

Mismatch Verbs: A Unified Account of Unaccusatives and Deponents

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1 Introduction

The term ”*deponent*” traditionally refers to a verb class in Latin or Classical Greek which is characterized by a mismatch between their morphological form and their semantic context. Deponent verbs are capable of appearing only in passive form but may appear in active syntax/semantics. This is illustrated by the following example:

- (1) Nempe patr-em sequ-untur liber-ī.
Of.course father-ACC.SG follow-3PL-PRES.PASS child-NOM.SG
'Of course, the children follow the father.' (Bermudez-Otero (2007:231))

I will discuss the exact properties of deponent verbs in the next section but, for now, it is sufficient to note that the verb form *sequuntur* is passive as indicated by the gloss but the meaning of the verb and its syntax are active. Apparently, this is a mismatch between form and function. This mismatch raises the question whether inflectional categories such as active and passive voice bear actual semantic content or whether they are just abstract categories loosely related to some semantic notion of voice.

This paper pursues two major goals both related to the question above. The first major goal is to show that the mismatch between form and function we find with deponent verbs in Latin is more widespread than one might think. In particular, I argue that we find the same kind of mismatch with unaccusative verbs in many languages amongst which are English or the Romance languages. The argumentation will be based on a detailed investigation of how both verb classes behave in all modules of the grammar. The second goal of this paper is to establish a morphosyntactic analysis that incorporates the findings of the first part of this paper and proposes a unified analysis for deponents

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and unaccusatives. The analysis captures the particular behaviour of these verbs by invoking two principles: Identity Avoidance and Lexical Override.

This paper is structured as follows. In section 2, I will examine the exact behaviour of deponent verbs in morphology, syntax and semantics. The same will be done for unaccusative verbs in section 3. In section 4, I will recapulate the findings of the previous sections and propose my approach that derives the observed behaviour of both verb classes. In Section 5, I will discuss two empirical predictions that this approach makes. Section 6 briefly highlights two problematic cases and section 7 concludes the discussion.

2 The Properties of Deponent Verbs

In this section, we examine the behaviour of deponent verbs in each module of the grammar separately and we will state for each module whether a deponent verb resembles a regular transitive verb in active or passive voice.

Let us start with the morphology. The morphology of a deponent verb is identical with the passive morphology of a non-deponent verb. This analogy applies to all possible combinations of ϕ -, tense-, aspect- and mood-features. The passive forms of a regular transitive verb like *amare* are identical to the active forms of a deponent verb like *auxiliari* throughout the whole paradigm¹. In addition to these forms, a regular verb like *amare* also has active forms. A deponent verb like *auxiliari* lacks these forms. A verb form like *auxilio* (help.1SG.PRES.IND.ACT) is not attested.

While the morphology of deponent verbs is clearly passive, their semantics seems to be active. Deponent verbs cannot be analysed as underlyingly passive since many of them select direct objects. Also, deponent verbs are not a class of psych-verbs because there is not certain semantic feature triggering deponency. Hence, we have no reason to believe that the semantics of deponent verbs is any different from the semantics of a regular non-deponent verb in active voice (see also Baldi (1976); Embick (2000); Xu et al. (2007); Lavidas & Papangeli (2007) for discussion and the same conclusion).

The syntax of deponent verbs turns out to be somehow ambivalent. On one hand, it clearly resembles canonically active syntax. Deponent verbs assign the same cases as active non-deponent verbs. The subject receives nominative case and the object receives accusative case as can be seen in example (2). This is a clear indicator for the fact that the syntax is active. A passive syntax would not assign case to its object as it will later be promoted to the designated subject position in SpecT receiving nominative case. The same applies to agreement. It is not the complement of V that triggers agreement but the external argument that was merged in Specv and has moved to SpecT afterwards. This agreement pattern the same as in an active syntax of a regular transitive verb.

¹There are three exceptions to this generalization, namely the imperfective present participle, the imperfective future participle and the imperfective future infinitive. I assume that since these forms are all infinitives or participles, they are not subject to the same inflectional rules as the regular finite forms.

- (2) Puer milit-em sequi-tur.
 boy.NOM soldier-ACC follow-PASS.3SG
 'The boy is following the soldier' Embick (2000)

On the other hand, with regard to the question of periphrasis, the syntax of deponent verbs behaves like the syntax of a passive clause². In perfective aspect, the form of a deponent verb appears to be periphrastic (3-a), just as the perfect passive form of a non-deponent verb (3-b). An active form of a non-deponent verb would be synthetic, even in a perfective clause (3-c).

- (3) a. Via-m secutus sum.
 way-ACC follow.PTCP be.1.SG
 'I followed the way.'
 b. Satis sum verberatus.
 enough be.1.SG beat.PTCP
 'I was beaten enough (times)' (Maccius Plautus, 5.1)
 c. Domin-us verbera-v-it serv-um.
 Master-NOM beat-PERF-3.SG servant-ACC.
 'The master beat the servant.'

Thus, we can subsume that the syntax of deponents is active with regard to case assignment, agreement properties, etc. but passive with regard to the question of periphrasis.

There are a few exceptions to the pattern we have observed so far. There is a small class of deponent verbs which allow a passive syntax. However, these cases are clearly lexical exceptions since the vast majority of deponent verbs is restricted to active syntax. One of the few deponent verbs which can be passivized is *hortari* (to urge). In a passive context it makes use of the same markers as regular non-deponent verbs, it uses passive morphology. Thus in the case of these few verbs, active and passive are morphologically indistinguishable.

- (4) Ab amicis horta-re-tur
 by friends urge-IPFV.SUBJ-PASS.3SG
 'He was urged by friends' (subjunctive) (Embick 2000)

I have listed the major facts in table (5) below. Morphologically, deponent verbs are clearly passive. The syntax is active, as far as case assignment and agreement is concerned. When it comes to the question whether the verb form is analytic or synthetic, the syntax behaves as if it was passive. The semantics of a sentence containing a deponent verb is also active. There are a few exceptions to the pattern described above. As I have shown, some deponent verbs can appear in a syntactically and semantically passive context.

²I am following Embick (2000) in that periphrasis is to be regarded a matter of syntax. If one does not want to subscribe to the assumption that periphrasis is a matter of syntax but of morphology, this does not affect my argumentation. In that case, the syntax would be consistent but the mirror image discussed in the following subsection would still be the same.

However in these cases, they still use their passive morphology. A deponent verb using active morphology is not attested.

(5) Properties of deponent verbs

| | | |
|------------|-------------|------------------------|
| Morphology | | Passive |
| Syntax | Periphrasis | Passive |
| | Case & Agr | Active |
| Semantics | | Active |
| Exceptions | Morphology | None |
| | Syntax | Few lexical exceptions |
| | Semantics | Few lexical exceptions |

3 The Properties of Unaccusative Verbs

In this section, we examine the behaviour of unaccusative verbs in all modules of the grammar just as we did with deponents. We will see that unaccusative verbs are characterized by a very similar mismatch between semantics on one hand and morphology on the other.

The morphology of unaccusatives is uncontroversially active. Unaccusative verbs in Latin are morphologically indistinguishable from unergatives or transitive actives. Again, this generalization applies to all combinations of ϕ -, tense, aspect and mood features.

Intuitively, the semantics of unaccusatives looks very much like the semantics of a passive verb. Both verbs assign the same theta-role, namely the patient, theme or undergoer role. Furthermore, they are both characterized by the same relation between the verb and its only argument. However, the exact semantics of unaccusative verbs is far from uncontroversial. According to Kratzer (1996) there are two kinds of voice heads available in languages like English: active and non-active ones, whereas the non-active one is used in passives and unaccusatives at the same time. However, Embick (2000) and Kratzer (2003) distinguish passives and unaccusatives by adding an agentivity feature to the former. I will, for the rest of this paper, adopt the view that unaccusatives and passives share basically the same semantic properties while keeping in mind that there are subtle differences that still need to be accounted for.

The syntax of unaccusative verbs is mainly identical to the syntax of a passivized verb. At first, the verb selects its only argument as a complement, which is the designated position for objects. After that, little *v* is merged with the VP building the *v*P. Unlike in transitive contexts, little *v* does not select an argument itself. Neither does it assign accusative case to the argument in object position. Later on, the T-head is merged. It causes raising of the argument in object position into its specifier to assign nominative case. Hence, the syntactic structures of passives and unaccusatives look identical to that

point.³.

However, there is one syntactic difference between passives and unaccusatives. Just as it was the case with deponents, it is related to the question whether or not the verb form is periphrastic. In Latin, all intransitive verbs appear to be synthetic in the perfect, regardless of whether their perfect form is regular or irregular. Hence, if we compare the perfect form of an unaccusative verb (6-a) with those of a regular verb in active (6-c) and passive (6-b), we see that the unaccusative verb behaves like the active form of a regular verb inasmuch it chooses the non-periphrastic verb form.

- (6) a. Filius qui in Marathonia pugna cecidit ...
 son who in Marathon battle fall.PERF.3SG
 'The son who fell in the battle of Marathon...' (Cicero, Letters to Atticus)
- b. Satis sum verberatus.
 enough be.1SG beat.PTCP
 'I was beaten enough (times)' (Maccius Plautus, 5.1)
- c. Dominus verberavit servum.
 Master.NOM beat.PERF.3SG servant.ACC.
 'The master beat the servant.'

Thus we must conclude that the syntax of unaccusatives is, on one hand, identical with an active syntax, namely in the case of periphrastic verb forms but concerning argument selection, case assignment and structural dependencies, the syntax of unaccusatives is clearly identical to the syntax of passive verbs.

Just as we did with deponent verbs, we must take a look at possible exceptions. Unaccusative verbs are usually restricted to one environment. Syntactically, they are passive but morphologically they are active. They never occur with passive morphology. This might seem trivial at first sight but in the end it is just the exact opposite from what we saw with the Latin deponent verbs. However, not all unaccusatives are restricted to passive syntax. There are some lexical exceptions called anticausatives that may undergo the so-called causative alternation that adds an external argument which is the initiator of the action expressed by the verb (as in *The vase broke* vs. *John broke the vase*). Anticausativization, however, is not possible with all unaccusative verbs. It is restricted to a small lexical class of them.

Let me sum up the major points of the discussion again. The morphology of unaccusatives is unquestionably active. We have seen that the syntax is ambivalent again inasmuch as it resembles a passive construction concerning case assignment, agreement and structural properties and an active construction concerning the question whether we find an analytic or a synthetic verb form. The semantics of unaccusatives is not uncontroversial but I have argued that it shares most properties with the semantics of a passive

³Also apart from the obvious structural similarities, unaccusatives and passives share many syntactic properties. In the recent discussions about the phasehood status of little vPs, unaccusative vPs and passivized vPs are always treated identically (see e.g. Chomsky (2001); Legate (2003))

verb, however, strictly speaking, they are not identical. There are no exceptions to the rule that the morphology of unaccusatives is passive. However there are some lexical exceptions in syntax and semantics as some unaccusative verbs may undergo causative alternation that results in an active construction.

(7) Deponents and Unaccusatives

| | | Deponent Verbs | Unaccusative Verbs |
|------------|-------------|--------------------|--------------------|
| Morphology | | Passive | Active |
| Syntax | Periphrasis | Passive | Active |
| | Case & Agr | Active | Passive |
| Semantics | | Active | Passive(?) |
| Exceptions | Morphology | None | None |
| | Syntax | lexical exceptions | lexical exceptions |
| | Semantics | lexical exceptions | lexical exceptions |

4 Analysis

In the preceding sections, we found a mirror image in the behaviour of deponent and unaccusative verbs with respect to all modules of the grammar. The mirror image is illustrated in the table above. The mirrored behaviour is remarkable, especially since deponent verbs have long time been regarded as some weird marginal phenomenon in Latin and a few other languages and unaccusatives have always been properly integrated into any syntactic theory. However, if the results of the previous section are on the right track, then this mirror image is a good argument to rethink the morphosyntactic analyses of deponents and/or unaccusatives.

So, in what follows, I will present my approach that captures the mismatch behaviour of unaccusatives and deponents at the same time. It is based on four major assumptions:

1. Lexical Prespecification:

The first assumption concerns the lexical entries of deponent and unaccusative verbs. I assume that some verbs, namely unaccusatives and deponents are lexically prespecified for a voice feature $[\pm\text{Active}]$ ⁴. Deponent verbs carry $[-\text{Active}]$, unaccusatives carry $[\text{+Active}]$. Regular transitive and unergative verbs remain unspecified.

- (8)
- | | | |
|--------------|------------------------|---|
| Deponent | 'sequ-' (follow) | $\Leftrightarrow \{V, \bullet NP \bullet, -\text{Active}\}$ |
| Unaccusative | 'madesc-' (become wet) | $\Leftrightarrow \{V, \bullet NP \bullet, +\text{Active}\}$ |
| Transitive | 'am-' (love) | $\Leftrightarrow \{V, \bullet NP \bullet\}$ |
| Unergative | 'viv-' (live) | $\Leftrightarrow \{V\}$ |

2. Light verbs

⁴The lexical feature $[\pm\text{Active}]$ is comparable to the feature $[\text{pass}]$ which was used by Embick (2000) to derive the behaviour of deponent verbs. Since Embick's account did not apply to unaccusatives, he used a privative feature. The feature I use in the present account is binary so as to capture the mirror image observed above.

The second major assumption is that there are only two v-heads, namely an active v-head and a passive v-head. Both are endowed with their typical syntactical features. Thus, the active v-head selects a specifier [\bullet NP \bullet] and assigns accusative case [Case:acc] whereas the passive v-head neither selects an argument nor assigns case. Furthermore both v-heads are specified by a value of the feature [\pm Active]. Intuitively, active v has [+Active] and passive v has [-Active]:

- (9) a) Active v-head: $v\{\bullet$ VP \bullet, \bullet NP $\bullet, \text{Case:acc}, +\text{Active}\}$
 b) Passive v-head: $v\{\bullet$ VP $\bullet, -\text{Active}\}$

3. Identity Avoidance

Unlike other approaches to deponency, this one has no problems deriving the defectiveness effects of deponent and unaccusative verbs. The only constraint needed to derive the possible combinations of v- and V-heads is the following:

- (10) $*\{X\dots, \alpha\text{Active}, \alpha\text{Active}, \dots\}$

This constraint is a very local one that prohibits specific combinations of features within the same feature bundle. For the purpose of this paper, especially the feature bundle of the v-head is of interest. After the VP is complete, the v-head is merged and head movement of V to v applies. As I assume, this head movement entails the formation of a complex head in which both feature sets of V and v are united. In such a case, a situation may emerge in which an inherently specified verb fuses its features with those of a v-head. If, for example a deponent verb bearing the feature [-Active] is combined with a passive v-head which also bears the feature [-Active], then the constraint in (10) would be violated. Hence, deponent verbs cannot be combined with passive v-heads. The same situation emerges when we try to combine an unaccusative predicate with a active v-head. Both bear the feature [+Active] and hence the combination is prohibited. The following table illustrates all the possible combinations:

- | | | | | |
|------|--|---|---|-------------------------|
| (11) | Deponent $V\{\dots[-\text{Active}]\dots\}$ | + | Passive $v\{\dots[-\text{Active}]\dots\}$ | \Rightarrow ruled out |
| | Deponent $V\{\dots[-\text{Active}]\dots\}$ | + | Active $v\{\dots[+\text{Active}]\dots\}$ | \Rightarrow ok |
| | Unaccusative $V\{\dots[+\text{Active}]\dots\}$ | + | Passive $v\{\dots[-\text{Active}]\dots\}$ | \Rightarrow ok |
| | Unaccusative $V\{\dots[+\text{Active}]\dots\}$ | + | Active $v\{\dots[+\text{Active}]\dots\}$ | \Rightarrow ruled out |
| | Regular $V\{\dots[\]\dots\}$ | + | Passive $v\{\dots[-\text{Active}]\dots\}$ | \Rightarrow ok |
| | Regular $V\{\dots[\]\dots\}$ | + | Active $v\{\dots[+\text{Active}]\dots\}$ | \Rightarrow ok |

Deponent verbs can be combined with active v-heads only. Unaccusatives can only be combined with passive v-heads and regular transitive verbs are compatible with both because they are not lexically prespecified.

It is clear that the constraint in (10) is specifically formulated to serve our purpose, namely to penalize two identical voice features within the same feature set. However on a more abstract level it can be seen as some kind of OCP-like anti-locality constraint which avoids specific combinations of identical features within the same domain. Such Identity Avoidance Principles or as van Riemsdijk (2008) simply calls them, *XX, have long time been attested in phonology (e.g. McCarthy (1986)) but in more recent literature it is

also frequently invoked for morphological (e.g. Yip (1998), Nevins & Sandalo (2010)) or syntactical (Ackema (2001) or van Riemsdijk (2008)) phenomena. The work of van Riemsdijk also provides a good overview in which parts of syntax the *XX-principle has been attested.

But as it turns out, the Identity Avoidance Principle can also be used to derive the puzzling defectiveness effects of unaccusative and deponent verbs. These verbs are inherently specified for a voice-feature [\pm Active] and this specification leads to incompatibility with active or passive syntax. So, in contrast to many other approaches to deponency (e.g. Embick (2000), Hippisley (2007), Schulz (2010)), the defectivity is not the result of a completely independent mechanism or constraint but it follows directly from the feature specification of the V- and v-heads and a well-known principle that has often been attested in the literature.

4. Lexical Override

The last assumption I want to make concerns the phonological realisation. We have seen that, under special circumstances, a situation may emerge where the feature [\pm Active] is found twice within the feature set of the complex V-v-head. If the values of these features are identical, then (10) will apply and the structure is ruled out. But if the values of these two features are not identical, then one will have to decide which one of them will prevail, i.e. which one will determine whether morphology uses their active or their passive forms. Again, the answer to that question is pretty straightforward: I assume that the lexical features of the V-head override the features of the functional v-head. Hence, we conclude that if contradictory feature specifications are always resolved in favor of the lexical features, then the possible combinations yield the following results:

$$(12) \quad \begin{array}{l} \text{Dep. V}\{\dots[-\text{Active}]\dots\} \quad + \quad \text{Act. v}\{\dots[+\text{Active}]\dots\} \Leftrightarrow \text{Passive morphology} \\ \text{Unacc. V}\{\dots[+\text{Active}]\dots\} \quad + \quad \text{Pass. v}\{\dots[-\text{Active}]\dots\} \Leftrightarrow \text{Active morphology} \end{array}$$

Thus, due to Lexical Override, a deponent verb combined with active v-head results in passive morphology and an unaccusative v-head combined with a passive v-head results in active morphology.

However the decision in favor of the lexical features does not only play a role with regard to the morphological realisation but also with regard to syntactic behaviour in the course of the derivation. Fusing the feature sets of V and v leads to overriding of the [\pm Active]-feature of the v-head, at least in the cases in which the V-head itself has such a feature. After this fusion and overriding of its features, the v-head behaves as if it was of the opposite type, at least concerning v-to-T movement: An active v-head whose [$+$ Active]-feature has been overridden by a [$-$ Active]-feature behaves like it was passive. Likewise a passive v-head whose [$-$ Active] has been overridden behaves like it was active.

Let me illustrate how the system works by deriving an example containing a deponent verb, for example for the sentence in (2) on page 3. The verb itself contains the feature [$-$ Active] which denotes it as deponent. The verb merges with its object building the VP. Afterwards the VP merges with the active v-head which contains [$+$ Active]. Recall

that a deponent verb can never be combined with the passive v-head because the two instances of the [-Active]-feature would violate the Identity Avoidance Principle. The vP is completed by merging the subject. In the course of the derivation, the [-Active] feature overrides the [+Active] feature and the result is a morphologically passive realisation.

An unaccusative example is derived accordingly. Since it bears the feature [+Active] it can only be combined with the passive v-head which does not introduce a specifier. Thus, the object is promoted to the subject position and the result is a unaccusative syntax. The morphology of that clause will be active because the lexical [+Active]-feature overrides the structural [-Active] feature of the passive voice head. Note that the derivations of regular transitive verbs in active or passive voice are not affected by my theory since these verbs remain lexically unspecified.

A final note is in order about languages which have only unaccusative verbs but no deponents. The theory I proposed can be easily adapted to these languages if one assumes that instead of a binary feature [\pm Active], these languages use a privative feature [Active], which denotes unaccusatives. Since there is no opposite feature value, it is not possible to denote lexical entries as deponent and hence the lack of deponent verbs is derived⁵.

5 Empirical consequences

The present approach makes a very novel claim in that it relates two classes of verbs (i.e. deponents and unaccusatives) and derives their mirrored behaviour on the basis of their lexical prespecification as well as some general, well-attested principles of the grammar. In this section, I focus on some empirical consequences of this approach. The first prediction I want to discuss is that a verb cannot be deponent and unaccusative at the same time.

This prediction becomes clear when looking at the respective feature specification. Unaccusative verbs are specified as [+Active] whereas deponents are [-Active]. It is obvious that a verb cannot bear these two features at the same time. Under normal circumstances this prediction could be easily tested. If deponent verbs passed the syntactic unaccusativity tests in Latin this would be a major setback for the theory. Unfortunately, as far as I can see, there are no applicable unaccusativity tests available in Latin. So, for example, ne-cliticization or applicability of impersonal passives⁶ cannot be applied in Latin. Alexiadou & Anagnostopoulou (1999) have developed several unaccusativity tests for Greek but these tests make use of pretty rare constructions and hence the limited corpora of Latin do not allow to test the prediction.

The second empirical prediction yields more interesting results. In the preceding section the question has been raised why so many languages have an unaccusative verb class whereas comparatively few languages have a deponent verb class. Even though Latin had

⁵Of course, this is a mere technical implementation and no explanation. See the following section for an argument why it is to be expected that many languages maintain an unaccusative verb class whereas only a few languages maintain a deponent verb class.

⁶As Pinkster (1992) noted, there are cases of impersonal passives in Latin, however they are highly idiomatic and rarely used.

a pretty elaborate system of deponent verbs, none of its daughter languages maintained this class. But all of them maintained the unaccusative verb class. If both verb classes are instances of the same phenomenon, this was unexpected at least at first sight. But as I will argue, there is an independent language factor that conditions the existence of a deponent verb class, namely the question of whether a language forms its passives periphrastically or synthetically. Latin used a synthetic verb form, at least in the major part of its verbal paradigm whereas all of its daughter languages used a periphrastic verb form. Hence, I will argue that the following hypothesis holds:

- (13) Hypothesis: Languages which always use periphrastic verb forms for passive contexts cannot maintain a deponent verb class.

Why should this be the case? To answer this question, let us have a look at the structural differences between a language which uses periphrastic passives and a language which does not. I assume that especially those languages which always use a periphrastic form for passive contexts make use of a functional projection designed for passive syntax (cf. Cinque (1999)⁷, Adger (2003), Collins (2005)), named PassP. Nonetheless, I assume that these languages still have two distinct v-heads, a passive and an active one, however a passive vP is merged with a passive phrase (PassP) whereas an active vP is not. Take a look at the structure in (14).

- (14) $[_{T'} T [_{\text{PassP}} \text{Pass} [_{\text{vP}} \text{v}_{\text{passive}} [_{\text{VP}} V \text{NP}]]]]$

Postulating an additional Pass-head in passive contexts enables to account for the obligatory presence of an auxiliary and the fact that the V-head is expressed by a non-finite participle form. But since these two factors are not found in Latin, there is no reason to assume the existence of a PassP in Latin. However, the Pass-head projection has great consequences on the theory of deponency which I sketched. If the phonological realisation of voice features is carried out by the features of the passive phrase, then a lexical specification on the V-head is completely pointless because the features of a PassP are too high up the tree to be mingled with⁸.

Consider the following example: A deponent V-head, which is specified for [-Active] moves to v hoping to override v's voice feature. However, the v-head does not contain any voice-features because the voice-distinction is handled by the passive phrase higher up the tree. The lexical specification of the V-head can neither affect the syntactic derivation, nor determine whether the morphological realisation will be active or passive. Thus, the existence of specific features on the lexical V-head has no consequences whatsoever. And since a hypothetical learner would never postulate the existence of such pointless features due to some principle similar to what is often called Input Optimization (Prince & Smolensky (1993)), it is clear that such features cannot be maintained by a language.

⁷Cinque (1999) introduces a functional projection for passives named PassP but he claims that the projections he postulates are a universal property of all languages which is something I explicitly deny.

⁸Under the standard assumption that such a PassP blocks head-movement of the passive v-head below, of course

It follows directly that a language which maintains a passive phrase cannot maintain a deponent verb class at the same time. Thus, the existence of a deponent verb class presupposes the absence of a PassP and hence the hypothesis in (13) is derived. To maintain unaccusatives, on the other hand, it is sufficient that the language maintains some synthetic forms for active voice contexts, which is, of course, far more widespread than the opposite.

The hypothesis in (13) turns out to be empirically accurate. Below I have listed a number of languages in which we find both factors: Synthetic passives and a deponent-like verb class⁹. I have discussed each of these languages in detail in Weisser (2010) but for reasons of space, I confine myself to the mere listing of the languages.

- Latin
- Classical and Modern Greek
- Sanskrit
- Swedish¹⁰
- Finnish

It seems to be pretty obvious that the ability of forming a synthetic passive and the ability to maintain a deponent verb class correlate. This is not a trivial finding. One could easily imagine deponent verbs in a language with periphrastic passives. However such a language does not seem to be attested. Amongst Romance languages, Latin is the only one which has a synthetic passive and it is the only one with a deponent verb class. All its daughter languages lost their deponent verb class because they all form their passives periphrastically. Amongst Germanic languages, Swedish is the only one which can express passive synthetically. And, as the hypothesis predicts, Swedish is the only Germanic language with a deponent verb class.

To my knowledge, this correlation between synthetic passives and deponency has neither been noted in the literature nor is there any other generative approach to deponency which is capable of deriving it. I take that as strong evidence in favor of the present approach.

⁹Of course, the term *deponent* is to be understood in the traditional meaning here, namely involving a mismatch between voice features.

¹⁰The situation of the so-called Swedish *s-verbs* is not uncontroversial. In Weisser (2010), I argue that transitive examples like (i) illustrate that the case of Swedish *s-verbs* is in fact a case of deponency and not some kind of inherent reflexivity or absolute habitual verb forms.

(i) Han minna-s mig från när vi träffade-s på Hultsfred
 He remember-PASS me.ACC from when we meet.PAST-RECIP in H.
 'He remembers me from when we met in H.'

6 Problems

It should not be concealed that the present approach to deponency faces some problems when it comes to the question of how to derive two residual classes of deponent verbs, namely the so-called semi-deponents as well as the non-defective deponents.

Semi-deponent verbs behave like deponent verbs in one half of their paradigm (usually in the perfect aspect) and like regular transitive verbs in the other half of the paradigm (in non-perfective aspect).

- (15) a. Hercules cum haec audi-re-t, magnopere
Hercules at.that.time that hear-IPFV-3SG, greatly
gavisus est.
rejoice-PASS.PTCP be.3SG
'When Hercules had heard that, he greatly rejoiced'
- b. Duo-bus litiga-nt-ibus tertius gaude-t
Two-ABL argue-PTCP-ABL third rejoice-ACT.3SG
'While two men argue, the third one rejoices'

These verbs are problematic probably for all kinds of approaches to lexically triggered deponency because the existence of a lexical feature should, in principle, not be dependent on a syntactical feature like the aspectual features of a functional head. One possibility to solve the problem involves the admittedly undesirable stipulation of assuming two distinct lexical entries for a verb like *gaudere* both of which are restricted to one aspect.

The other problematic class of deponent verbs are the non-defective ones. As I have shown in example (4), a handful of deponent verbs can appear in passive syntax. In my theory, deponents are not passivizable because they inherently bear the feature [-Active] which cannot be combined with a passive *v* due to the Identity Avoidance Principle. But if some deponents can actually appear in passive syntax, one needs to find a way to suspend the Identity Avoidance Principle for these cases. The simplest way to solve this problem is to assume that non-defective deponent verbs have a [-Active*] feature instead of a [-Active]. These features are similar enough to yield the same morphological realisation but the Identity Avoidance Principle recognizes them as distinct and hence the combination of both features is not ungrammatical. However, again this solution is stipulative to a certain degree as well.

7 Conclusion

This paper pursued two interrelated goals. First, I tried to show that the mismatch we find with deponent verbs in Latin is not some marginal exotic phenomenon. In particular, I argued that the very same kind of mismatch is found with unaccusative verbs. The argument was based on an in-depth analysis of the behaviour of both verb classes in different modules of the grammar. I have shown that unaccusative verbs and deponent verbs behave completely oppositional in all modules of the grammar. Whenever one of

them behaved like an regular active verb in a certain module, the other behaved like a regular passive verb. Even the exceptions to the basic rules of deponents and unaccusatives revealed the same mirror image. This behaviour suggests that, on an abstract level of analysis, both verb classes seem to be part of the same phenomenon.

The second major goal of this work was to establish a formal analysis for deponent verbs. As a consequence of the discussion in the first part of this paper, this analysis was designed to cover the morphosyntactic behaviour of both verb classes, deponents and unaccusatives. My approach equally derived the behaviour of both mismatch verbs and it did so by postulating four different assumptions all of which have already been proposed in the literature. First, it is assumed that verbs can be lexically prespecified for voice features. Second, it is assumed that the same voice features appear on the v-head on which the voice features are morphologically realised. The third assumption, called Identity Avoidance, says that ungrammatical combinations of verbs and v-heads (i.e. cases of defectivity such as the fact that deponent verbs cannot appear in passive syntax) are rejected by an OCP-like Identity Avoidance Principle. And fourth, it is assumed that conflicting feature specifications are always resolved in favor of the inherent feature of the lexical head (Lexical Override). These four assumptions were sufficient to derive the idiosyncratic morphosyntactic behaviour of deponents as well as unaccusatives. And, as I have shown, it can also easily be adapted to languages in which we find only one side of the coin, unaccusativity or deponency.

In comparison to other theories about deponency, the theory I presented in this paper has several advantages. The first advantage for which I extensively argued is the equal treatment of deponents and unaccusatives. But even if one does not share my opinion that these both verb types involve the same kind of mismatch on an abstract level of analysis, my theory of deponency would still be applicable. In the section about languages without deponency I have shown how my theory works in languages which exhibit only one side of the coin. Thus, even if one does not subscribe to the forementioned hypothesis, the theory can still be adapted to derive only cases of deponency. The second advantage is that the four assumptions above are well established in modern syntactic theory. Other theories of deponency need adhoc constraints or stipulations to derive the empirical facts, especially to derive the property of defectiveness. In my theory, defectiveness is derived elegantly by invoking the notion of a Identity Avoidance Principle, a syntactical version of the well-known Obligatory Contour Principle (OCP). Another advantage is that my approach directly answers the frequently asked question why no Romance language preserved a deponent verb class. I have shown that my theory predicts that deponent verbs can only appear in languages which form their passive synthetically, at least in a part of their verbal paradigm. The hypothesis is supported by the empirical facts since to my knowledge there is no case attested in which deponent verbs are found in a system which makes use of periphrastic passives throughout its whole paradigm. On the other hand, if a language expresses its passive morphology at least partly by synthetic verb forms, then these languages can have a deponent verb class as in Latin, Greek, Sanskrit, Swedish or Finnish.

Finally, we are also in the position the answer the question posed in the introduction, namely whether a few counterexamples like in this case the deponent verbs force us to

dispose the idea that the semantic notion and the inflection category of *voice* are identical or at least closely related. I argued that we one can actually maintain the assumption that there is a one-to-one mapping of semantic content and inflectional category. However in some cases there might be some syntactic processes (in the case at hand: Prespecification and Lexical Override) that might obscure this close mapping relation.

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