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## Deponency in Latin\*

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## 1. Introduction

A *DEPONENT VERB* HAS A MORPHOLOGICALLY PASSIVE FORM but active meaning (Bennett 1907). Classical examples of deponent verbs come from Latin and have been much discussed in the literature, going back to Roman times. In Latin, a verb in passive form and a deponent verb share the same paradigm, but contrast in meaning with respect to voice:

- |     |                      |                 |                    |                  |
|-----|----------------------|-----------------|--------------------|------------------|
| (1) | Verb in passive form |                 |                    |                  |
|     | <i>amor</i>          | 'I am loved'    | <i>ama:mur</i>     | 'we are loved'   |
|     | <i>ama:ris</i>       | 'you are loved' | <i>ama:mini:</i>   | 'you are loved'  |
|     | <i>ama:tur</i>       | 'he is loved'   | <i>amantur</i>     | 'they are loved' |
| (2) | Deponent verb        |                 |                    |                  |
|     | <i>mi:ror</i>        | 'I admire'      | <i>mi:ra:mur</i>   | 'we admire'      |
|     | <i>mi:ra:ris</i>     | 'you admire'    | <i>mi:ra:mini:</i> | 'you admire'     |
|     | <i>mi:ra:tur</i>     | 'he admires'    | <i>mi:rantur</i>   | 'they admire'    |

The specific question we attempt to tackle in this paper is why certain Latin verbs are deponent. Compared to recent works on Latin deponent verbs (Embick 2000, Sadler and Spencer 2001; Kiparsky 2005) which avoid this question by simply assigning Latin deponents a syntactico-semantic or

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conjugational class feature [Passive], we give a nearly all-inclusive description of Latin deponents and discuss the factors that determine their morphological and syntactico-semantic nature in more detail. We do not ask the most general question, which is why classical Latin had a deponent construction in the first place. Instead, we assume that the existence of the deponent in classical Latin was purely fortuitous, and then go on to ask what value the construction had, given its existence in the language.

Our interest is purely synchronic and our data comes only from the classical language. Readers interested in the history of the Latin deponent and in what Latin grammarians had to say about this class of verbs should consult Flobert 1975. Baldi (1977) provides a concise history of modern linguistic scholarship on Latin deponents.

We analyse Latin deponents from two perspectives. From a syntactico-semantic perspective, we categorize Latin deponents into syntactico-semantic classes, using the classification of Levin 1993, which was developed for English verbs, but which appears to be universal in scope. Levin provides a classification of a large number of English verbs, based on a variety of syntactico-semantic criteria. We find that Latin deponents can be defined negatively from a syntactico-semantic perspective: they tend not to fall into syntactico-semantic classes in which the object of a verb is *physically affected*. Additionally, we analyse the morphological characteristics of Latin deponents. We find that nearly half of Latin deponents are derived from either nouns or adjectives; these fall into several non-causative semantic categories. A majority of those deponent verbs that are not derived from nouns or adjectives contain *deponent roots*, which we define as roots whose verbs always take deponent forms. In these cases, we say that the deponent feature is a lexical property of the root and we have what we call a deponent root. In others, though, not all verbs in a given root are deponent, so that the root itself is not deponent and a lexeme or a stem may bear the deponent feature. In terms of percolation, if a root is marked as deponent, then the deponent feature will percolate down to all lexemes containing that root and all the stems of that lexeme. If a lexeme is deponent, then so will all its forms be deponent. Finally, if a stem is deponent, then only the forms in that stem will be deponent. We know of no cases of individual suppletive verb forms being deponent, but only the verb ESSE 'to be' is suppletive at the individual verb form level.

Our method in this work is largely numerical, based on fairly exhaustive counts of Latin deponent verbs and their senses. Similarly for the conclusions that we extract from the data. Thus, we show that Latin deponent verbs and their senses exhibit a number of strong generalizations, both syntactico-semantic and morphological, none of which are by any means absolute.

## 2. Syntactico-Semantic Categorization of Latin Deponent Verbs

### 2.1. Methodology

We manually collected 543 deponent verbs and their relevant information from the *Oxford Latin Dictionary* (1983).<sup>1</sup> Our interest is not in the verbs alone, but just as much in the senses of these verbs, since a single verb may have more than one distinct sense, each of which may fall into a different semantic class. We are not always careful to distinguish the expressions ‘deponent verbs’ and ‘senses of deponent verbs’, but the latter notion is primary in our research. We started off, perforce, from verbs, simply because that is how the dictionary is arranged, not by senses. First, we tagged all verbs whose citation form ends in *-or* in the dictionary, from *abo:minor* to *ulciscor*. We then analysed each deponent verb sense through the following steps (a–g):

- a. We checked the senses of each deponent verb and only considered the first definition for each sense listed in the dictionary. For example, *aborior* has two senses: 1) ‘to pass away, disappear, be lost’; 2) ‘to miscarry, be aborted.’ We only considered the first definition for each sense, i.e. ‘to pass away’ and ‘to miscarry’ and ignored the other definitions, such as ‘to disappear’, ‘to be lost’, and ‘to be aborted.’
- b. We categorized each resulting sense of a deponent verb into one of the 49 verb classes (numbered 9 through 57) in Levin 1993. For example, we put *adveneror* ‘to worship’ in the class of *admire* verbs (labelled as 31.2 in Levin 1993).
- c. If we could not find the English gloss of a Latin deponent verb in Levin 1993, we would look for its synonyms via the webpage <http://www.rhymezone.com/>, an online English synonym dictionary. For example, *abo:minor* has two senses: 1) ‘to avert’; 2) ‘to loathe.’ We put *avert* in the class of *avoid* verbs, though *avert* is not listed in Levin 1993, because via the webpage we found *avoid*, the only synonym of *avert* that is listed in Levin 1993.
- d. If we did not find any English synonym of a sense of a deponent verb in Levin 1993, we would just ignore the sense. For example, the second sense of *abu:tor* is ‘to utilize’. We did not find it or its synonyms such as ‘to use’ in Levin 1993, so we ignored it.

<sup>1</sup> This dictionary ‘treats classical Latin from its beginnings to the end of the second century AD’ (p. v) and thus does not include the post-classical cases that are covered in Flobert’s (1975) comprehensive treatment of all Latin deponent verbs.

- e. We only considered the “big class” and ignored subclass numbers. If several senses of a deponent verb fall into one big semantic class, we only counted one sense. For example, *praefer* has three senses: 1) ‘to say’; 2) ‘to recite’; 3) ‘to speak’. They belong to the classes *say* verbs (37.7), verbs of transfer of a message (37.1), and *talk* verbs (37.5) respectively. They all belong to the big class of verbs of communication (37). We thus count for *praefer* only one sense that belongs to the class of verbs of communication. We did the same with the English verb senses in Levin 1993 against which we compared the Latin deponents. For example, the English verb *brush* has two senses that fall into the subclasses 41.2.1, ‘*floss* verbs’ and 41.2.2, ‘*braid* verbs’, which we collapse into a single class, 41 ‘verbs of grooming and bodily care’.
- f. For a family of deponent verbs sharing the same root that falls into a single sense class, only one token sense was counted. Unlike the English verbs in Levin 1993, there are many derivative Latin deponents that share one root and whose senses fall into one big verb class. For example, there are 15 deponents with the root *sequ-*, which have 41 senses listed in Levin 1993. Among the 41 senses, there are 16 senses which fall into the big class of verbs of motion. We counted the 16 senses as one sense which falls into the class of verbs of motion. By doing so, we could control for the influence of derivations that repeatedly create senses in one verb class so that we could make a more reasonable comparison between Latin deponents and English verbs. Note that steps (e) and (f) both lead to conservative numbers, because they greatly reduce the numbers of deponent senses. If we had omitted these steps, our results might have been even more robust, but perhaps misleadingly so.
- g. By using the distribution of English verb senses in Levin 1993 as a reference, we compared the **ratio**<sub>1</sub> of the number of senses of a syntactico-semantic class of Latin deponents divided by the number of senses of all Latin deponents to the **ratio**<sub>2</sub> of the number of senses of a class of English verbs divided by the number of senses of all English verbs. This gives us an indirect measure of the distribution of the meanings of deponent verbs in Latin, compared to the distribution of ‘normal’ verbs. If, for a given class, we find that ratio<sub>1</sub> is larger than ratio<sub>2</sub>, this may suggest that there is a relation between the meaning of a verb and its deponency.

## 2.2. Results

We obtained 1,215 senses from the *Oxford Latin Dictionary* through step (a) and reduced this number to 655 senses through steps (b–e).<sup>2</sup> We then obtained a net total of 394 senses through step (f). The results we obtained through analysing these senses in step (g) are given in Table 1.

**Table 1.** Syntactico-semantic classes of Latin deponents and English verbs

V(erb) class	Class name	Number of deponent senses	Ratio1	Ratio2	Ratio1/Ratio2
15	Hold and Keep	10	2.54%	0.27%	9.41
55	Begin, Complete	14	3.55%	0.45%	7.89
52	Avoid	5	1.27%	0.20%	6.35
14	Learn	3	0.76%	0.17%	4.47
34	Assessment	3	0.76%	0.17%	4.47
46	Lodge	4	1.02%	0.27%	3.78
36	Social interaction	26	6.60%	1.89%	3.49
12	Push/Pull	3	0.76%	0.25%	3.04
53	Lingering and Rushing	3	0.76%	0.27%	2.81
50	Assuming a position	5	1.27%	0.47%	2.70
<b>20</b>	<b>Contact</b>	<b>3</b>	<b>0.76%</b>	<b>0.32%</b>	<b>2.38</b>
48	Appear, Disappear, Occur	14	3.55%	1.54%	2.31
13	Change of possession	32	8.12%	3.70%	2.19
37	Communication	35	8.88%	4.05%	2.19
<b>44</b>	<b>Destroy</b>	<b>3</b>	<b>0.76%</b>	<b>0.35%</b>	<b>2.17</b>
32	Desire	4	1.02%	0.50%	2.04
33	Judgement	12	3.05%	1.69%	1.80
<b>26</b>	<b>Creation and Transformation</b>	<b>21</b>	<b>5.33%</b>	<b>3.01%</b>	<b>1.77</b>
<b>35</b>	<b>Searching</b>	<b>12</b>	<b>3.05%</b>	<b>1.81%</b>	<b>1.69</b>
31	Psych-Verbs	47	11.93%	7.65%	1.56
29	Vs with predicative complements	28	7.11%	4.67%	1.52
30	Perception	8	2.03%	1.34%	1.51
<b>39</b>	<b>Ingesting</b>	<b>6</b>	<b>1.52%</b>	<b>1.29%</b>	<b>1.18</b>
54	Measure	4	1.02%	0.97%	1.05
51	Motion	23	5.84%	5.86%	1.00
47	Existence	20	5.08%	5.47%	0.93
11	Sending and Carrying	3	0.76%	1.39%	0.55
<b>10</b>	<b>Removing</b>	<b>13</b>	<b>3.30%</b>	<b>6.86%</b>	<b>0.48</b>
<b>18</b>	<b>Contact by impact</b>	<b>2</b>	<b>0.51%</b>	<b>1.59%</b>	<b>0.32</b>
38	Sounds made by animals	2	0.51%	1.66%	0.31
<b>17</b>	<b>Throwing</b>	<b>1</b>	<b>0.25%</b>	<b>0.87%</b>	<b>0.29</b>

<sup>2</sup> We ignored 7 deponent verbs which were rarely used or whose meaning is dubious and 266 senses whose English glosses or their synonyms we could not find in Levin 1993.

(erb) class	Class name	Number of deponent senses	Ratio1	Ratio2	Ratio1/Ratio2
<b>40</b>	<b>Verbs involving the body</b>	<b>5</b>	<b>1.27%</b>	<b>4.77%</b>	<b>0.27</b>
<b>21</b>	<b>Cutting</b>	<b>1</b>	<b>0.25%</b>	<b>1.04%</b>	<b>0.24</b>
<b>45</b>	<b>Change of state</b>	<b>8</b>	<b>2.03%</b>	<b>8.82%</b>	<b>0.23</b>
22	Combining and Attaching	3	0.76%	3.73%	0.20
<b>41</b>	<b>Grooming and Bodily care</b>	<b>1</b>	<b>0.25%</b>	<b>1.39%</b>	<b>0.18</b>
<b>25</b>	<b>Image creation verbs</b>	<b>1</b>	<b>0.25%</b>	<b>1.47%</b>	<b>0.17</b>
<b>23</b>	<b>Separating and Disassembling</b>	<b>1</b>	<b>0.25%</b>	<b>1.57%</b>	<b>0.16</b>
<b>9</b>	<b>Putting</b>	<b>4</b>	<b>1.02%</b>	<b>8.94%</b>	<b>0.11</b>
43	Emission	1	0.25%	4.20%	0.06
16	Concealment	0	0.00%	0.27%	0
<b>19</b>	<b>Poke</b>	<b>0</b>	<b>0.00%</b>	<b>0.15%</b>	<b>0</b>
<b>24</b>	<b>Colouring</b>	<b>0</b>	<b>0.00%</b>	<b>0.32%</b>	<b>0</b>
27	Engender	0	0.00%	0.17%	0
28	Calve	0	0.00%	0.25%	0
<b>42</b>	<b>Killing</b>	<b>0</b>	<b>0.00%</b>	<b>0.62%</b>	<b>0</b>
49	Body-internal motion	0	0.00%	0.37%	0
56	Weekend Verbs†	0	0.00%	0.22%	0
57	Weather Verbs	0	0.00%	0.67%	0
Total		394	100%	100%	

† This class is named after the verb *to weekend* 'to spend the weekend'.

In Table 1, the leftmost column lists the numbers of verb classes used in Levin 1993. Corresponding to these numerical labels are the names of verb classes in Levin 1993; the adjacent column gives the names of these classes. The third column lists the total number of deponent senses that belong to each verb class. The fourth column lists the ratio<sub>1</sub> of the number of senses of each class of Latin deponents divided by 394, the number of senses of all Latin deponents we calculated through steps (a–f). The fifth column lists the ratio<sub>2</sub> of the number of senses of each class of English verbs divided by 4,025, the number of senses of all English verbs in Levin 1993 analysed through step (e). The rightmost column lists the value of ratio<sub>1</sub> divided by ratio<sub>2</sub>. The rows in Table 1 are arranged based on the values in the rightmost column in descending order. We have grouped the rows into three sets, those whose value in the last column is greater than 2, those whose value is less than 0.5, and those between 2 and 0.5.

The most noticeable generalization that falls out from Table 1 is that Latin deponents tend NOT to fall into classes of verbs whose objects are *physically affected*. An entity is considered physically affected only if a material influence upon it is followed by changes in size, shape, colour, or weight, or object-internal physical alternation in the entity itself. A row in Table 1 is bolded if a verb class contains a significant number of English verbs whose objects are physically affected.

If we draw a line between the class of judgement verbs and the *desire* verb class in which the percentage of Latin deponents is twice that of English verbs, there are 16 verb classes (from the *hold* and *keep* class to the *desire* class) above the line. In other words, Latin deponents tend more to fall into these classes compared to English verbs. For the most part, these classes do not involve affected objects, but two of the 16 classes (12.5%) contain a significant number of English verbs whose objects are physically affected.<sup>3</sup> They are the class of contact verbs and the *destroy* class. However, none of the deponent verbs in the class of contact verbs have physically affected objects, and only two deponent verbs in the *destroy* class seem to. There are 13 English verbs in the class of contact verbs in Levin 1993 and four of them, namely *pinch*, *prod*, *sting*, and *tickle* relate to physical affectedness. The three Latin deponent senses in this class are *osculator* ‘to kiss’, *palpor* ‘to stroke’, and *sa:vior* ‘to kiss’. They do not relate to physical affectedness according to our definition. There are 14 English verbs in the *destroy* class and all of them involve physically affected objects. The three deponent senses in the *destroy* class are *nepo:tor* ‘to waste’, *populor* ‘to ravage’, and *spolor* ‘to ravage’. We put *nepo:tor* ‘to waste, squander’, which does not relate to physical affectedness, in the *destroy* class only because it is the single place where *waste* is listed in Levin 1993. Thus, only two of the 167 deponent senses (1.2%) in the 16 classes that fall above 2 in Table 1 arguably involve affected objects.

There are 11 verb classes for which the value of  $\text{ratio}_1$  divided by  $\text{ratio}_2$  is between 2 and 0.5, which means that Latin deponent senses in these classes roughly have a distribution similar to that of English verbs. Three of the 11 classes (27.3%) contain a significant number of English verbs whose objects are physically affected. They are the class of verbs of creation and transformation, the class of verbs of searching, and the class of verbs of ingesting.

There are 121 English verbs in the class of verbs of creation and transformation in Levin 1993 and many of them (such as *cook*, *squeeze*, and *transform*) involve physically affected objects. There are 21 Latin deponent senses in this class but none of them involve physically affected objects. Four of them are intransitive only: *orior* ‘to be born’, *poe:tor* ‘to write poetry’,

<sup>3</sup> Among the 10 English verbs in the *push/pull* class, *press* is the only verb which can arguably take physically affected objects. Three Latin deponent senses fall into the *push/pull* class, viz. *obni:tor* ‘to press’ (intransitive only), *remo:lior* ‘to push back’, and *aspernor* ‘to push away’. None of them take physically affected objects. Among the 76 English verbs in the class of verbs of social interaction, only a few verbs such as *fight* can arguably take physically affected objects. There are 26 Latin deponents in the class of verbs of social interaction. Most of them are intransitives. The 5 transitive deponents are *complector* ‘to embrace’, *contechnor* ‘to plot’, *continor* ‘to meet’, *nanciscor* ‘to get (a person) attached to one in a particular relationship or connection’, and *sector* ‘to visit’. None of them relate to physical affectedness.

*supernascor* ‘to develop on the surface’, and *modulor* ‘to make music (on an instrument)’ (*modulor* can be transitive when it takes other meanings). Among the 21 senses, *perplexor* ‘to twist’ does not relate to physical affectedness because it is followed by an abstract noun meaning, for example, ‘facts’. The verb *moderor* ‘to arrange’ does not relate to physical affectedness, either. The other 15 senses basically have the following meanings:

- (3) a. ‘to perform’ (e.g. *abu:tor*)                      b. ‘to design’ (e.g. *architector*)  
 c. ‘to construct’ (e.g. *confabricor*)                d. ‘to invent’ (e.g. *fa:bulor*)  
 e. ‘to develop’ (e.g. *ex(s)equor*)                    f. ‘to play (notes)’ (e.g. *praemeditor*)  
 g. ‘to weave’ (e.g. *ordior*)

All of the senses involve creation and are thus said to take *effected* objects instead of affected ones (the terms are standard in the lexical semantic literature). Notice there is a difference between effected objects and physically affected ones. ‘effect’ means ‘to cause to come into being’ rather than ‘to exert a physical impact on an existing object and trigger some changes in it’.

There are 73 English verbs in the class of verbs of searching. Quite a few, such as *dig*, *mine*, *excavate*, *sift*, *burrow*, *scratch*, and *tunnel*, relate to physical affectedness. There are 12 deponent senses in this class and none of them involve physically affected objects. The 12 senses basically have the following meanings:

- (4) a. ‘to seek’ (e.g. *aucupor*)                            b. ‘to inspect’ (e.g. *intueor*)  
 c. ‘to investigate’ (e.g. *percontor*)                d. ‘to explore’ (e.g. *ruspor*)

There are 52 English verbs in the class of verbs of ingesting. Many of them, such as *eat*, *chew*, *gobble*, and *ingest*, involve physically affected objects. There are 6 deponent senses in this class. The major senses of *epulor* ‘to dine’ and *pa:bulor* ‘to graze’ are intransitive. The verb *impascor* ‘to feed’ can only be used intransitively. Three verbs take physically affected objects and they are *tuburcinor* ‘to gobble’, *u:tor* ‘to consume’, and *vescor* ‘to devour’ (*vescor* can only be intransitive when it means ‘to eat’ and its morphological properties are dubious).

Thus, three of the 184 deponent verbs (1.6%) of these 11 intermediate verb classes, i.e., *tuburcinor* ‘to gobble’, *u:tor* ‘to consume’, and *vescor* ‘to devour’ take physically affected objects.

Next, let us consider the 22 verb classes based on which the value of  $\text{ratio}_1$  divided by  $\text{ratio}_2$  is smaller than 0.5. These are the verb classes that Latin deponents tend not to fall into compared to English verbs. Thirteen of the 22 verb classes (59.1%) contain a significant number of English verbs that relate to physical affectedness. We shall show in detail that the number of Latin deponent verbs in each of these categories that relate to physical affectedness is very small compared to the number for English.

There are 276 English verbs in the class of verbs of removing and many of them, such as *erase*, *trim*, and *bone*, involve physically affected objects. There are 13 senses of deponents in this class and all of them are transitive verbs. Two of the deponents, i.e. *medeor* ‘to cure’ and *medicor* ‘to cure’ seem to relate to physical affectedness. The other deponents do not take physically affected objects. They basically have the following senses:

- (5) a. ‘to steal’ (e.g. *fu:ror*)                      b. ‘to omit’ (e.g. *transgredior*)  
 c. ‘to discharge’ (e.g. *e:iaculor*)              d. ‘to remove’ (e.g. *e:mo:lior*)  
 e. ‘to defraud’ (e.g. *pecu:lor*)                  f. ‘to despoil’ (e.g. *praedor*)  
 g. ‘to capture’ (e.g. *potior*)                      h. ‘to exorcise’ (e.g. *de:veneror*)

There are 64 English verbs in the class of verbs of contact by impact and many of them such as *hammer*, *bite*, and *scratch* can take physically affected objects. The two deponents, *admo:lior* ‘to beat’ and *iaculor* ‘to strike (with a javelin or other missile)’ relate to physical affectedness.

There are 35 English verbs in the class of verbs of throwing and quite a few, such as *bash*, *slam*, and *smash*, relate to physical affectedness. The only deponent sense in this class is *iaculor* ‘to throw’ which does not take a physically affected object.

There are 192 English verbs in the class of verbs involving the body and many of them, such as *suffocate*, *bruise*, *hurt*, and *injure*, can take physically affected objects. All of the 5 deponent senses in this class are intransitives:

- (6) a. *a:versor* ‘to recoil’    b. *blandior* ‘to smile’    c. *conscreeor* ‘to hawk’  
 d. *morior* ‘to faint’        e. *pandiculor* ‘to grimace’

There are 355 English verbs in the class of verbs of change of state and many of them, such as *break*, *crash*, *crease*, and *boil*, take physically affected objects. Seven of the 8 deponent senses in this class can only be intransitives:

- (7) a. *aboriscor* ‘to fade’    b. *colla:bor* ‘to give way’    c. *de:fetiscor* ‘to tire’  
 d. *e:nascor* ‘to sprout’    e. *li:quor* ‘to melt’        f. *morior* ‘to wither’  
 g. *vagor* ‘to vary’

The only deponent in this class that may be transitive is *de:grassor* ‘(w. acc.) to descend upon’, but it is not clear whether the object of the transitive sense is physically affected.

There are 42 English verbs in the class of verbs of cutting and all of them relate to physical affectedness. The only deponent in this class is *manticulor* ‘cut open’ which takes physically affected objects.

There are 56 English verbs in the class of verbs of grooming and bodily care and many of them, such as *shave*, *comb*, and *clip*, which take *beard*, *hair*, and *nail* as their objects, relate to physical affectedness. The only deponent in this class is *meditor* ‘to exercise oneself’ which is intransitive.

There are 59 English verbs in the class of image creation verbs and quite a few of them (such as *engrave*, *mark*, and *paint*) can take physically affected objects. The only deponent in this class is *ima:ginor* ‘to imagine’ which does not relate to physical affectedness.

There are 63 English verbs in the class of verbs of separating and disassembling and quite a few of them such as *sever*, *break*, *hack*, and *saw* can take physically affected objects. The only deponent in this class is *redordior* ‘to unravel’ which relates to physical affectedness.

There are 360 English verbs in the class of verbs of putting and many of them such as *coil*, *infect*, and *poison* can take physically affected objects. None of the four deponents in this class relate to physical affectedness:

- (8) a. *aucupor* ‘to lay a trap for’  
 b. *reme:tior* ‘to cover (a distance) in the reverse direction’  
 c. *obmo:lior* ‘to put in the way as an obstruction’  
 d. *amplector* ‘to move around, circle’

There are 6 English verbs in the class of *poke* verbs, 13 English verbs in the class of verbs of colouring, and 25 English verbs in the class of verbs of killing. All of them relate to physically affected objects. There is no deponent in these classes.

Thus, only six of the 43 senses (14.0%) belonging to the verb classes which deponents tend not to fall into can take physically affected objects. They are senses corresponding to the verbs *medeor* ‘to cure’, *medicor* ‘to cure’, *admo:lior* ‘to beat’, *iaculor* ‘to strike (with a javelin or other missile)’, *manticulor* ‘to cut open’, and *redordior* ‘to unravel’.

To summarize briefly the above discussion, 12.5% of the verb classes where Latin deponents tend to fall compared to English contain a significant number of English verbs which relate to physical affectedness but only 1.2% of the deponents in these verb classes take physically affected objects; 27.3% of the verb classes where Latin deponents roughly have a distribution similar to that of English verbs contain a significant number of English verbs which relate to physical affectedness but only 1.6% of the deponents in these verb classes take physically affected objects; 59.1% of the verb classes where Latin deponents tend not to fall contain a significant number of English verbs which relate to physical affectedness and 14.0% of the deponents in these verb classes take physically affected objects. Table 2 shows that the less likely Latin deponents are to fall into a set of verb classes, the more we find among them classes of verbs whose objects are physically affected and more deponents which relate to physical affectedness.

Additionally, only 11 of the 394 deponents (2.8%) take physically affected objects. By contrast, English has a much higher rate of verbs which relate to physical affectedness. All of the verbs in the classes of *destroy* verbs, *poke*

**Table 2.** The distribution of verb classes and deponents that relate to physical affectedness

Ratio <sub>1</sub> /Ratio <sub>2</sub>	> 2	0.5–2	< 0.5
Percentage (and number) of classes of English verbs (with physically affected objects)	12.5% (2)	27.3% (3)	59.1% (13)
Percentage (and number) of deponents (with physically affected objects)	1.2% (2)	1.6% (3)	14.0% (6)

verbs, verbs of cutting, colouring, and killing, and a majority (66.0%) of the verbs in the class of verbs of change of state take physically affected objects. The verbs in these classes alone constitute over 8% of all the 4,025 English senses, around three times the 2.8% we have found for Latin deponents. The other 12 verb classes, each of which contains a significant number of English verbs that relate to physical affectedness, comprise verbs that constitute around one third of all the English senses. Assuming that even a small fraction of the approximately 1,300 senses in these classes relate to physical affectedness, it is clear that a much greater proportion of English verb senses than Latin deponent verb senses take physically affected objects.

### 3. Morphological Analyses of Latin Deponent Verbs

We also analyse the morphological structure of each Latin deponent verb. We find that nearly half of the 536 deponent verbs are derived from either nouns or adjectives and that these basically fall into several non-causative semantic categories. Additionally, a majority of the other half (those not derived from other lexical categories) contain *deponent roots* whose verbs always take deponent forms. For those deponent verbs not containing deponent roots, we show that in some the lexeme must be marked as deponent, while in a few, the famous semi-deponents, individual stems must be so marked.

#### 3.1. Denominal and deadjectival deponents

There are 249 Latin deponents which are either denominal or deadjectival out of a total of 536 (46.5%). Their verbal stems are zero-derived from their nominal or adjectival stems. Consider the example in (9). Both the noun *architectus* ‘a master builder’ and the deponent *architector* share the same stem *architect-*. Both *-us* and *-or* are inflectional markers.

(9) *architect-us* ‘a master builder’ → *architect-or* ‘to construct’

The 249 denominal or deadjectival deponent verbs fall into five general non-causative semantic categories, which depend to a great extent on the syntax and semantics of their bases. If a deponent is derived from an adjective

$x$ , it basically means ‘to act or to be  $x$ ’; if a deponent is derived from an animate noun  $y$ , it basically means ‘to act like  $y$ ’; if a deponent is derived from an inanimate noun  $z$ , it may fall into one of the three semantic categories: it may mean either ‘to give or make (with a sense of creation)  $z$ ’, ‘to use  $z$ ’, or ‘to get  $z$ ’. Some examples are given in (10).

- (10) a. *fatu-us* ‘silly’ → *fatu-or* ‘to play the fool’  
 b. *ancill-a* ‘handmaid’ → *ancill-or* ‘to act like a handmaid’  
 c. *fa:bul-a* ‘fable’ → *fa:bul-or* ‘to make up a fable’  
 d. *copi-a* ‘supply’ → *copi-or* ‘to furnish oneself (with supplies)’  
 e. *aqu-a* ‘water’ → *aqu-or* ‘to fetch water’

Table 3 gives the numbers of denominal or deadjectival deponents which fall into the five non-causative semantic categories. *Equor* ‘to procure horses’, which is derived from the animate noun *equus* ‘horse’, and *piscor* ‘to get fish’, which is derived from the animate noun *piscis* ‘fish’, are the only two exceptions to the semantic category ‘to act like  $y$ ’; instead, they fall into the category ‘to get  $z$ ’, which is otherwise reserved for inanimate nouns. Disregarding the 19 deponent verbs whose meanings are unclear with respect to their nominal bases, our generalizations cover 224 deponent verbs (97.4% of the 230 deponents), with only 6 exceptions.<sup>4</sup>

It is enlightening to compare this set of deponents to the set of Latin denominal or deadjectival verbs that are active in both form and meaning, a substantial majority of which have a causative sense. We went through every tenth page of the *Oxford Latin Dictionary* and obtained a sample of 65 Latin active verbs derived from adjectives or nouns.<sup>5</sup> Disregarding 4 verbs which are rarely used or whose morphological structure is unclear and 3 verbs whose semantic structure is unclear, we find that 42 of the 58 verbs (72.4%)

**Table 3.** Denominal and deadjectival deponent verbs

Base	Semantic categories of deponents	Number of deponents
Adjective	‘to act or to be $x$ ’	35
Noun (+Animate)	‘to act like $y$ ’	52
Noun (–Animate) plus <i>equus</i> and <i>piscis</i>	‘to give or make $z$ ’ (with a sense of creation)	62
	‘to use $z$ ’	51
	‘to get $z$ ’	24

<sup>4</sup> The six exceptions are comprised of four denominal deponents including *libi: dinor* ‘to gratify lust’, *manticulor* ‘to cut open (a bag or purse)’, *nego: tior* ‘to do business’, and *reliquor* ‘to be in arrears in respect of money owed’, and two deadverbial deponents including *frustror* ‘to delude’ and *de: frustror* ‘to foil or thwart completely’.

<sup>5</sup> The bases of two active verbs relate to prepositional phrases. They are *e: li: mino* ‘to turn out of doors’, from *ex limine* ‘out the threshold’ and *obvio:* ‘to go against’ from *ob via:* ‘from the road’.

have a causative sense (11a, b). 11 of the remaining 16 verbs (19.0%) fall into the semantic category ‘to use’ (11c). Two verbs (3.4%) fall into the semantic category ‘to get’ (11d). One has the sense of ‘to become’ (11e). One has the sense of ‘to plant’ (11f). One has the sense of ‘to put in’ (11g).

- |      |    |                |                                  |   |               |                                 |
|------|----|----------------|----------------------------------|---|---------------|---------------------------------|
| (11) | a. | <i>crispus</i> | ‘curly’                          | → | <i>crispo</i> | ‘to make wavy’                  |
|      | b. | <i>lumen</i>   | ‘light’                          | → | <i>lumino</i> | ‘to light up’                   |
|      | c. | <i>regnum</i>  | ‘office of king’                 | → | <i>regno</i>  | ‘to rule as a king’             |
|      | d. | <i>pilus</i>   | ‘a hair’                         | → | <i>pilo</i>   | ‘to grow hairy’                 |
|      | e. | <i>sponsa</i>  | ‘woman betrothed<br>in marriage’ | → | <i>sponso</i> | ‘to become engaged<br>to marry’ |
|      | f. | <i>holus</i>   | ‘vegetables’                     | → | <i>holero</i> | ‘to plant with vegetables’      |
|      | g. | <i>humus</i>   | ‘earth’                          | → | <i>humo</i>   | ‘to bury’                       |

Thus, we conclude that Latin denominal or deadjectival verbs differ in form depending on whether they have a causative sense. Those with causative senses tend to be active, while those that fall into general non-causative semantic categories such as ‘to act or to be *x*’, ‘to act like *y*’, ‘to give or make (with a sense of creation) *z*’, ‘to use *z*’, and ‘to get *z*’ tend to assume deponent forms. This generalization is by no means absolute, since Latin denominal or deadjectival verbs which fall into the semantic categories ‘to use *z*’ and ‘to get *z*’ take either active or deponent forms.

### 3.2. Deponent roots

Once the denominal and deadjectival deponents are extracted, we are left with 287 verbs. We find that 52 *deponent roots* account for 244 of these verbs (85.0%). A verb with a deponent root always takes a deponent form.

We analysed the morphological structure of each of the 287 verbs and obtained 70 roots. We typed key letters of each of the 70 roots into the Perseus online Latin-English lexicon ([www.perseus.tufts.edu](http://www.perseus.tufts.edu)), which then gave us a list of words with the letters. If the list does not contain any active form which has the root, then we say that the root is a deponent root. For example, we typed the key letters *sequ* and *sect* (a variant of *sequ*) of the root *-sequ-* into the online lexicon, which then gave us a list of words containing *sequ* and *sect*. Since no word with *sequ* or *sect* has an active form like *sequo*: or *secto*:, we conclude that *-sequ-* is a deponent root. Table 4 gives us a list of deponent roots each of which has four or over four deponent verbs.<sup>6</sup>

<sup>6</sup> *-gredi-* is a variant of the deponent root *-gradi-*. A few prefixed verbs with *-gredi-* have rare active variants: *aggredio*:, *progredio*:, *supergradio*:. None of the deponents with *-min-* have active forms while *-min-* is not deponent when it is associated with the meaning ‘to drive’ (e.g., *commino*: ‘to drive together’). Active forms *mo:lio*: ‘to build up’ and *de:mo:lio*: ‘to remove’ coexist with their corresponding deponent forms, but *mo:lio*: and *de:mo:lio*: are rare variants. *Adorio*:

**Table 4.** Latin deponent roots

Latin deponent root	Number of verbs with each deponent root	Example verb	Gloss
<i>gradi</i>	22	<i>gradior</i>	'to proceed'
<i>la:b</i>	16	<i>la:bor</i>	'to glide'
<i>sequ</i>	15	<i>sequor</i>	'to follow'
<i>min</i>	11	<i>comminor</i>	'to threaten'
<i>loqu</i>	10	<i>loquor</i>	'to talk'
<i>nasc</i>	10	<i>nascor</i>	'to be born'
<i>mo:li</i>	9	<i>mo:lior</i>	'to build up'
<i>mori</i>	9	<i>morior</i>	'to die'
<i>ori</i>	8	<i>orior</i>	'to rise'
<i>tue</i>	8	<i>tueor</i>	'to look at'
<i>f(or)</i>	7	<i>affor</i>	'to address'
<i>hor(t)</i>	7	<i>hortor</i>	'to encourage'
<i>luct</i>	7	<i>luctor</i>	'to wrestle'
<i>me:ti</i>	7	<i>me:tior</i>	'to measure'
<i>fate</i>	5	<i>fateor</i>	'to concede'
<i>prec</i>	5	<i>precor</i>	'to ask for'
<i>quer</i>	5	<i>queror</i>	'to regret'
<i>apisc</i>	4	<i>apiscor</i>	'to grasp'
<i>fru</i>	4	<i>fruor</i>	'to enjoy'
<i>fung</i>	4	<i>fungor</i>	'to perform'
<i>medit</i>	4	<i>meditor</i>	'to contemplate'
<i>spic</i>	4	<i>conspicor</i>	'to see'
<i>u:t</i>	4	<i>u:tor</i>	'to make use of'

### 3.3. Roots whose verbs have both active and passive forms

The remaining 43 of the 287 deponent verbs (15.0%) have 18 roots whose verbs have both active and deponent forms. See Table 5. Each row in the third column of Table 5 gives a pair of deponent (left) and active (right) forms with the same root. These verbs fall into two sets. In one, a verb lexeme has both deponent and active uses.<sup>7</sup> These are treated at length in Flobert (1975). The remaining set is comprised of pairs where the bare root lexeme is active but a prefixed lexeme is deponent. These are bolded in the table. From them, we conclude that the deponent feature may sometimes reside in the lexeme rather than in the root. In the pair of verbs *frango:* and *refra:gor*, the first shows that the root itself is not deponent. We therefore must say that the lexeme

'to attack' coexists with its corresponding deponent form, but *adorio:* is rare. *-spic-* is a deponent root when it is not followed by the suffix *-i*, but not with the suffix. With *-i*, the verb is always irregular: *spicio:*, *spexi*, *spectum*. Without *-i*, the verb is always regular and deponent: *spicor*, *spicatum*. Minimal pairs like *conspicio:* and *conspicor*, both meaning 'to catch sight of', can be found.

<sup>7</sup> Not all the active forms are listed in the *Oxford Latin dictionary*, but they are all attested in the Perseus online Latin-English lexicon.

**Table 5.** Roots whose verbs have both active and passive forms

Roots whose verbs have both active and passive forms	Number of verbs with such a root	Example verb	Gloss
<i>vers</i>	8	<i>conversor converso:</i>	'to consort/to turn'
<i>plec</i>	6	<i>amplector amplecto:</i>	'to embrace'
<i>lice</i>	4	<i>liceor liceo:</i>	'to bid/to fetch'
<i>palp</i>	3	<i>palpor palpo:</i>	'to stroke'
<i>sent</i>	3	<i>assentior assentio:</i>	'to assent'
<i>veho</i>	3	<b><i>praevehor veho:</i></b>	'to travel/to carry'
<i>fra:g</i>	2	<b><i>refra:gor frango:</i></b>	'to resist/to break'
<i>scisco</i>	2	<i>sciscitor sciscito:</i>	'to inquire'
<i>spern</i>	2	<b><i>aspernor sperno:</i></b>	'to despise/to separate'
<i>volu:</i>	2	<i>convolu:tor convolu:to:</i>	'to whirl round'
<i>cer</i>	1	<i>certor certo:</i>	'to compete/to contend'
<i>facio</i>	1	<i>proficiscor proficisco:</i>	'to set out'
<i>li(:)qu</i>	1	<i>li:quor liquo:</i>	'to become/make liquid'
<i>pasc</i>	1	<b><i>impascor pasco:</i></b>	'to feed'
<i>pergo</i>	1	<i>expergisor expergisco:</i>	'to wake up'
<i>scree</i>	1	<b><i>conscreeor screeo:</i></b>	'to hawk'
<i>tin</i>	1	<i>continuor continuo:</i>	'to encounter/connect'
<i>va:ric</i>	1	<i>praeva:ricor praeva:rico:</i>	'to straddle across anything'

REFRA:GOR bears a deponent feature. We will show below that in some cases a single stem of a lexeme may be deponent. Thus, the deponency feature may be borne by a root, a stem, or a lexeme.

### 3.4. Semi-deponent verbs

A few Latin verbs have in the perfect tenses passive forms only, but with active meanings. They are usually called *semi-deponent* verbs. There are four basic semi-deponent verbs and others derived from them (-*us* is the first person masculine nominative marker; the equivalent form for a regular verb, e.g. *ama:tus sum* 'I have been loved', is passive):

- (12) a. *audeo:, ausus sum* 'to dare'  
 b. *gaudeo:, ga:vi:sus sum* 'to rejoice'  
 c. *soleo:, solitus sum* 'to become accustomed to'  
 d. *fi:do:, fi:sus sum* 'to believe'  
 e. *confi:do:, confi:sus sum* 'to have confidence in'  
 f. *diffi:do:, diffi:sus sum* 'to distrust'

The deponent feature of these semi-deponent verbs is in their perfect stems: *aus-*, *ga:vi:s-*, *solit-*, and *fi:s-*. There is no deponent root in these semi-deponent verbs and no lexeme of these verbs is specified with the deponent feature, because otherwise all of their verb forms besides the perfects should take deponent forms.

## 4. Conclusion

We have shown that several factors play a role in predicting whether a verb in Latin may be deponent. Semantically, Latin deponent verbs tend not to take physically affected objects and a Latin verb derived from a noun or adjective tends to be deponent if its meaning is non-causative. Additionally, a Latin verb is deponent if the deponent conjugational class feature is inherent in its root, though in some cases we need to mark an individual stem or lexeme with a deponent feature.

We shall draw one broad conclusion on the function of the deponent in Latin. After all, that is the greatest puzzle: why should a language have such an anti-iconic phenomenon as the deponent? Why should the marker of passive be used to mark active and even transitive verbs? One possible response is that the deponent verbs are just leftovers from some past age and that the construction has no synchronic ‘psychologically real’ status. Given the strong generalizations that hold over deponent verbs and their senses, however, this conclusion is unwarranted. Rather, the deponent construction does seem to have a coherent synchronic function within classical Latin: it marks non-canonical active verbs. The canonical active verb is one that is high on Hopper and Thompson’s (1980) scale of transitivity. They define transitivity globally as ‘an activity [that] is “carried-over” or “transferred” from an agent to a patient.’ (251). This global property is broken down into a number of parameters. Prominent among these are ‘affectedness of O[bject]’, whether the object is concrete, action vs non-action, and the number of participants. Causative verbs are also clearly high in transitivity.

Latin speakers had a choice at their disposal that speakers of other languages do not: they could inflect an active verb according to either the active system or the system that was used to express passive verbs. What we see is that they used the latter for active verbs only when these verbs were non-canonical. On a more general level, this is an unusual example of a very general principle sometimes called ‘avoid synonymy’ (Kiparsky 1982): when a language gives you two constructions, use them in such a way as to make them non-synonymous. Thus, because Latin speakers had at their disposal both the normal active inflectional system and the *r* system for forming active verbs, they had to find a way to differentiate the two semantically, which they did by using the latter only for non-canonical verb senses. In the end, of course, this solution proved cumbersome, and the deponent verbs disappeared, but when they did, they took the entire *r* system along with them, including any normal means of expressing the passive. To this day, no Romance language has a vibrant passive system, thus showing the power of morphology.

This observation leads to a caution about attempts to unify terminology. Other recent analyses of the Latin deponent (Embick 2000, Kiparsky 2005, Sadler and Spencer 2000) have used the term passive to cover both a syntactic phenomenon (true syntactic passives) and a morphological phenomenon (the *-or* conjugation system, which is used both for syntactic passives and for deponent verbs). By doing so, they disguise a truth that unites syntactic passives and deponents that we have uncovered here: both passives and deponents stand in semantic opposition to the class of canonical (transitive) verbs. In other words, what unifies all the verbs in the *-or* conjugation, both passive and deponent, is not syntax, but marked or non-canonical semantics.

We have not answered the most general question of why Latin had deponent verbs. Rather, we have argued that, since the language had such a construction, speakers had to find some Saussurean value for it within the system of the language and we have tried to explicate that value. Questions for future research remain. For example, do the above generalizations also hold cross-linguistically? Can the relation between Latin deponency and physical affect-ness be deduced from any theoretical framework? We leave these for more ambitious folk.

## References

- Baldi, Philip. 1977. Remarks on the Latin *R*-form verbs. *Zeitschrift für vergleichende Sprachforschung* 90.222–57.
- Bennett, Charles. 1907. *New Latin grammar*. New York: Allyn and Bacon.
- Embick, David. 2000. Features, syntax, and categories in the Latin perfect. *Linguistic Inquiry* 31.185–230.
- Flobert, Pierre. 1975. *Les verbes déponents latins des origines à Charlemagne*. Paris: Belles Lettres.
- Glare, P. G. W. 1983. *The Oxford Latin dictionary*. Oxford: Oxford University Press.
- Hopper, Paul, and Sandra A. Thompson. 1980. Transitivity in grammar and discourse. *Language* 56.251–99.
- Kiparsky, Paul. 1982. Word-formation and the lexicon. *Proceedings of the 1982 Mid-America Linguistics Conference*, ed. By Frances Ingemann. Lawrence, Kansas.
- . 2005. Blocking and periphrasis in inflectional paradigms. *Yearbook of Morphology* 2004.113–35.
- Levin, Beth. 1993. *English verb classes and alternations: a preliminary investigation*. Chicago: The University of Chicago Press.
- Sadler, Louisa, and Andrew Spencer. 2001. Syntax as an exponent of morphological features. *Yearbook of Morphology* 2000.71–96.

