mental activity); φράζομαι 'think, believe' (mental process) and 'consider, contrive' (mental activity). This kind of polysemy can emerge easily since, in many contexts, whether the subject is more actively involved in the

172 Note that mental activity verbs tend to have a sigmatitic middle aorist (e.g. ἐβουλευσάμην). For a study of the syntax and semantics of the verbs of thinking in Homer, I refer to Bertolín Cebrián (1996).

173 The active participle μέδων functions as a substantive 'ruler' (i.e. someone who plans things). The active form may be explained by the fact that a ruler does not plan for his own sake (at least he is not supposed to), but for the sake of his subjects.

174 The compounds συμβουλεύω - συμβουλεύομαι do show a clear contrast; the former means 'advise (+ dat.), recommend (+ acc.)', whereas the latter means 'to take counsel with s.o. (+ dat.)'. That is, when the subject is the 'receiver' of the advice, the verb takes the middle voice.
cognitive process or not is irrelevant. What matters most, then, is that s/he conceived an idea, not in what way s/he conceived it.

Like perception\textsuperscript{175} and mental processes, the semantic structure of mental activities involves two simultaneous causal relations; (a) a cognizer that focuses his attention on, and makes mental contact with, a cognized entity (an ‘idea’), and (b) the cognized entity which, by coming into being, brings about a mental affectedness within the cognizer. The middle-marking of the mental activity verbs is motivated by causal relation (b): the mental activity has an effect on the state of mind of the cognizer. Mental activities are semantically middle (as opposed to active and passive) in that the subject is both an Initiator (being an agent), and an Endpoint (being an experiencer).

The mental activity middle is related to the indirect reflexive middle. This is shown by the fact that quite a number of indirect reflexive middle verbs acquired a mental meaning. For example, the original meaning of the verbs τεχνάζωμαι and μηχανάω probably was indirect reflexive ‘make s.th. for oneself by art’, construed with a concrete, physical direct object (e.g. πλοία ‘ships’, Hdt. 1.94.6). Then, through metaphorical extension, they were also used in the sense to ‘contrive’, i.e. a purely mental activity with an abstract direct object that only exists in the mental sphere, e.g.,

\begin{align*}
(39) \; & \; \alpha \; συνήδει \; (...) \; τὴν \; γύναικα \; ταύτην, \; (...) \; \tauῷ \; πατρὶ \; τῷ \; ἕμετέρῳ \; θάνατον \; μηχανω-\; μένην \; φορμάκοις, \; (...) \; (Antipho \; 1.9) \\
& (...) \; who \; knew \; that \; this \; woman, \; (...) \; had \; been \; contriving \; death \; against \; our \; father \; by \; poison, \; (...) 
\end{align*}

Other examples of a semantic extension from indirect reflexive (concrete meaning) to mental activity (abstract) are:

\begin{align*}
μετατίθεμαι \; \tauὶ \; ‘change \; s.th. \; for \; oneself’ \; & \; > \; μετατίθεμαι \; τὴν \; δόξαν \; ‘change \; one’s \; opinion’ \; > \; μετατίθεμαι \; (abs.) \; ‘change \; one’s \; mind’\textsuperscript{176} \\
δρισσωμαι \; \tauὶ \; ‘mark \; s.th. \; out \; for \; oneself’ \; & \; > \; ‘determine \; for \; oneself; \; define’ \; (cf. K-G, I: 111) \\
συμβάλλωμαι \; \tauὶ \; ‘put \; s.th. \; together \; for \; oneself’ \; & \; > \; ‘agree \; on, \; conclude’ \\
συμβάλλωμαι \; \tauὶ \; ‘bring \; s.th. \; together \; for \; oneself, \; contribute’ \; & \; > \; ‘suppose, \; reckon’ \; (K-G, I: 111) 
\end{align*}

An example that shows an intermediate stage between indirect reflexive and mental activity is:

\textsuperscript{175} Mental activity is similar to perception. Verbs designating visual perception tend to evolve into verbs of mental activity. Sweetser explains this phenomenon thus: "This metaphor is probably based on the strong connection between sight and knowledge, and also on the shared structural properties of the visual and the intellectual domains - our ability to focus our mental and visual attentions, to monitor stimuli mentally and visually" (1991: 33). She gives the following examples of verbs that either have a physical or a mental sense: look down on, look up to, look forward to, look back on, overlook, look after. Examples from Greek are θεδομαί ‘gaze at’ and σκέπτομαι ‘look at’ which acquired a metaphorical sense 'contemplate' and 'consider, examine', respectively. See also note 91.

\textsuperscript{176} The simple verb τίθημι is more frequently used in the middle when it is used 'in reference to a mental action', as LSI notes (under B II). The image of putting something in some place (at one's own disposal, cf. the middle voice) is metaphorically employed in a meaning 'assess', e.g. ἐκ τούτων τὰ δίκαια τίθενται (Dem. 8.8) ('they assess justice on these grounds'). The frequent construction of this metaphorical use of τίθημι with local adverbials (e.g. τίθημι-μαί τι ἐν τίνι 'regard s.th. as s.th.') shows that the concrete meaning put something somewhere still shines through the metaphorical meaning.
Another thing I will tell you, and do you lay it to heart.

The mind is metaphorically conceptualized as a container, in which one can store things to remember. This is an intermediate case because the subject (σύ) can be equally viewed as a beneficiary and as an experiencer. The subject is a beneficiary since he has the items that are stored in the container of his memory readily at his disposal; the subject is an experiencer in that he is mentally affected as a result of the event. These semantic roles are, however, related.

2.1.10 Speech Act Middle

The speech act middle involves a subject that is involved in the speech act in a special way. Since speech acts are volitional the subject can be considered an agent. In addition, the subject can be interpreted as a beneficiary or an experiencer. Examples of middles designating speech acts are:

- ἀγοράσωμαι 'speak in the assembly, speak' (MT)
- ὀρνάσω 'pray' (MT)
- ἀπολογέω 'speak in defense' (MT)
- μαντεύομαι 'devine, prophesy' (MT)
- μνημοσύνα 'speak, say' (MT)
- προφασίζωμαι 'allege as an excuse' (MT)
- φθέγγομαι 'utter a sound or voice; speak loud and clear' (MT)
- ψεύδομαι 'cheat by lies, speak false'

Verbs of emotional speech
- σωπάσωμαι 'accuse' (MT)
- ἀναίνομαι 'refuse, reject' (MT)
- ἀρνέωμαι 'refuse, deny' (MT)
- λοιποφορέω 'revile, rebuke'
- μέμψωμαι 'rebuke' (MT)
- μύρσομαι 'lament'
- μωσόμαι 'blame'
- ὁδύρομαι 'lament' (MT)
- ὀλοφύρομαι 'lament' (MT)

177 A very common metaphor (see Lakoff 1987: 450).

178 More examples of this type of metaphorical shift can be found in Kühner-Gerth (I: 111-2). Note that Langacker treats beneficiaries and experiencers as manifestations of one archetypal role experiencer (Langacker 1991a: 327-9), see also section 1.1.2.

179 Most of the speech act middles have a sagramic middle aorist, e.g. ἤγοροσάμην, ἤτιμασάμην. A number of them also have a passive variant form with identical meaning, e.g. ἀπελογήθην, ἤπνηθην, διέλεξην, ἐλοιμοδήθην. Δέομαι only has a passive form, ἐδεέθην. There is, however, a semantic distinction between the variant formations ἐμμψάμην 'I blamed, rebuked' vs. ἐμψώθην 'I became angry with', and ἐγενήθημαι 'I lied' vs. ἐψεύθην 'I made a mistake'. In these oppositional pairs, the passive aorist forms do not denote speech acts, but mental processes. I will elaborate on the issues of (aorist) morphology in ch. 3.
Verbs of promising
εὐχόμοι 'vow, pray, boast,' 180 (MT)
στένουσα (Hom.) 'promise, boast' (MT)
ὑπισχέομαι 'promise' (MT)
φιστάμαι 'promise' 181

Verbs of commanding
ἐφίσμενοι 'command'
ἐντέλλομαι 'command'
κέλλωμαι 'command' (MT)

Verbs of asking and answering
ἀμείβομαι 'answer'
ὑπο-/ἀποκρίνομαι 'answer' 182
ἀπέστημι 'beg' (MT)
ηρόμην (aor.) 'ask (information)' 183
λύσομαι 'beg, pray' (MT)
πυρόθανομαι 'ask (information)' (MT)

Most middle verbs of speech are media tantum. If they do have an active form, there is not always a clearly detectable semantic distinction (e.g. ἐντέλλω - ἐντέλλομαι, λοιπόν - λοιπόνομαι). 184 If there is a clear semantic distinction, it is not predictable, as in ἀμείβομ 'exchange' vs. ἀμείβομαι 'answer' (see below), and ἐφίσμεν 'send' vs. ἐφίσμεν 'command' (original meaning 'send s.o. for oneself'?). In these cases, the meaning of the middle verb has drifted away from its active counterpart.

Most middle verbs of speech are rather specific with respect to their lexical meaning. It appears that verbs with a general, more neutral meaning like 'speak, say' tend to be active: ἀγορεύω 'speak', οὐντότω 'speak, say', εἰρω 'speak, say' (Hom.), καλέω 'call (by name)', λέγω 'speak, say', and φημί 'say'. 185 In Homer, however, we also find middle forms of φημί (φάτο), and the general verb μυθόμαι 'speak, say', which appear to be semantically neutral. 186 These middles are possibly the result of semantic

180 Probably a very old medium tantum, cf. Skt. ὄμητι 'speak solemnly'.
181 'Ὑφ-ἰστομαι literally means 'stand under s.th. (as support)' which acquired a metaphorical sense 'take upon oneself, submit to, promise'. Similarly, ὑπισχέομαι (epic and Ionic variant ὑπίσχεομαι) literally means 'take upon oneself'.
182 The active form ἀποκρίνομαι means 'separate, select, choose'.
183 In Classical Greek, this form functions as a suppletive aorist to the active present ἐρωτάω. In Homer, there is still a corresponding present form ἐρώτομαι 'ask'.
184 For a further discussion of this issue, see chapter 5.
185 For a study of the verbs of saying in Greek, see Fournier (1946).
186 Cf. also middle οὐντομαι in classical poetry. According to Fournier, there is no semantic difference between active ὄφη and middle φᾶτο. In Homer, they are used as metrical alternatives (Fournier 1946: 34). Boeder (1961-2: 20-5, 74-6), however, claims that the middles φᾶτο and μυθόμαι are not semantically neutral. Instead, according to Boeder, they involve a subject that has a special interest in the speech act in that he wishes to convey his point of view to the listener. The evidence in support of his claim, however, is
generalization (or ‘bleaching’), i.e. their original, more specific meaning underwent a process of generalization.\(^\text{187}\)

The middle inflection of verbs of speech can be explained semantically in the following ways. Firstly, in many cases the subject intends to gain benefit from the speech act, as in ἄραμοι, εὐχαμαι, λίσσομαι. These middle verbs are similar to indirect reflexive middles in that the subject can be assigned the semantic role beneficiary. This probably also applies to verbs of commanding: the subject benefits in that an act is performed according to his will. Also speech acts like ἀπολογόμεμαι, προφασίζομαι, ψεύδομαι (and αἰττάμαι?) will generally be profitable to the speaker.

Secondly, many middle verbs of speech imply a strong emotional - or at least mental - involvement on the part of the speaker: αιττάμαι, ἀναίνομαι, ἀρνέομαι, λίσσο-μαι, λοιδορέομαι, μέμφομαι, μύρομαι, μωμέομαι, ὀδόρομαι, ὀλοφύρομαι (also ψεύδομαι?).\(^\text{188}\) The subject of verbs of emotive speech acts can be assigned the semantic role of experiencer. As for ὑπογνέομαι and ψυγίζομαι (and εὐχαμαι in the sense ‘vow’) the consequence of the speech act is that the speaker is bound by his promise, and as such s/he is mentally affected by the speech act (similarly, Kemmer 1993: 141).

More difficult to account for, however, is the middle inflection of verbs of asking and answering. The middles of asking πυνθάνομαι, δέομαι, and aorist ἡρώμην can be explained in various ways. The former two imply that the asker will get, as a result of the speech act, the information s/he asked for. In this way, the speaker-subject can be considered an experiencer. The semantic development of πυνθάνομαι makes this point clear. In Homer the verb has the meaning ‘hear that, learn that’ (a mental process middle). The subject undergoes a cognitive change of state. This is still the central meaning in the Classical language (especially in the aorist stem). In Classical Greek, however, it acquired an additional meaning ‘ask’ (especially in the present stem), which can be paraphrased by try to acquire information.\(^\text{189}\) In a similar way, the middle inflection of the aorist ἡρώμην might be explained by the fact that the subject acquires information as a result of the question.\(^\text{190}\)

Δέομαι (+ gen. + gen.) ‘beg s.th. of s.o.’ is a semantic extension of the original meaning ‘lack, need, want’, which pertains purely to a passive emotional or physical

\[\text{\textsuperscript{187}}\text{As for ϕάτο (cf. Lat. fāri 'say'), this process was as follows: the root }^\text{*}\textbf{bēh₄}\text{ originally had a more concrete meaning ‘shine, be bright’, e.g. Skt. }^\text{b}^\text{h₄}-\text{ti ‘shine’ (which corresponds with Greek ϕητί). Thus, the original meaning of the middle may have been ‘make oneself clear’, hence ‘explain oneself, speak’ (see Chantry 1968).\]

\[\text{\textsuperscript{188}}\text{The fact that many emotive speech acts are actives(-only) attests to the semantic unmarkedness of the active endings (see chapter 1), e.g. οἰάζω ‘to cry ati, wail’, γονιω ‘wail’, γρύζω ‘to say γρύ, grumble, mutter’, δηνέω ‘wail, mourn’, κλαίω ‘weep, wail’ (also κλαίωμαι in poetry, perhaps modelled after future κλαύσομαι), οἰμώζω ‘to cry oμοι, wail’. See for the issue of active and middle (quasi-)synonyms chapter 5.\]

\[\text{\textsuperscript{189}}\text{Note that the new meaning ‘ask’ probably developed from the conative use of the present stem.}\]

\[\text{\textsuperscript{190}}\text{An intriguing question is why the present form ἄρατο is active, but the aorist form ἡρώμην is middle (although the expected form ἡρώτημα also occurs). In my view, the answer must be sought in the semantic unmarkedness of the active (see chapter 1). In chapter 5, the issue of active and middle (quasi-)synonymous verbs will be dealt with.}\]
affectedness. This mental and physical affectedness is still present in the meaning ‘beg for’. This can be nicely illustrated by contrasting δέομαι with active οἰτέω. Compare the following instances where both verbs are construed with an infinitive:

(41) [Adrastus] παρελθὼν δὲ ὁ ὁδός ἔς τὰ Κροίσου οἰκία κατὰ νόμον τοὺς ἐπιχειροῦς καθαρίσιον ἔδειτο ἐπικυρίσαι (Hdt. 1.35.1).
This man came forward into the house of Croesus and begged to win purification of Croesus after the customs of that country.

(42) ο δὲ Κόφς, οἷς τὸ θυραννος δημότης δὲ ἐών, οἰτέει Μυτιλήνης τυραννεύσαι (Hdt. 5.11.2).
But Coes, as he was not a ruler but an ordinary citizen, asked to become ruler of Mytilene.

In (41), the subject (Adrastus) is in deep trouble, and the purification he begs for is his only chance of salvation. In (42), on the other hand, Darius allows Coes to propose a reward for his good advice. Coes is clearly not in urgent need of the city of Mytilene when he asks for the tyranny over it. The semantic contrast between δέομαι and οἰτέω is also reflected in the different case-markings of the object that is asked for. The genitive of δέομαι can be interpreted as an ablative genitive (i.e. expressing the idea of being separated from s.th.), or, alternatively, as a genitive of source (viz. of the emotion of desire). Conversely, οἰτέω can be construed with a double accusative - of the person asked and of the thing being asked for. These accusative complements with οἰτέω neutrally denote the direct objects. Both the person and the thing can appear as subject in a passive construction.

The last middle verb of asking to be discussed here is λύσσομαι (+ acc.). The middle voice can be explained by the emotional undertone of the act of begging, and by the benefit that the subject hopes to receive as a result. Thus its subject can be interpreted both as an experiencer and as a beneficiary.

Verbs of answering, ἀμείβομαι and ὑπο-ὑποκρίνομαι, are more problematic with regard to their middle voice. The explanation may be found in the history of these verbs. In Homer, the middle ἀμείβομαι means ‘alternate with one another’ (see section 2.1.6). This reciprocal meaning shifted into the meaning ‘answer’. An intermediate stage may have been ‘alternate with words’, as in

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191 This semantic change can be nicely explained as a generalized invited inference. For instance, an utterance such as I need help pragmatically implies that one asks for help. That δέομαι involves a high degree of subject-affectedness is also shown by the fact that it has a passive aorist form ἐδεήθησαν. In ch. 3, I shall argue that the passive aorist form expresses a high degree of subject-affectedness.

192 Marginally, also middle οἰτέομαι occurs, though apparently without distinct meaning. The middle form may however emphasize that the subject profits or hopes to profit as a result of the request (see Rijksbaron 1991: 59 [on E. Ba. 360]).

193 Both the person from whom something is asked, and the object that is asked for are marked by the genitive. Both are illustrated by σέο δέομαι μὴ δέεσθαι ἀνάμων (Hdt. 1.8.4) (‘I beg you not to request unlawful things from me’).
(43) ὃς τὸ μὲν χαλεποσιν ἀμειβομένῳ ἐπέεσσι
ἐστασαν (γ 148)
So these stood alternately retorting with harsh words.

As for ἀποκρίνομαι, this verb appears to be an Attic replacement (first occurrence in Thucydides) of the older (Homeric) verb ὑποκρίνομαι. In origin, simple κρίνομαι had an indirect reflexive meaning 'select (for oneself), distinguish (for oneself)' (cf. active κρίνω 'select, distinguish'). This meaning is still well-attested (e.g. δ 408 ἐτάξιος 'select companions'). Subsequently, this meaning extended to the metaphorical meaning 'explain, interpret'. Both the simple verb and the compound ὑποκρίνομαι can have this meaning. For example,

(44) ἄλλη ἀγε μοι τὸν ὑπειρον ἡπόκριναι καὶ ἀκουσον (τ 535).
But come now, hear this dream of mine, and interpret it for me.

(45) (...) ὁ γέρων ἐκρίνατ' ὑνειρος (Ε 150)
(...) that old man interpreted dreams.

Finally, the meaning 'explain, interpret' developed into 'answer', probably because, in general, giving an explanation occurs as an answer to a question.

The last issue I would like to discuss in this section concerns the pair ὑεύδω - ὑεύδομαι. The formal contrast between active ὑεύδω 'deceive' and middle ὑεύδομαι 'cheat by lies' (aor. ἐψευσάμην) can be explained adequately in terms of absence vs. presence of subject-affectedness. The active appears to denote 'cheating, deceiving' in a general sense, i.e. not necessarily by lying. This is shown by the occurrence of inanimate entities as subject. For instance,

(46) a. ἄλλα πιστεύω (...) μὴ ὑεύσειν με ταύτας τας ἄγαθας ἐλπίδας (Xen. Cyr. 1.5.-13)
But I feel confident (...) that these sanguine hopes will not deceive me.
b. Ναὶ τῷ σιῶ, ὃ 'Ἀργεῖον, ὑευσεῖ ὑμῖν τὰ σήμα ταύτα (Xen. HG 4.4.10)
By the twin gods, Argives, these Siganos will deceive you.

In example (a.) the subject is ἐλπίδας, which makes it unlikely that ὑεύσειν refers to a speech act. In example (b.) the subject is τὰ σήμα, which refers to the sigmas written on the shields of the Sicyonians. Pasimachos took these shields from the Sicyonians to deceive the Argives. Again, written letters on shields cannot speak (in the literal sense). The construction allows a second complement in the genitive, expressing the thing with respect to which one is deceived. This (separative) genitive is probably related to the genitival complement with verbs of depriving. That this active construction has a causative meaning is shown by the occurrence of corresponding intransitive mental processes like:

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194 In this metaphor, explaining things is viewed as a process of taking something apart in order to understand it better. A similar metaphor is found in English expressions such as analyse (from Greek ἀναλύω 'make loose, take apart'), explicate (from Latin explicare 'unfold'), unravel, and untangle.

195 There is also an intransitive mental process middle ὑεύδομαι 'be deceived' (with a passive aorist ἐψευσθην), of which the active ὑεύδω 'deceive' is the causative form.
The middle verb \( \psi\eta\upsilon\delta\omega\mu\alpha\iota \) (aor. \( \dot{\psi}\nu\nu\sigma\alpha\mu\eta\nu \)) can be construed absolutely, or with an object, for example,

\begin{align*}
\psi\nu\delta\omega\mu\alpha\iota & 'I lie' (absolute) \\
\psi\nu\delta\omega\mu\alpha\iota \tau\omicron\upsilon\omicron\tau\omicron & 'I say that which is untrue' (cognate object) \\
\psi\nu\delta\omega\mu\alpha\iota \sigma\omicron\upsilon\omicron\nu & 'I deceive him by lying' (human object) \\
\psi\nu\delta\omega\mu\alpha\iota \acute{o}\omicron\kappa\tau\omicron & 'I believe the treaty' (inanimate object)
\end{align*}

The middle voice of \( \psi\nu\delta\omega\mu\alpha\iota \) can be explained in two ways that do not exclude each other. First, the middle voice may express that the subject generally derives benefit from the act of lying (i.e. the subject is \textit{beneficiary}). Second, the middle may also express that the subject is mentally involved to a greater extent (i.e. the subject is an experiencer), since the liar consciously utters words which he knows to be untrue.

In sum, active \( \psi\nu\delta\omega \) 'deceive' is the causative counterpart of \( \psi\nu\delta\omega\mu\alpha\iota \) 'be deceived' (aor. \( \dot{\psi}\nu\nu\sigma\alpha\mu\eta\nu \)). \( \psi\nu\delta\omega \) does not imply mental involvement of the subject. Middle \( \psi\nu\delta\omega\mu\alpha\iota \) (aor. \( \dot{\psi}\nu\nu\sigma\alpha\mu\eta\nu \)) 'lie, cheat by lies', on the other hand, is a speech act, and it does imply that the subject is mentally affected.

To conclude, in this section I have offered a number of explanations for the occurrence of the middle voice with speech act verbs. I have argued that in some cases the middle voice marks that the subject benefits from the speech act (subject is beneficiary), and that, in other cases, the subject is mentally (emotionally or cognitively) affected. These different explanations do need necessarily exclude one another. There are, however, also middle verbs whose middle endings do not appear to have a special semantic contribution (e.g. \( \phi\alpha\tau\omicron \)). These cases may be explained by semantic generalization (or 'bleaching'). In the course of history, the middle endings lost their specific middle meaning.\(^{196}\)

\subsection*{2.1.11 Indirect Reflexive Middle}

The indirect reflexive middle involves transitive events performed by a volitional subject (an agent). The subject is affected in that s/he derives benefit from the action performed, i.e. the subject has the semantic role of \textit{beneficiary}. It is, however, often quite difficult to distinguish between the beneficiary-role and the recipient-role because the indirect reflexive middle designates typically that the subject, like a recipient, has the effectuated or

\(^{196}\) A class of middle verbs that is related to the speech act middles are the \textit{media tantum} that denote sounds made by animals, e.g. \( \beta\lambda\chi\varphi\sigma\mu\acute{o}\iota\acute{m} \) 'bleat', \( \beta\rho\rho\acute{o}\sigma\mu\acute{o}\iota \) 'roar, bellow', \( \mu\kappa\acute{o}\sigma\mu\acute{o}\iota \) 'bleat', \( \mu\kappa\acute{\omega}\sigma\mu\acute{o}\iota \) 'bellow', and \( \sigma\theta\acute{\epsilon}\gamma\gamma\sigma\mu\acute{o}\iota \) 'whinny, cry (of birds), speak (humans)'. Most of these verbs are onomatopoetic. The polysemous verb \( \sigma\theta\acute{\epsilon}\gamma\gamma\sigma\mu\acute{o}\iota \) that can apply to animal sounds as well as to human speech shows that these classes are related. As with human speech, the middle voice of animals sounds may be explained by the emotional affectedness of the subject: animals typically bloat/bellow/bark etc. when they are agitated/afraid/angry/hungry/need to be milked, etc. There are, however, also active verbs of animal sounds: \( \gamma\rho\acute{\iota}\zeta\varsigma \) 'grunt', \( \acute{\upsilon}\lambda\acute{k}\epsilon\tau\omicron\acute{o} \) 'bark', and \( \chi\rho\acute{\epsilon}\mu\epsilon\tau\zeta\zeta\varsigma \) 'whinney, neigh'. \( \mu\kappa\acute{o}\sigma\mu\acute{o}\iota \) and \( \mu\kappa\acute{\omega}\sigma\mu\acute{o}\iota \) have active aorists, \( \acute{\epsilon}\mu\kappa\varsigma\kappa\nu \) and \( \acute{\epsilon}\mu\kappa\varsigma\kappa\nu \). As was argued in ch. 1, the active voice does not necessarily express \textit{absence} of subject-affectedness. Rather, it is neutral as to the semantic feature of affectedness.

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affected object at his/her disposal as a result of the event. Recipient-subjects, however, are only found with media tantum.\textsuperscript{197}

A typical example is (see also Cock 1981, Rijksbaron 1994\textsuperscript{2}: 144):

\begin{enumerate}
\item[(48)] a. (...) δισάμενοι σῖτον ἐν τῇ κόλοσσῃ οἱ ἄστει ἄλευρα τε καὶ ἄλφις ἔποιευν πάντες ἔπει μήνας συνχοῦς (Hdt. 7.119.2)

(...) the citizens divided up corn in the cities and all of them for many months made wheaten and barley.

b. [The Egyptians] (...) ἀπὸ ὀλυρέων ποιῶνται σῖτια, (...) (Hdt. 2.36.2)

(...) they make their bread from spelt, (...).
\end{enumerate}

In example (a.), the corn is ground for the Persian king, Xerxes, whereas in (b.) the Egyptians themselves profit from the food they prepare.

In addition to indirect reflexive middles that contrast with active verbs\textsuperscript{198}, there are also a number of media tantum.\textsuperscript{199}

\textsuperscript{197} This means that verbs such as διδομεν 'give' and λέγω 'say' do not have indirect reflexive middles διδομαι τι 'I give myself s.th.' or λέγομαι τι 'I say s.th. to myself'. Because it is unusual to give or to say something to oneself, the indirect reflexive is expressed by the pronoun ἐσαυτό (see also below). For an extensive analysis of the indirect reflexive use of ποιῶμαι, I refer to Cock (1981).

\textsuperscript{198} There are also a number of indirect reflexive middles whose meaning has drifted away from that of their active counterparts. E.g., αἰρέω 'take' vs. αἰρέομαι 'choose' (esp. in the aorist stem: εἰλήμην 'I chose'). In Homer, the middle αἰρέομαι still exhibits the regular meaning 'take for oneself'; ἀποδιδομεν 'give back' vs. ἀποδίδομαι 'sell' (< *give back with the aim of profit'). Other examples are cited by Rijksbaron (1994\textsuperscript{2}: 147).

\textsuperscript{199} There is also a group of verbs that designate emotionally motivated actions that seem to be related to the indirect reflexive middle. Often, the subject can also be said to benefit from the activity in that the subject tries to exercise power over the object through the activity. Examples are: αἰκίζομαι 'maltreat', βιῶσιμαι 'press hard, wrong, ravish', δηλέομαι 'hurt, damage', διορέομαι (+ acc. + dat.) 'present s.o. with s.th.', λυμαίνομαι 'outrage, maltreat', φεὐδομαι (+ gen.) 'spare', φιλοφρονέομαι 'treat kindly, show favour to', χαρίζομαι (+ dat.) 'do s.th. favourable to s.o'. The subject is either ill-disposed or well-disposed towards the object. Some of the verbs expressing violent actions (βιῶσιμαι, δηλέομαι) semantically shade into middle-only verbs of plundering, like σίνομαι and ληφωμαι, that can be classified as indirect reflexives. Like the indirect reflexive middle, these verbs all have sigmatic middle aorists (e.g. ἐβιασάμην, ἐχαρισάμην).
The use of the indirect reflexive middle is an unemphatic way of expressing that the subject is the beneficiary. If one wishes to emphasize that the subject benefits from the action, the reflexive pronoun is used, and mostly with an active verb form (comparable to the direct reflexive construction with reflexive pronoun, see 2.1.7). This can be seen as a form of neutralization (see also section 1.1.4). An example is

(49) [Philip weakened Macedonia] (…), ἔντεν ἐπισφολαστήραν ἢ ὑπήρχε φόσει κατεσκέυασεν αὐτῷ (Dem. 2.15)

[Philippus] has rendered [Macedonia] for his own benefit even more insecure than it was by nature.

However, the (redundant) use of a middle form is another option, e.g.,

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200 Assuming that the original meaning of ἁκέομαι was ‘mend, repair’, the middle inflection can be explained by the fact that you generally repair something for your own benefit. The middle inflection of the near-synonymous ἰδομαι may be analogous to ἁκέομαι. If we do not accept the explanation of ἰδομαι as analogous to ἁκέομαι, the middle inflection becomes somewhat problematic since it is not clear how the meaning ‘heal’ relates to middle semantics. Healing benefits the healed person, rather than the healer. Quite possibly, the meaning ‘heal’ developed from an indirect middle meaning such as ‘save someone/something (so as to have him/her at one’s disposal)’, cf. the Homeric medium tantum ῥόμαι ‘rescue, protect’.

201 The active *αἰνωμι must have existed in Mycenaean Greek where we find a passive perfect participle a-ja-me-no (ἀγαμένος) ‘be inlaid’. The active *αἰνωμι originally may have meant ‘provide with’. The middle αἰνωμι, when it was still in opposition with the active form, must have meant ‘provide oneself with’.

202 Thematic δέχομαι is the successor to the older athematic verb *δέγματ, of which forms such as ἐδέγμην, ἠδέγμθεν survive in the Homeric language. This athematic medium tantum with e-vocalism in the stem possibly belonged to the PIE class of stative middle verbs, cf. also ἔλαμ ‘be clad’, κείμαι ‘lie’. Likewise, *δέγματ had a stative meaning ‘wait for’, e.g. ἀλλ’ ὁδεῖ τινα φώνα μέγαν καὶ κολλόν ἐδέγμην/ ἐνθάδ’ ἐλεύσεσθαι (1 513) (‘But I always waited for a tall and handsome man to come here’). See also note 118.

203 The media tantum that have a meaning ‘acquire’ can be compared to the indirect reflexive middle πορίζωμα ‘furnish oneself with’ (cf. active πορίζω ‘furnish’).
Apart from the indirect reflexive middle with a reflexive pronoun in the dative, we also find indirect reflexive middles in combination with an external (non-coreferential) indirect object. Consider

(51) [Amasis to the Greeks] (...) ἔδωκε χώρους ἐνιδρύσασθαι βωμοὺς καὶ τεμένεα θεοῦ (Hdt. 2.178.1)

(...), he gave lands where they might set up altars and sanctuaries to their gods.

The primary beneficiaries are the Greeks - the (unexpressed) subject of ἐνιδρύσασθαι - as they can directly and physically dispose of the altars and the cult-places. The gods are the beneficiaries of the cult-places in a more indirect way. Another example of this type of expression is:

(52) [Megabazos leads his army through Thrace] (...) πᾶσαν πόλιν καὶ πᾶν ἔθνος τῶν τωτῆ οἰκῆμενον ἡμεροῦμενος βασιλέα (Hdt. 5.2.2)

(...) subduing to the king every city and every nation that lived there.

Again, both the subject and the dative-constituent are beneficiaries of the event. The subject of the middle verb ἡμεροῦμενος (Megabazos) exercises an immediate, physical power over the cities he conquers, while the king is only indirectly, more distantly involved. It is worthy of mention that this greater distance on the semantic level is iconically mirrored by the morphological distance. The distal beneficiary is expressed by means of a separate dative-constituent, whereas the proximal beneficiary is coded by means of a bounded inflection.  

So far we have discussed the more typical indirect reflexive construction. Now I wish to mention two additional construction-types that I regard to be subtypes of the indirect reflexive middle. First, the so-called causative middle and, secondly, what I would like to call the perspective-shifting middle.

The term 'causative middle' is a very unfortunate one. A typical example is:

(53) ἢ οὖκ ἀκήκοας, ὃτι Θεμιστοκλῆς Κλεόφαντος τὸν υἱὸν ἔπεα μὲν ἐδιδάξατο ἄγαθον; (Pl. Men. 93d)

Have you never heard how Themistocles had his son Cleophon taught to be a good horseman?

The subject, Themistocles, is not the actual performer of the event. He is, rather, the initiator of the event since he employs a professional teacher to instruct his son. However,

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204 Compare also νεῖδ δὲ Σκάρτηθεν Ἀλέκτορος ἕγετο κούρην (δ 10) ('but for his son he [= Menelaus] was bringing to his home from Sparta the daughter of Alector'). Apparently, Menelaus, as the patriarch, is seen as the primary beneficiary of the marriage; his son, the actual groom, is only the secondary beneficiary.

205 See e.g. Goodwin (1895: 267), Stahl (1907: 54-5), Smyth-Messing (1920: 392).
as K-G (I: 108) point out (see also Gildersleeve 1900-11: 67), the active verb can be used in a similar way. For example,

(54)  [Pericles had his sons taught] τούτους (...) ἰππέας μὲν ἐδίδαξεν οὖδένος χείρος Ἀθηναίοι, (...) (Pl. Men. 94b)

He had them taught to be the foremost horsemen of Athens, (...)

The fact that both the middle and the active construction convey the same causative meaning leads to the conclusion that the middle inflection itself does not express causativity.206 In fact, any transitive verb can be interpreted as a causative, given the appropriate context. For instance,207

(55)  Κῦρον δ' αὐτόν [= τὸν παράδεισον] ἐξέκοψε καὶ τὰ βασίλεια κατέκαυσεν (Xen. An. 1.4.10)

But Cyrus cut down the park and burned up the palace.

In this type of expression, the intermediate agent that physically performs the action denoted by the verb, is pragmatically irrelevant (non-topical). Its presence can only be inferred on the basis of the hearer’s world-knowledge, namely that the subject-referent himself would not perform the activity. Instead, an anonymous intermediary agent, usually a professional, physically performs the action.208

The question now remains what the function of the middle inflection in this type of causative clause is. Notice that, in (53), it is Themistocles’ own son who is taught to be an excellent horseman. The subject, Themistocles, is therefore indirectly the beneficiary of the event. For this reason, the middle can be viewed as a subtype of the indirect reflexive middle use.

This brings me to the second subtype of the indirect reflexive middle, which I would like to call the perspective-changing middle. With this middle type, the selection of the subject effects a change of perspective on the event described. For example,

(56)  a. (...) τὸν Ἐρασύλοχον τῷ Καλλίππῳ μισθώσατι τὴν τριημαρχίαν ἔπεισεν (...) (Dem. 50.52)

(...) he induced Thrasylochus to let his triarchy to Callipus.

b. (...) μάρτυρας ὑμῖν παρέξομαι πρῶτον μὲν τοὺς μεμισθοθεμένους παρ’ ἐμοῦ τὸ Σφηττοῖς χωρίων (...) (Lys. 17.8)

(...) I will produce to you as witnesses first those who have rented the land of Sphetos from me (...)

The active verb μισθῶμι ‘let’ (example a.) is construed with an accusative object that denotes the thing let, and with a recipient-dative that denotes the person to whom...

206 See also K-G, I: 108: "Im Medium an sich liegt der Kausativbegriff ebensowenig wie im Aktiv." Compare, conversely, Goodwin’s remark (1895: 267): "The middle sometimes has a causative meaning".

207 For more examples, see K-G, I: 99-100.

208 Thus, the intermediary agent can be compared to a mere instrument. Instruments, too, often remain unexpressed, due to their pragmatic irrelevance. Consider an expression such as The police shot the burglar. The instrument (some kind of firearm) is not expressed here because it is inferable on the basis of our world-knowledge, and pragmatically unimportant.
something is let. The subject of the middle μισθόματι 'rent' denotes the person that receives the rented object. It corresponds with the dative in the active construction.

Other example of this middle type are (K-G, I: 109):

δανείζω 'lend'
κήρημι 'lend'\(^{209}\)
τίνω 'pay'
χράω 'give an oracle'\(^{210}\)
ώνέω (Cretan) 'sell'

δανείζομαι 'borrow'
κήραμαι 'borrow'
τίνομαι 'make s.o. pay, punish'
χράομαι 'consult an oracle'
ώνεόμαι 'buy'

The lexical meaning of these verbs involves a transfer of an object from one person to another. The middle inflection marks that the subject is a recipient. This type of middle use can, therefore, be considered a subtype of the indirect reflexive middle.\(^{211}\)

\(^{209}\) The present κήρημι is a late formation (first in Demosthenes). It was created as a present form of the older causative aorist ἔχρησα 'let s.o. use s.th.' and the middle aorist ἔχρησόμην 'use s.th.', probably by analogy with the pair ἔστημι : ἔστησα (see Chantraine 1968).

\(^{210}\) Like κήρημι, the present χράω was formed on the basis of the older aorist ἔχρησε - ἔχρησόμην. The original meaning of the aorist middle was 'use', from which the more specific meaning developed 'use a god/an oracle' > 'consult an oracle'.

\(^{211}\) Note that the middle verbs involving a change of perspective have a sigmatic middle aorist form, just like the more typical indirect reflexive middles, e.g. ἔδανεσάμην, ἔμισθοσάμην.
2.2 Semantic Feature Analysis

In the previous sections, a classification of the middle usage type was set forth. In order to summarize the description of the middle uses, it might be useful to present an analysis of the essential semantic features that distinguish the middle uses from one another. These semantic features all relate to the subject of the clause.212

Table 3: The middle uses: semantic feature analysis

<table>
<thead>
<tr>
<th>Aorist form</th>
<th>Subject = Animate</th>
<th>Subject = Agent</th>
<th>Subject = Beneficiary</th>
<th>Subject = Experiencer</th>
<th>Subject = Patient</th>
<th>Subject undergoes Change of State</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1.1 Passive</td>
<td>ἐκοινωνήν</td>
<td>+/-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+/-</td>
</tr>
<tr>
<td>2.1.2 Spontaneous Process</td>
<td>ἐπάθην</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2.1.3 Mental Process</td>
<td>ἐφοβισθήν</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
<td>+/-</td>
</tr>
<tr>
<td>2.1.4 Body Motion</td>
<td>ὀθηλλάζην</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>2.1.5 Collective Motion</td>
<td>ἔγερθην</td>
<td>+</td>
<td>+/-</td>
<td>-</td>
<td>-</td>
<td>+</td>
</tr>
<tr>
<td>2.1.6 Reciprocal</td>
<td>ἐμαχαθάμεν</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>2.1.7 Direct Reflexive</td>
<td>ἐλοιπάσαμεν</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>2.1.8 Perception</td>
<td>ἐγενασάμεν</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>2.1.9 Mental Activity</td>
<td>ἐλογασάμεν</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>2.1.10 Speech Act</td>
<td>ἐλοινδορησάμεν</td>
<td>+</td>
<td>+</td>
<td>+/-</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>2.1.11 Indirect Reflexive</td>
<td>ἐκοινασάμεν</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

212 It must be noted that these semantic features relate to the *typical* examples of each middle use. There will always be exceptions and boundary-cases.

213 The numbers refer to the sections in which the uses were discussed.
Fig. 2: Semantic map of the Greek middle voice
2.3 The structure of the network

2.3.1 The Semantic map of the Middle Voice

An important aim of this chapter has been to investigate in which way the middle uses semantically relate to one another. The result of this investigation can be represented by a network structure that consists of nodes representing the different middle uses and of links representing the semantic interrelations. It is possible to represent this network structure graphically. Consider figure 2. The boxes represent the various middle meanings; the lines connecting the boxes represent the semantic relations between the middle meanings. The thickness of the boxes indicates the token-frequencies of the middle meanings (see also section 2.3.2). Each middle meaning is typified by means of a number of distinguishing characteristics. These essential semantic properties are also represented in table 3 above.

The distinguishing features are distributed over the map of the network in the following way. The uses in which the subjects are agents are found on the left-hand region of the map. The uses with patient-subject are found in the lower region of the map. Note that there is a section where the two regions overlap. The experiencer-subjects cover the upper-middle region of the map. Beneficiary-subjects are found in the upper-left region. Uses that involve a change of state can be found in the right-hand region of the map.

One important element of the category is not depicted on the map of the semantic network: the abstract schema. This is due to the two-dimensionality of the written medium. The abstract schema can be thought of as floating above the plain of the various concrete middle meanings. The abstract schema embodies the semantic property that is common to all middle uses, which is subject-affectedness. The various middle uses are connected with the "node" of the abstract schema as elaborations of the schema.

Fig. 3: The Network of the Middle Voice: abstract schema and elaborations

For the purpose of clarity, the semantic network as it was shown in Fig. 2 has been reduced to a one-dimensional form. This form should be thought of as a side-view on the network of Fig. 2. Furthermore, not all middle uses have been depicted. The remaining middle uses are represented in a reduced form by the boxes containing dots. The purpose
of this figure is to show that the complete semantic network of the middle voice has two levels. The first level relates to the various middle uses and their interrelations; the abstract schema, of which the middle uses are elaborations (represented by the arrows), constitutes the second level of the semantic network.

2.3.2 The Category Prototype

In the map as it was given above, all middle uses are regarded as equally important. However, as was expounded in ch. 1, in prototype theory some category members are viewed as ‘better’ examples of the category than others. The other members are assimilated to a category according to the degree to which they resemble these prototypes. Prototypicality must be thought of as a graded notion. With regard to prototypicality, a category can be compared to a mountain range having summits of various heights. In this section, I will try to assess which of the middle usage types can be considered prototypical. To establish the category prototype two criteria will be used. The first criterion relates to token-frequency. The higher a member’s frequency of occurrence, the higher its cognitive salience. The second criterion relates to the centrality of the member within the network. The more relations a member has to other members, the more prototypical a member is.

The token-frequency of the middle uses is given in the following table.
Table 4: Frequency of middle usage types\textsuperscript{214}

<table>
<thead>
<tr>
<th>Type</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Passive</td>
<td>24 (1)</td>
<td>8.0 % (0.3 %)</td>
</tr>
<tr>
<td>Spontaneous Process</td>
<td>35 (14)</td>
<td>11.7 % (4.7 %)</td>
</tr>
<tr>
<td>Mental Process</td>
<td>63 (44)</td>
<td>21.0 % (14.7 %)</td>
</tr>
<tr>
<td>Body Motion</td>
<td>59 (26)</td>
<td>19.7 % (8.7 %)</td>
</tr>
<tr>
<td>Collective Motion</td>
<td>11 (4)</td>
<td>3.7 % (1.3 %)</td>
</tr>
<tr>
<td>Reciprocal</td>
<td>10 (10\textsuperscript{215})</td>
<td>3.3 % (3.3 %)</td>
</tr>
<tr>
<td>Direct Reflexive</td>
<td>3 (0)</td>
<td>1.0 % (0.0 %)</td>
</tr>
<tr>
<td>Perception</td>
<td>3 (1)</td>
<td>1.0 % (0.3 %)</td>
</tr>
<tr>
<td>Mental Activity</td>
<td>9 (5)</td>
<td>3.0 % (1.7 %)</td>
</tr>
<tr>
<td>Speech Act</td>
<td>19 (13)</td>
<td>6.3 % (4.3 %)</td>
</tr>
<tr>
<td>Indirect Reflexive</td>
<td>58 (21)</td>
<td>19.3 % (7.0 %)</td>
</tr>
<tr>
<td>δύναμαι</td>
<td>6 (6)</td>
<td>2.0 % (2.0 %)</td>
</tr>
<tr>
<td>Total</td>
<td>300 (145)</td>
<td>100 % (48.3 %)</td>
</tr>
</tbody>
</table>

With regard to token-frequency, three middle uses clearly stand out as candidates for the status of category prototype. These are the mental process middle, the body motion middle, and the indirect reflexive middle. The frequency of the middle meanings is represented in figure 2 by the thickness of the boxes. The second criterion relates to the centrality of the middle use in the network. It can be seen in figure 2 that it is the mental process middle that has the most connections within the network with other middle uses. Especially the fact that it is related to both the indirect reflexive middle and the passive middle - which can be considered the two extreme poles of the category - is a strong argument for taking the mental process middle as the central member of the category.

\textsuperscript{214} A sample of 300 middle verbs from Homer, Herodotus and Aristophanes in order to have both narrative and dialogical texts. From Iliad and Odyssey, of each book the two first occurring middles, of Iliad A through Δ the first three were taken. Likewise, from Herodotus the 11 first occurring middles were taken from every book, plus one extra from book 1. From Aristophanes the first 100 occurring middles from the Plutus were taken. Only present stem middles were taken into account, in order to avoid morphological complications (passive aorists, perfects on -α, etc.). The bracketed numbers relate to the media tantum included. Since the distinctions between the middle uses are gradient, it is not always easy to classify the occurrences. However, I believe that my classification is fairly reliable as boundary-cases constituted only a small minority of the sample. Only the intriguing middle δύναμαι I have not ventured to classify. It is not easy to understand what exactly is the contribution of the middle inflection of δύναμαι ‘be able’. From a synchronical perspective, it would seem that the middle endings have no meaning. C.J. Ruijgh suggests (pers. comm.) to connect δύναμαι with δ(φ)ήν and δ(φ)ηρος (cf. Frisk 1973), and with Latin dårūs ‘hard’ and dårāre ‘continue, endure’ (root *d(υ)ēh₂, ‘hard’). Δύναμαι (with nasal infix *du-n-h₂), then, originally meant ‘make oneself hard, become hard’ > ‘be hardened, be strong’ > ‘be able, can’. For other proposals, see Frisk (1973), and Rix e.a. (1998). If the original meaning of δύναμαι would be ‘become hard’, then it could be classified as a spontaneous process middle.

\textsuperscript{215} The amount of reciprocals counted is probably not representative, considering that 5 out of 8 of the reciprocal middles counted were verbs of fighting found in the Iliad.
Now if we combine the two criteria it appears that it is, indeed, the mental process middle that most deserves the predicate category prototype. The indirect reflexive middle, the body motion middle, the spontaneous middle, and the passive middle can be thought of as secondary prototypes - lower peaks in the mountain range.

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216 Sicking & Stork (1996), in their brief discussion of the meaning of the middle voice come to a similar conclusion: "It seems, then, safe to conclude that the Middle Voice basically denotes one-place Situations which typically lack the feature 'control' by a human Agent, such as μαίνεται 'he is mad', ἔγειρεν 'he wakes up', ἰσχύνει 'it breaks'" (Sicking & Stork 1996: 136). However, they do not distinguish between mental processes and spontaneous processes. For the middle voice in Modern Greek, Manney (2000: 65-7) regards the mental process type (called emotional response by Manney), and the spontaneous process type (Manney's spontaneous change) as the category's prototypes. This confirms one of the main assumptions of diachronic prototype semantics, that the category prototype will display the highest stability through time, whereas most of the diachronic changes occur at the periphery of the category (see Geeraerts 1997).

217 It should be noted that the direct reflexive middle appears to be a rather peripheral member of the category. In this respect, the Greek middle voice diverges from the reflexive systems as they are found in modern European languages. In these languages, the direct reflexive type has a more central status within the category, cf. also Kemmer (1993: 146): "The present analysis, (…), takes the spontaneous event type to be a deviation from more basic middle situation types such as the grooming class, which involve volitional initiation and, moreover, identity of Agent and Patient." The crucial difference, however, between the middle voice category in Greek and the modern reflexive systems is the fact that the Greek middle voice also includes the canonical passive, whereas in the languages with reflexive system the canonical passive is mostly expressed by an auxiliary plus participle construction. As a consequence, the centre of gravity of the Greek middle voice is located more in the direction of the passive. This difference between the Greek middle voice and the modern reflexive systems also relates to the morphological status of the middle marker. As was found out by Heine after a survey of African languages (Heine 2000: 5-6), there is a correlation between the form of the middle marker and its meaning. Whereas clitic particles (such as Romance se) tend to express a reflexive meaning (e.g. He saw himself in the mirror), verbal suffixes (cf. Greek middle inflection) tend to express meanings such as grooming, change of body posture, translational motion, emotion, cognition. (These meanings are called middle by Heine (2000: 3-4), as opposed to reflexive, reciprocal and passive.)