Abstract
Paradigmaticity involves obligatoriness. In the case of diathesis, if a language has an active/passive opposition, the possibility for a verb to display it depends on a semantic property of the verb, i.e. transitivity. In Ancient Greek, several verbs which do not take the accusative, but rather the genitive or the dative, also occur in personal passive constructions; the extent to which such may passivize was limited in Homer, but increased in later prose, showing that they were being reanalyzed as transitive. Only in the Byzantine period was accusative coding also extended to this group of verbs, through actualization of the preceding reanalysis. Thus, while acquiring the features of the transitive construction, verbs which originally took the dative or the genitive acquired its behavior (passivization) before overt coding.

1. Introduction
Paradigmaticity involves obligatoriness: for example, if tense is a relevant category in a given language, then all verbs inflect for tense, and the same is true, in principle, for all relevant categories. In the case of diathesis, if a language has an opposition between active and passive, the possibility to display the opposition does not extend to all verbs, but is typically restricted to a group of verbs, called 'transitive'. Ancient Greek attests to a change from a stage at which there was no active vs. passive voice opposition, as we know it from English, to one in which it became common. Such change was part of a wider development, from a stage at which the case of second arguments of bivalent verbs was determined by its meaning and could display variation, to one in which it was required by the verb, and became obligatory. This last development was accomplished only in Byzantine times: during the time span commonly referred to as Ancient Greek, one can observe various types of bivalent verbs acquire transitive behavior, by extending passivization to non-accusative objects. As a consequence, the voice opposition became more systematic, and it acquired a paradigmatic status.

Some remarks are in order concerning the nature of transitivity and verbal valency. Transitivity is traditionally defined as a semantic property of verbs (or rather of whole utterances, cf. Hopper, Thompson 1980); however, when we use passivization as a possible test for transitivity of a specific verb, we refer to a syntactic reflex of this property. The double nature of transitivity, and the double meaning of the word 'transitive', are often a matter of confusion (Payne 1997:
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The Greek voice system

In Classical Greek, voice is organized as shown in Table 1:

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1. Nørgård-Sørensen (2009) makes a distinction between valency and constructions, and describes a similar development in case marking of objects in Russian as a change from a construction to a valency based syntax. Note that his use of ‘constructions’ and ‘valency’ broadly corresponds to my use of semantic and syntactic valency. Nørgård-Sørensen concludes that “Constructions and valency do not represent alternative models for describing one and the same syntactic system, but two different syntactic types”. In keeping with current terminology, I prefer not to follow this suggestion, which would imply, among other things, that the notion of construction cannot be applied to English: but this is clearly not the case, as shown by ongoing research in Construction Grammar.
Active and middle have distinct endings in all tense/aspects, but a separate passive only exists for tenses formed on the aorist stem. Thus, in tenses built on the present or the perfect stem, the middle functions as a mediopassive, and its value must be understood from the context. The aorist and future passive is formed by addition of the suffix -thē/-ē- to the stem (see Duhoux 2002).

Note that markers involved in passive morphology do not have passivization as their primary function. Indeed, even the distribution of active and middle was lexical in Proto-Indo-European, that is, voice was not an inflectional category, so the fact that many Greek verbs do inflect in both voices is already the result of paradigmization of voice. This is even clearer in the case of passive aorists, which are formed by the addition of a derivational suffix, which originally had the same effect on the base verb as middle morphology, as shown in Allan (2003: 127-147) (and in fact passive aorists have active endings, that is, the suffix is in complementary distribution with middle endings).

### Table 1: The Greek voice system

<table>
<thead>
<tr>
<th>TENSE/ASPECT</th>
<th>PRESENT</th>
<th>AORIST/FUTURE</th>
<th>PERFECT</th>
</tr>
</thead>
<tbody>
<tr>
<td>VOICE</td>
<td>ACTIVE/MEDIO-PASSIVE</td>
<td>ACTIVE/MIDDLE/PASSIVE</td>
<td>ACTIVE/MEDIO-PASSIVE</td>
</tr>
</tbody>
</table>

3. **Voice in Homer**

With regard to voice, Homeric Greek displays a fluid situation, which attests to an ongoing change. As Chantraine puts it:

“Chez Homère, la voix passive n’est pas un fait de langue, mais un fait qui relève de la parole, c’est-à-dire que le moyen (avec l’aoriste en –ēn ou –thēn) peut, à l’occasion, prendre la valeur qui nous appelons passive”. (1953: 180)

Forms with the suffix -thē/-ē- most often do not have passive meaning, but are rather closer to the typical meaning of the middle voice. Only two future forms occur, with ingressive meaning. Mediopassive forms formed on the present or perfect stem can have active or passive meaning, depending on the context. Thus for example the verb biāzein/biāzesthai ‘constrain, do violence to’ (8 occurrences of which 7 middle forms) may occur in the middle or active with virtually the same meaning, as in (1) and (2), or function as a passive when an agent phrase also occurs, as in (3):

(1) é múla dé se biázetai ōkās Akilleús

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2 The meaning of future passive and middle forms is a complex issue; see Allan (2003: 178-195) for discussion and further references.
Verbs such as πίπτειν ‘fall’ and θνῄσκειν ‘die’ are always active, but they function as passives of ‘kill’ when they occur with an agent phrase:

(4) καὶ γὰρ εἰς τεῖνεικεν ἀδελφός
and PTC POSS.1SG.NOM die:PF.3SG brother:NOM
“for a brother of mine, too, is dead” (Od. 4.200)

(5) ἐὰν θέν μίαν ἐλπέτο θυμὸς ἱκαστὸν
PTC surely 3SG.ACC much hope:PRS.3SG.M/P soul:NOM each:GEN hand:DAT
under A.:GEN die:INF.PRS
“for sure the heart of each hoped that he had been killed by the hand of Aias” (Il. 15.289)

But it would be wrong to think that passive meaning is necessarily associated with the occurrence of an agent phrase. In the case of verbs of consumption (’eat’, ’drink’), middle forms based on the present or perfect stem always have passive meaning, as in (6), in spite of the fact that they never co-occur with agent phrases. Aorist forms are always active, and future form are all morphological middles, but have active meaning, as in (7):

(6) ἡώςσα τοι εκπέποταi καὶ ἐδόται en megárosi
how.much:Nom PTC drink:PF.3SG.M/P and eat:PF.3SG.M/P in palace:Dat.PL
“all that has been drunk and eaten in (your) palace” (Od. 22.56)

(7) τοῦφρα γὰρ οὖν ὕποτόν te teon  καὶ ἱκόματ’ εἶναι
so.long PTC PTC life:ACC PTC thing:ACC and good:N/A.PL eat:FUT.3PL.M/P
“for so long shall (men) devour your possessions” (Od. 2.123-5)

3. Possible cases of second arguments in Greek
Ancient Greek bivalent verbs can occur in a variety of constructions, and can take second arguments in the accusative, in the genitive and in the dative. Some verbs may occur in more than one construction; with them, case variation is meaningful, and usually reflects degrees of affectedness.

As we will see in the next section, verbs may be arranged along a scale of (semantic) transitivity, involving the following parameters:

<table>
<thead>
<tr>
<th>PROPERTIES OF PATIENTS</th>
<th>PROPERTIES OF AGENTS</th>
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</thead>
<tbody>
<tr>
<td>affectedness</td>
<td>intentionality</td>
</tr>
<tr>
<td>change of state/position</td>
<td>control</td>
</tr>
</tbody>
</table>

Table 2: Parameters of transitivity

Parameters of patients are most relevant, since we are dealing with case marking of objects; however, as we will see, parameters of agents may play a role as well. Objects of verbs which may take the transitive construction in syntactic terms, that is, have an accusative object, are basically of two types depending on their semantic role, either patient or stimulus (see sec. 3.1. on themes).

Based on the above parameters, four groups of verbs emerge as relevant:

a) high transitivity: the object is a highly affected, prototypical patient, which undergoes a change of state;
b) medium transitivity: the object is a relatively highly affected patient, but does not undergo a change of state;
c) low transitivity: the object is a stimulus and is unaffected; however, the subject has agent properties;
d) no transitivity: the object is a stimulus and the subject has no agent properties.

3.1. Accusative

The accusative is in the first place the case of wholly affected patients, which undergo a change of state. As such, it occurs with highly transitive verbs, such as verbs of destruction and creation or verbs of killing. Typically, accusative second arguments can become subjects of passive constructions, and this is true as early as at the Homeric Greek stage. Highly transitive verbs in group (a) allow for case variation to a limited extent (only the partitive genitive may alternate with the accusative, cf. sec. 3.2).

Accusative objects whose semantic role is theme are treated like prototypical patients of group (a) verbs, based on a metaphor by which displacement (i.e.

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3 The four groups of verbs are defined on the basis of the concepts in Table 2, which are general parameters of transitivity. For reasons of space, I cannot discuss the possible universal validity of such classification, which are assumed as relevant for Ancient Greek, based on the morphosyntactic behavior of specific Greek verbs in each group.
change of location) corresponds to change of state. 4

All other accusative objects are, to various extents, less affected, because they do not undergo any change of state; passivization depends on other features of the situation, and in particular on the occurrence of an agent which controls the state of affairs. These are verbs that may have case variation involving the accusative, or take cases different from the accusative. When an accusative object is semantically a stimulus, it may occur in controlled situations, with verbs such as 'look' or 'listen to', which may be passivized, or it may occur in uncontrolled situations. In the latter case, where the subject is an experiencer, passive is less frequent and sometimes not even possible: the verb deídein 'fear', for example, does not passivize, even though it takes an accusative object as in (8):

(8) huperphiallou hageménos deísantes hábrin
monstrous:GEN ruler:GEN fear:PART.AOR.NOM.PL arrogance:ACC
“fearing the arrogance of the monstrous ruler” (Pind. P 4.112)

3.2. Genitive

The genitive occurs with a variety of verbs, including some highly transitive ones of group (a), and indicates that the patient is affected to a limited extent. With verbs which indicate change of state on the side of the patient, the genitive functions as a partitive, and typically occurs with indefinite NPs, as in (9):

(9) mé pós tis lətoío phagón nóstoio
NEG.PTC:IND.EMPH.OBL.NOM lotus:GEN eat:PART.AOR.NOM.RETURN return:GEN
láthētai
forget:SUBJ.AOR.MID.3SG
“that nobody should eat (some) lotus and forget his homeward way” (Od. 9.102)

Such verbs allow for variation between the accusative, which indicates total affectedness, and the genitive.

The genitive also occurs with verbs of group (b), which indicate affectedness but not change of state; again, it may alternate with the accusative (or the dative, or both). Case alternation is meaningful with such verbs as well. Some semantically related verbs only or almost only take the genitive: this is the case, for example, of verbs of 'ruling', as árkhein 'govern' in (10), which usually do not take the accusative, and may take the dative to a limited extent:

(10) Déiókēs mēn nun tò Médikón étanos sunéstrepe

4 Such objects typically occur with trivalent verbs, such as verbs of giving, and are not included in the present discussion.
I will return to this group of verbs in sec. 4.

The genitive frequently encodes the stimulus of experiencer verbs. In some cases, it alternates with the accusative, and it is impossible to see a difference between the two cases in terms of control or intentionality; however, there are verbs which favor the accusative when the experiencer displays some agent-like properties, and the genitive (or dative) when it does not. In general, with verbs that allow for it, case alternation results in a difference in profiling, as shown in sec. 3.3 (see further Luraghi forthcoming b on possible constructions of the verb orégein, ‘reach (out)’).

Some verbs may take a second argument in the genitive, on account of the spatial meaning of this case, which frequently, especially with prepositions, substitutes for the ablative (Luraghi 2003a). An example is (11); as we will see, such verbs never acquire transitive syntax:

(11) hoi neôteroi autôn toîsi
    ART.NOM.PL young:_CMPR.NOM.PL DEM.GEN.PL ART.DAT.PL
    presbutéroisi suntunkhánontes eikousi tês hodoû
    old:_CMPR.DAT.PL meet:PART.PRS.NOM.PL turn:PRS.3PL ART.GEN way:GEN
    “younger men, when they meet their elders, give place to them in the way” (Hdt. 2.80.1).

3.3. Dative

As in the other Indo-European languages, the dative encodes a number of semantic roles typical of human participants, such as benefactive (or malefactive), possessor, experiencer, and recipient. Such semantic roles all indicate participants which are affected by a state of affairs, but are crucially distinct from patients, because they do not undergo a change of state. Similarly, dative second arguments occur with verbs of type (b) that indicate actions typically directed toward human beings, without implying a change of state, such as ‘help’ in (12), a verb which takes the dative in many Indo-European languages:

(12) hêke ho Sardiênos kêrux
come:AOR.3SG ART.NOM Sardian:NOM herald:NOM
deômenos Kroîsos boîtheein

An example is Od. 12.265-266, discussed in Luraghi (forthcoming b).
entreat:PART.PRS.M/P.NOM help:INFPRS

"the Sardian herald came to entreat their help for Croesus" (Hdt. 1.83.1)

The dative further occurs with the verb khrâsthai 'I use', as in (13), and is traditionally explained as close to the instrumental function of the (inanimate) dative. The object of this verb, too, is affected by an action, but does not undergo a change of state.

(13) kai spí trixa exeurêmata egéneto, toísi
and 3PL.DAT threefold invention:NOM.PL become:IMPF.3SG DEM.DAT.PL
hoi Hêllênes ekhrêsanto
ART.NOM.PL Greek:NOM.PL use:AOR.MID.3PL
"they invented three things that the Greeks made use of" (Hdt. 1.171.4)

Experiencer verbs may also take a stimulus in the dative, as in phthonéin 'hate', and khaîrein 'rejoice, like' in (14):

(14) phthonéei gàr toísi aristoiisi periegousí
to envy:PRS.3SG PTC ART.DAT.PL best:DAT.PL be.around:PART.NOM.PL PTC
kai zóousi,
and live:PART.NOM.PL rejoice:PRS.3SG PTC ART.DAT.PL worst:DAT.PL
khaîrei dè toísi kakisoiisi
ART.NOM.PL rejoice:PRS.3SG PTC ART.DAT.PL worst:DAT.PL
"he envies the best ones who are close to him, while they live, and is pleased by the worst of his fellows" (Hdt. 3.80.4)

With some such verbs, the dative may alternate with the genitive, as shown in (15) and (16):

(15) epeì k' olooîo tetarpônestha góoio
when PTC dire:GEN enjoy:PF.M/P.1PL groan:GEN
"when we have taken our fill of dire lamenting" (II. 23.10);

(16) philótei trapéiomen
love:DAT enjoy:AOR.MID.1PL
"we take our joy together in love" (II. 3.441).

The dative and the genitive both indicate a relatively low degree of transitivity, i.e. that the second argument in (15) and (16) is not a patient (it does not change state and is not an entity in some way affected by the state of affairs); the difference between the two cases is a matter of profiling: while the dative highlights the lack of change of state (and for this reason it is traditionally connected with the dative of instrument adverbials), the genitive profiles low affectedness
(which is why it is traditionally connected with the partitive meaning of this case).

Finally, the dative may occur with verbs which require a comitative interpretation of the dative NPs as in (17), as shown by the fact that they can alternate with prepositional phrases which contain comitative prepositions, as in (18). Similar to verbs that require the ablative genitive (see example (11)), these verbs never developed a passive:

(17) 
\[
\text{elthón }\text{ dē oıkade ekéleuon }\text{ akolouthēn }\text{ moi go:PART.AOR.NOM.PTC home order:IMPF.1SG accompany:INF.PRS.1SG.DAT tēn }\text{ therdpanan }\text{ eis tēn }\text{ agorān ART.ACC servant:ACC to ART.ACC market:ACC.}
\]

“returning home, I bade the servant-girl follow me to the market” (Lys. 1.18)

(18) 
\[
\text{ekēnon }\text{ mēn oûn ekéleuon }\text{ badizein, }\text{ emē }\text{ dē meth’ DEM:ACC PTC PTC order:IMPF.3PL walk:INF.PRS.1SG.ACC.PTC with hautōn }\text{ akolouthēin }\text{ eis Damnippou 3PL.REFL.GEN accompany:INF.PRS to Damnippus:GEN.}
\]

“so they bade him go his way, but told me to follow along with them to Damnippus’s house” (Lys. 12.12)

4. Passivization

Highly transitive verbs of group (a) which, as we have seen, most often take the accusative, have passives already in Homer; they take agent phrases with hupō+genitive, as shown in (19):

(19) 
\[
\text{éa }\text{ d’ hup’ astōn kataphoneuthēnai pētōris let:IMPER.2SG.PTC under citizen:GEN.PL.kill:INF.AOR.P stone:DAT.PL.}
\]

“let him be stoned to death by the citizens” (E. Or. 536)

The extent to which verbs that most often do not take the accusative can be passivized is described in Conti (1998). This is not an easy task, considering that some verbs occur in Homer but not in later literature, while other do not occur in Homer; however, some tendencies may be detected. In the first place, apparently, the passive is extended first to verbs that take genitive objects, even if not particularly transitive, such as ēldesthai ‘to desire, strive for’, whose object seems closer to a stimulus than to a patient, but whose subject acts intentionally. An occurrence of a passive is shown in (20):

(20) 
\[
\text{nūn toi }\text{ eeldēsthō }\text{ pōlēmos kakōs, }\text{ ei thoōs }\text{ essi now PTC strive:IMP.PRS.P.2SG war evil if swift:NOM be:PRS.2SG.}
\]

“now you must strive for evil war, if you are swift” (Il. 16.494)
In general, verbs whose second argument is a stimulus passivize freely in Ancient Greek. The verb *phileîn* 'love, like', which takes the accusative, occurs in the passive in Homer, with an overtly expressed agent, as in (21), the passive of *erâsthai* 'love', which takes the genitive, occurs in Herodotus, as in (22) (this verb is not attested in Homer):

(21) *phîlēthen ek Diós*
love:AOR.P.3PL from Zeus:GEN
“they were loved by Zeus” (Il. 2.668-669)

(22) *tóte mèn dé ho Kambúsēs ēgēme tēn*
then:PTC PTC ART.NOM C.:NOM marry:AOR.3SG ART.ACC
erōmēnēn
love:PART.PRS.M/P.ACC
"Then Kambyses married his beloved” (Hdt. 3.31).

The verb *phthoneîn* 'envy', 'hate', which takes a stimulus in the dative when the latter refers to a human being (as in (14)), occurs in the passive only starting from Herodotus, but it is not clear whether this may depend on the fact that the passive extends to dative objects at a later time than to genitive objects, or that this verb did not occur in Homer in the relevant construction.6

Verbs of ruling most often take the genitive, but can occasionally take the dative; this alternation exists already in Homeric Greek and continues afterward. As an example, let us consider the verb *anássein* 'rule', which may take the genitive, the dative, or a prepositional phrase with *en* 'in', 'among'. Conti (1998: 25-26) mentions among possible second arguments of *anássein* the following: *pántōn Argeíōn* 'all the Argives (gen.)' (Il. 10.33), *Ilíou* 'Ilion (gen.)' (Il. 6.478), *pollēisin nēsoi kai Árgeî* 'many islands and Argos (dat.)' (Il. 2.108), *andrásin en polloîsi kai iphthímoisin* 'numerous and valorous men (prep. phrase)' (Od. 19 110).7 The passive of this verb is already attested in Homer:

(23) *haî ... anassontai d’ emoì autô*
DEM.NOM.PL rule:PRS.M/P.3PL PTC 1SG.DAT self:DAT
"they (=the cities) are ruled by myself” (Od. 4.177).

6 There are 8 occurrences of *phthoneîn* in Homer; in most of them, the verb means ‘to refuse something (gen) to somebody (dat)’ or ‘to hinder somebody (acc) from doing something’. Only in one occurrence does the verb mean ‘envy’, and occurs with a genitive object, which does not refer to the human being toward which the feeling is directed, but to the thing which is the matter of envy (Od. 18.18).

7 There is also an occurrence with the accusative (Od. 3.245), which Conti takes as a time adverbial (1998: 26).
Note that the agent phrase is in the dative. Agent phrases marked by *hupó* appear in Herodotus with verbs in this group, as shown in (24):

(24) *hupò toû Károu Smérdis árkhontai kai hup’ under ART.GEN C.:GEN.S.:GEN govern:PRS.M/P.3PL and under oudenós állou INDEF GEN INDEF GEN

“they are ruled by Smerdis, the son of Cyrus, and by no other” (Hdt. 3.74.3).

Among verbs that always take the dative, *krásthai* ’make use of’ is found in the passive from Herodotus (example (25)) onwards:

(25) *hai dè es tò mèn epoiēthēsan ouk ekhrēstēsan* DEM.NOM.PL.PTC to ART.ACC.PTC make:AOR.P.3PL NEG use:AOR.P.3PL

“they (the ships) were not used for the purpose for which they had been made” (Hdt. 7.144.2)

I will discuss the relation between passive agents and transitivity in sec. 5.

The extent to which verbs with non-accusative objects may passivize increases after Herodotus, as shown in Conti (1998), however, as already remarked, the passive does not extend to all such verbs, even at a later time. In particular, verbs which indicate motion away from something or accompaniment never occur in the passive; this means that they are not assimilated in any respect to transitive verbs. Note that such verbs by the most part also display alternative construction in which they take a PP as their complement (cf. above, (17) and (18)).

But apart from such verbs, a number of verbs which have an experiencer subject and a stimulus object never occur in the passive either. Conti (1998: 35) attempts an explanation based on degrees of control on the side of the subject, but this criterion does not allow for a clear-cut distinction, as she seems to suggest: it is not completely clear in which sense the subject of verbs such as *phlhōneîn* ’hate’ or *thauμázeîn* ’wonder’, which may passivize, exerts more control than the subject of verbs such as *khaireîn* ’rejoice’ or *thumōesthai* ’get angry (at someone)’, which may not. In any case, since verbs with experiencer subjects vary in the extent to which they may passivize even in the case that they always take the accusative (see above sec. 3.1 and example (8), and Conti 1998: 41-42), one does not need to set up rigid semantic borders between types of verbs: the syntactic behavior of verbs that never occur in the passive simply reflects their low degree of transitivity to a higher extent than the behavior of some, semanti-
cally similar, other verbs. 8

The extension of transitivity features to verbs that take non-accusative objects continues after the Classical period. For example, the verb *pleonektein* ‘overtake’ develops a passive by the age of Plutarch (late 1st-early 2nd century CE). This verb takes the genitive in Attic-Ionic, but it also occurs with the genitive in Koine Greek.

5. **Diachrony of passive agents**

Passive agent may be coded in various ways in Ancient Greek; the coding is partly conditioned by transitivity. Agent expressions are mostly formed with prepositions which have spatial meaning; their extension to agent is based on different metaphors:

i) the control metaphor: *hupó* ‘under’

ii) the origin metaphor: *ek* ‘out of’, *pros* ‘from’

iii) the source metaphor: *apó* ‘from’, *pará* ‘from the side of’. 9

In Homeric Greek, only *hupó* phrases can occur with verbs of type (a), that is, verbs that indicate a change of state, while other prepositions are limited to other types of verbs. From Herodotus onwards, *hupó* extends to all verbs, while other prepositions remain limited to verbs that do not indicate change of state. Only in the Koine, when *apó* starts replacing *hupó*, does it also extend to verbs of type (a). 10

<table>
<thead>
<tr>
<th></th>
<th>+ change of state/displacement</th>
<th>-change of state</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>hupó</em> (control)</td>
<td>Homer</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Herodotus</td>
<td>+</td>
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<tr>
<td></td>
<td>Attic</td>
<td>+</td>
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<tr>
<td></td>
<td>Koine</td>
<td>+</td>
</tr>
<tr>
<td><em>ek, próis</em> (origin)</td>
<td>Homer</td>
<td>-</td>
</tr>
</tbody>
</table>

8 As already remarked in sec. 1, similar to valency, transitivity can be understood as a semantic or as a syntactic property of verbs. In the first case, which is exemplified here, transitivity and degrees thereof are assumed to be measured on a scale which is assumed to be universal. In the second, the fact that a certain verb may be transitive is language specific. This second meaning of transitivity (that is, syntactic) is relevant when one observes grammaticalization of valency in Greek (and other languages).

9 See Luraghi (2000, 2003b) for a description of the spatial meaning of these prepositions, and the difference between origin and source.

10 In addition to prepositional phrases, the dative could also indicate agent in Ancient Greek, especially in Homer. The distribution of the dative of agent is described in George (2005: 51-60, 78-102). In Homeric Greek, the dative of agent extends to all types of verb, while in Herodotus, not only does its frequency decrease dramatically, but it also remains limited to verbs that do not indicate change of state.
The extension of *hupó* phrases to all types of verb is a reflex of the grammaticalization of valency (and of syntactic transitivity): different degrees of (semantic) transitivity are no longer relevant for the coding of passive agent.

6. The building of government

According to Meillet, Vendryes (1924: 522) “Un verb indo-européen ne ‘gouvernait’ pas le cas de son complément; mais le nom apposé au verbe se mettait au cas exigé par le sens qu’il exprimait lui-même.”

This situation is still clearly visible in Ancient Greek: different cases make different contributions to constructions in which they occur. However, the extension of passivization is an important sign of an ongoing process, by which NPs were no longer syntactically independent of the verb, but started also being connected syntactically, and not only by their meaning. Types of case variation described in the above sections are not all equal from this point of view. In practice, we have three types of verbs to which passivization may extend:

i) verbs that allow for case variation;

ii) verbs which do not allow for case variation, but take non-accusative objects;

iii) verbs which always take the accusative.

Government implies obligatoriness and semantic bleaching. The function of governed items is determined by the governor; prototypical government does not allow for variation. Thus, both verbs in groups (ii) and (iii) are candidates for prototypical government. However, verbs with non-accusative objects in group (ii) indicate that cases are still meaningful even where there is no case variation. To the extent to which these verbs acquire the behavior of prototypically transitive verbs, the meaning of cases starts bleaching, as shown by later replacement of the original case of the object by the accusative.

Note that extension of the accusative to these verbs starts in the Koine or most often Late Koine, when behavior relative to passivization is completely established.\(^\text{11}\) The two step grammaticalization of passive voice described in this paper consists in reanalysis of certain verbs as active, shown by possible passivization, and actualization of the reanalysis by consistent coding of objects of all transitive verbs through the accusative.\(^\text{12}\) This is in accordance with the ‘behavior before coding’ principle stated as follows in Haspelmath (forth.): “[w]hen a

\[\begin{array}{|c|c|c|}
\hline
\text{Herodotus} & - & + \\
\hline
\text{pará, apó (source)} & \text{Attic} & - & + \\
\hline
\text{apó} & \text{Koine} & + & + \\
\hline
\end{array}\]

Table 3: Distribution of agent expressions

\(^{11}\) This change is part of a wider process of reorganization of the case system, by which the dative is lost and genitive objects virtually eliminated.

\(^{12}\) See Luraghi, Parodi (2008: 112-113, 162-163) on reanalysis and actualization (or extension).
grammatical construction grammaticalizes, as a rule the behavioral properties change before the coding properties of the construction.” Paradigmatization is a grammaticalization process, by which a grammatical category acquires a value (in this case, voice acquires the value passive).\footnote{The Ancient Greek data only show increasing grammaticalization of passive, and not the very beginning of its introduction: the creation of the new value passive for the voice category must be traced back to some late stage of Proto-Indo-European, at which the middle voice sporadically started to be interpreted as passive depending on the context. An analysis of this development in PIE is beyond the scope of the present paper.}

To explain the diachronic development described in this paper, I would like to suggest a scalar definition of government, as represented in Figure 1:

\begin{figure}[h]
\centering
\begin{tabular}{lll}
- governed & + governed \\
\hline
variation & variation with different verbs & no variation \\
with the same verb & cases meaningful & complete semantic \\
based on independent & to a limited extent & bleaching of cases \\
meaning of cases & & \\
\end{tabular}
\caption{A scalar definition of government (cf. Luraghi 2009)}
\end{figure}

This development can be viewed as a case of hyperanalysis, as described by Croft:

\begin{quote}
“… the listener reanalyzes an inherent semantic/functional property of a syntactic unit as a contextual property […]. In the reanalysis, this inherent property of a syntactic unit is then attributed to the context […], and so the syntactic unit in question loses some of its meaning or function. Hence, hyperanalysis is a major source of semantic bleaching and/or loss in general” (2000: 121)
\end{quote}

In the specific case described in this paper, the independent meaning of cases is partly lost and transferred to the verb. The fact that various verbs with non-accusative objects are being reanalyzed as transitive verbs is shown by the increasing extent to which passivization becomes possible even before reanalysis is actualized by the extension of accusative coding for all objects.

7. Concluding remarks
In this paper, I have shown how an active/passive voice opposition developed in Ancient Greek. Passive became increasingly obligatory, and its extension proceeds from prototypically transitive verbs with accusative objects, to verbs with lower degrees of transitivity, with non-accusative objects. In this process,
the latter verbs were reanalyzed as transitive, acquiring the behavior of transitive verbs, that is, the possibility to passivize, and to take agent phrases originally restricted to passive of highly transitive verbs. Case variation and different argument structures were preserved until complete semantic bleaching of cases. At this point, reanalysis was actualized through accusative coding of all second arguments. This grammaticalization process also attests to an increasing syntacticization of verbal valency.

<table>
<thead>
<tr>
<th>TRANSITIVITY</th>
<th>high</th>
<th>medium</th>
<th>low</th>
<th>absent</th>
</tr>
</thead>
<tbody>
<tr>
<td>PASSIVE</td>
<td>always possible</td>
<td>increasingly possible</td>
<td>infrequent</td>
<td></td>
</tr>
<tr>
<td>PASSIVE AGENT</td>
<td>ἡπό</td>
<td>ἡπό or source prepositions</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CHANGE OF STATE</td>
<td>+</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>AFFECTEDNESS</td>
<td>+</td>
<td>+</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>INTENTIONALITY</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>CONTROL</td>
<td>+</td>
<td>+</td>
<td>+</td>
<td>-</td>
</tr>
<tr>
<td>TYPE OF EVENT</td>
<td>action</td>
<td>state</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TYPES OF VERB</td>
<td>kill, eat, send</td>
<td>govern, help, say, use, do</td>
<td>look, listen</td>
<td>have, hate, know</td>
</tr>
<tr>
<td>ARGUMENT STRUCTURES</td>
<td>N/A, N/G</td>
<td>N/A, N/G, N/D</td>
<td>N/A, N/G, N/D</td>
<td>N/A, N/G, N/D (noncanonical subjects)</td>
</tr>
</tbody>
</table>

Table 4: Degrees of transitivity and constructions

References
Haspelmath, Martin forthcoming. The Behaviour-before-Coding Principle in

Hopper, Paul and Sandra A. Thompson, Transitivity in Grammar and Discourse. *Language* 56, 251-99


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