The Transition from haver to ter in Portuguese

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1 Introduction

The basic fact that underlies this paper is that in Modern Portuguese, *ter* is used to indicate possession and as an auxiliary (as in 1) but in Portuguese of the 14th century, both these roles were filled by *haver* (as in 2)\(^1\,\,2\).

(1) a. *Tenho a impressão de que* vim jogar a cabra-cega  
   I-have the impression of thatI-came to-play the    C.  
   ‘I have the impression that I came to play blindman’s bluff.’ (Reis, 1977, p.47)

b. *e dizer que não me tinha ocorrido!*  
   and to-tell that not me(dat) has occurred  
   ‘...and to say that it didn’t occur to me.’ (Reis, 1977, p.71)

(2) a. *ouve hâa irmãa, que avia nome Noema*  
   and he-had a   sister, that has   name N.  
   ‘...and he had a sister by the name of Noema’ (*Bíblia Medieval*, 1958 ed., p.28)

b. *que lhe aviam tomado os seus servos*  
   that him(dat.) they-had took   the their slaves  
   ‘...that they took their slaves to him’ (*Bíblia Medieval*, 1958 ed., p.42)

This paper examines the transition from *haver* to *ter* for possessive and auxiliary uses in Portuguese from the late 1300's to the present. In section 2, I will discuss work which posits a syntactic connection between the possessive and auxiliary uses of *have* and which originally motivated this investigation. Section 3 contains the data and an analysis of it using the Constant Rate Hypothesis (Kroch, 1989b, 1994). Section 4 outlines an alternative, semantic, account of the possessive-auxiliary connection and section 5 attempts to reconcile the data to both the syntactic and semantic accounts. The final section raises some residual questions.

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\(^1\)Actually, this is not strictly true. The primary auxiliary in the 14th century was *ser*, but it is still true that *haver* was infrequently used as an auxiliary at this time and *ter* was never used. See section 3.4

\(^2\)My thanks to Clarissa Surek-Clark for her help with the translations
2 The Possessive-Auxiliary Connection

2.1 Possessive have is Derived from be

I will be adopting the so-called Benveniste-Freeze-Kayne line of thought on the syntactic connection between have and be\(^3\). The inspiration for this approach comes from the diachronic relationship between have and be, noted most prominently in Benveniste (1966). The construction of be + preposition (There is to me) can be reconstructed in Proto Indo-European with the meaning of possession. Possessive have, on the other hand, derives from different verbs in different languages (often from words meaning take or hold) and represents an innovation. For example, in Classical Latin (100 b.c. - 100 a.d.) there were two competing constructions that marked possession, one stemming from the PIE source (is to me) and one representing the innovation (have).

\[
\begin{align*}
(3) & \text{ pecunia } mihi \text{ est} \\
& \text{money(nom) me(dative) is} \\
& \text{‘I have money’} \\
(4) & \text{ pecuniam habeo} \\
& \text{money(acc) have-1st-sing-present} \\
& \text{‘I have money’}
\end{align*}
\]

By the time of early Romance (circa 1000 a.d.), the have construction became the standard way to express possession and the is to me construction dropped out of use. In this way, have replaced the is to me construction. This process of replacement occurred independently in every Indo-European language that has possessive have.\(^4,5\)

Freeze (1992) and Kayne (1993) argue further for a synchronic relationship between possessive have and be. On Freeze’s account, possessive have is a locative copula and is derived by incorporating a locative preposition into be. Freeze argues that the existential construction (ex. 5), the predicate locative (ex. 6), and the possessive have construction (ex. 7) are all derived from the same source, an underlying theme-locative deep structure. (Examples are Freeze (1992) la-1c)

\[
\begin{align*}
(5) & \text{ The book is on the bench.} \\
(6) & \text{ There is a book on the bench.} \\
(7) & \text{ Lupe has a book.}
\end{align*}
\]

Each of these constructions has semantic constraints on their use that distinguish them from their common D.S. Thus, the existential construction displays a strong definiteness effect, the predacate locative construction is dispreferred with a [+human] subject,

\(^3\)Throughout this paper I will us the English words have and be to refer generally to the words in various Romance languages that mean have (avoir, haver, habere, etc.) and be (être, ser, esse, etc.).

\(^4\)I would like to thank Don Ringe for his help with the Latin facts and examples.

\(^5\)However, some languages still use a be + preposition construction to mark possession: e.g. French (est à moi) and German (ist mir). It is not clear whether this is a residual construction or a later innovation.
and the *have* construction is limited to inalienably possessed themes when the subject is [-human]. These constraints are apparently quite common cross-linguistically (Freeze cites data from Russian, Tagalog, Finnish and Chamorro, among other languages) although in most cases (Romance and Germanic languages being notable exceptions) the (possessive) *have* construction surfaces with the same copula as the other two locative constructions, i.e. it surfaces with *be*. On this analysis, then, the *have* form is just an idiosyncratic realization of the copula *be* that arises when a preposition has been incorporated into it.

Kayne (1993) analyzes possessive *have* in substantially the same way: that is, he agrees that *have* is synchronically derived from the incorporation of a preposition into *be*. Kayne differs from Freeze on certain details (for Kayne, the incorporation is motivated by a lack of definiteness and the preposition is not located in a locative phrase but rather in the head of the DP complement of *be*) but these differences are not crucial for the purposes of the present study.

2.2 Auxiliary *have* and Possessive *have*

Kayne (1993) extends the synchronic analysis of possessives to auxiliaries. That is, he argues that *have* in an auxiliary construction is also derived from the incorporation of a null preposition into *be*. The motivation for this extension is basically that *have* and *be* are both used as auxiliaries just as both are used to mark possession.

To fulfill the structural demands of this account, Kayne argues for a complete DP structure below the auxiliary verb. This verb is always *be* underlying, but will surface as *have* when incorporation of the null preposition in the DP occurs. The relevant circumstances for this incorporation are of course rather different than those in the possessive case. Since identifying the conditions on incorporation in the auxiliary structure amounts to indentifying the conditions on auxiliary selection, it is not surprising that the factors Kayne pinpoints (argument structure, object (clitic) raising) are the same as those traditionally associated with auxiliary selection, though they are not obviously related to other instances of incorporation. But, under this analysis, the whole topic of auxiliary selection (i.e., why some verbs are conjugated with versions of *have* and some with versions of *be*) becomes a discussion on the conditions which produce incorporation of the (null) preposition.

Putting aside the details of Kayne’s proposal⁶, the main idea that is important for this study is that Kayne claims that the same syntactic process (incorporation) is responsible for the presence of *have* forms in both possessive constructions and auxiliary constructions.

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⁶I am not terribly happy with Kayne’s particular account of auxiliary selection, as it is very complex and involves a great deal of stipulation. I will not give a detailed account of Kayne’s arguments here, as I have discussed them in a separate paper.
3 The Portuguese Data

3.1 Background

Portuguese became a language distinct from Spanish and Galician around the beginning of the 14th century (Parkinson, 1990). The data for the current investigation begins with the *Biblia Medieval*, which is attributed to the late 14th century by its editor, and extends through the 20th century. Each century is represented in this study by at least one text, though in most cases, by only a single text. The texts used were primarily literary, a few were philosophical and one was a history.

All instances of *haver* and *ter* were extracted from the texts until a minimum number of auxiliary and possessive uses (20) was obtained with the following exceptions: 1) for the 14th century, there simply weren't enough tokens available of auxiliaries with either *have* form; this problem is discussed further in 3.4. 2) for the 16th century, I went through four texts by the same author (Vicente) but was only able to find 14 examples of *have* type auxiliaries.

A complete chart of the number of tokens per verb (*haver/ter*), per use (possessive/auxiliary) per century is in the appendix, along with example tokens from each century.

3.2 The Data

The basic findings have been summarized in the table below. The percentages in the table below are the proportion of *haver* uses as a percentage of all *have* (*haver + ter*) uses in possessive and auxiliary contexts. As expected, the use of *haver* declines over time and the use of *ter* rises as the latter replaces the former.

<table>
<thead>
<tr>
<th>Use</th>
<th>1300's</th>
<th>1400's</th>
<th>1500's</th>
<th>1600's</th>
<th>1700's</th>
<th>1900's</th>
</tr>
</thead>
<tbody>
<tr>
<td>Possessive</td>
<td>95%</td>
<td>54%</td>
<td>19%</td>
<td>18%</td>
<td>17%</td>
<td>0%</td>
</tr>
<tr>
<td>Auxiliary</td>
<td>100%</td>
<td>57%</td>
<td>29%</td>
<td>31%</td>
<td>9%</td>
<td>16%</td>
</tr>
</tbody>
</table>

What is somewhat more interesting is the rate of replacement of *haver* by *ter* in the two contexts examined. The graph below is simply a plotting of the information from the chart above, but it allows us to see that the slopes of the curves for possessive and auxiliary use of *haver* are very similar. A complete statistical analysis has not yet been completed;

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7For the 16th century, I used four texts all by the same author and counted them as a single text. For the 17th century, the text I began with (Portugal) provided data very unlike the rest of the data I was getting so I examined an additional 17th century text (Vieira). The data from these two sources was averaged and the average scores were used in analysis.

8My thanks go to Susan Garrett for her help with classification.

9The proportion of auxiliary uses is somewhat inflated for the 1900's due to the conservative character of the literary dialect.
all that can be said so far is that the possessive and auxiliary curves correlate highly, with $r = 0.97^{10}$.

![Graph showing the proportion of use of 'haver' versus 'ter'.](image)

### 3.3 The Constant Rate Hypothesis

Kroch (1989b, 1994) proposes a model of diachronic change called the Constant Rate Hypothesis (CRH). Underlying this model is the idea that a single language might for a time have two grammars which compete for dominance. Until one of the grammars is

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10If we throw out the data points from the Bíblia Medieval – see section 3.4 for possible reasons to do this – the correlation still remains high, with $r = 0.88$. 

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victorious, variation is expected as sometimes one grammar determines a given structure and sometimes the other grammar will. Since variation along any given dimension is the result of two grammars in competition, we would expect the amount of variation to depend on the abstract competition of grammars: as one grammar becomes more and more dominant, we expect less and less variation. Moreover, since a given piece of the grammar is likely to have effects in multiple constructions in the language, we would expect all of these constructions to depend on the grammar competition in the same way. In particular, we expect the rate of change from one stable set of constructions governed by a given grammar piece to another set of stable constructions governed by the replacement of that grammar piece to be the same for all the constructions in that set. Kroch (1989b) discusses Constant Rate Effects found for a variety of language phenomena.

Within the current study, if Kayne is right that there is a single grammatical process (namely, the incorporation of a preposition into be) governing the creation of have in both possessive and auxiliary contexts, then we would expect there to be Constant Rate Effect in Portuguese as it changes the realization of the incorporation from haver to ter. As noted in the previous subsection, this does in fact appear to be the case.

### 3.4 Early Use of haver

I have so far considered the transition from haver to ter independently from other phenomena in Portuguese. This is, however, somewhat misleading because there is another form, ser, one of the Portuguese forms of be, which is also used as an auxiliary (though it is not used as a possessive). Thus, when I claim that 57% of auxiliary uses are of the form haver, leaving the remaining 43% of auxiliary uses to ter, I am making no claim whatsoever about the prevalence of have auxiliary forms relative to be forms. For most of the texts this fact is not crucial, since they contain, in absolute terms, a reasonably high number of have auxiliaries. However, in the 14th century text, this was not the case.

For the 14th century, I have claimed that all the have auxiliaries used were haver. However, in absolute terms, there were only 3 instances of have auxiliaries found. Thus, although strictly speaking it is accurate to say that haver was the sole have form for auxiliaries for this time period, it is more true to say that haver had not yet fully taken on an auxiliary role by this time. This is in marked contrast to the abundance of haver forms for possessive use in this time period; haver's possessive role appears to be fully established.

This causes certain problems for the CRH analysis because it points to a strong split between the possessive and auxiliary uses for haver and argues against there being a grammatical link between the two uses\(^{11}\). In the next section, I will examine a quite different approach to the possessive-auxiliary connection within diachronic change.

\(^{11}\)There is further, the problem of the rapid transition between the 14th century, where haver is barely used as an auxiliary at all, and the 15th century, where it is quite common and in fact half of the have auxiliary and possessive uses have already been replaced by ter. Most likely, my 14th century text, the Bibila Medieval, represents an extremely conservative dialect, or, just possibly, reflects an attempt at Latinization (recall that in Latin, there were no have auxiliary forms) of this early vernacular bible.
4 A Semantic Account of the Transition

A semantically based account, like that of Vincent (1982), handles the 14th century facts quite naturally. On Vincent’s account, *have*‘s use as an auxiliary is dependent on its first being established as a possessive. The link between the auxiliary use and the possessive use is not essentially grammatical but arises out of the semantic relationship between these two uses. Vincent argues for two factors which lead to the advent of the auxiliary use for possessive *have*, both stemming from its thematic structure (shown below).

(8) **HAVE** + Location(subject) + Neutral(object)

The Neutral role is the most neutral theta role available. Its meaning is “semantically inert, and thus takes its interpretation from the meaning of the verb rather than from any independently definable case function” (Vincent, p.76)\(^{12}\).

This thematic structure links on the one hand with *be*, whose thematic structure is the following:

(9) **BE** + Neutral(subject)

Given the general lack of semantic content inherent in *have* and *be*, plus the similarity of their theta grids, it is easy to imagine how they might be construed as being in complementary distribution: *have* for two place predicates and *be* for one place predicates. Modern Romance language *have* in general used this as a criteria for auxiliary selection.

On the other hand, *have*’s thematic structure interacts with the thematic structure of the participle, which Vincent defines as an adjectival co-occurring with an argument in a Neutral role. Originally, participles with *have* modified the object of the verb (in Latin, *habere*), so that the sentence below meant – at least when Cicero said it – “they have great capital invested in the province” and not “they have invested great capital in the province” (example is Vincent’s number 27).

(10) in ea provincia pecunias magnas collocatas habent
in this province capital great invested they-have

“Capital” (*pecunias*) fills the neutral theta requirement of both *have* and “invested”. The remaining argument, the subject (they), must fill both the location theta role of *have* and the agent role of “invested”. Such a dual theta identification of the subject was required commonly enough by circumstances such as these that it eventually became grammaticalized and the *have* auxiliary construction was born.

Vincent argues for a cline of semantic encroachment. On one end of the cline is Latin, where all auxiliaries are *be* forms. Proceeding down the cline, there are languages (such as French and Italian) which have allowed the possessive *have* form (derived historically from the Latin possessive *habere*) to take over part of the auxiliary usage. Further down the cline are languages which are beginning the cycle over again with the development of

\(^{12}\)Vincent intends ‘case function’ in the sense of Fillmore (1968) where case is more or less equivalent to theta role
ter as a possessive (such as Spanish tener). At the end of the cline is Portuguese, which has allowed the new possessive form to take over all possessive uses and the auxiliary role as well.

Note that on this account, possessive use necessarily precedes auxiliary use, since it is only by virtue of having a possessive theta grid that a verb can begin the semantic encroachment on the auxiliary. This claim corresponds very well to the 14th century Portuguese data, where haver has a strong possessive presence but seems to be just beginning to take on some auxiliary uses. Moreover, there are examples among the possessive uses of ter that correspond to the Latin example above:

(11) e o mesmo Assuero... que tinha sugyto a seu dominio o orbe
and the same A. that has subdued to his power the world
universo
universe
‘and the same Ahashuerus... that had the whole world subdued to his will.’(Vieira, p.84)

(12) mas elle tem tudo feito
but demonstrative he-has all made
‘But he had that one all made’(Vicente, Auto da Festa, p. 112)

However, this account predicts that ter should go through the same process as haver. That is, ter should first establish itself as a possessive and only then begin to take over the auxiliary uses. But, as we have seen in the previous sections, ter comes into both possessive and auxiliary roles at the same rate. Thus the semantic account handles the advent of haver as an auxiliary but it fails to account for the advent of ter in both roles.

5 Paradox and Resolution

5.1 The Paradox

This Portuguese study was undertaken with the aim of determining the nature of the relationship between possessive have and auxiliary have. The data leads to conflicting conclusions. The earliest time period examined supports a semantic account like Vincent’s, and argues that the connection between the possessive use and the auxiliary use, although well motivated semantically, is not a necessary one. Given that have has a possessive use, Vincent presents a plausible story for how it might take on an auxiliary use, but he does not predict that such a transition must happen. Support for his position comes from a language like Spanish, where tener has taken over a portion of the possessive uses of haver but has stopped short of taking over any auxiliary uses.

The later time periods examined, however, paint a different picture. As ter takes over haver’s possessive uses, it also takes over its auxiliary uses. Moreover, the rate of the transition is the same for both uses. Following the CRH, this leads us to suppose that there
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is a syntactic linking between the two uses; as *ter* and *haver* compete in the grammar, both syntactic constructions are affected at the same rate. The question remains, then, What is the connection between possessive *have* and auxiliary *have*? Are they, or are they not, syntactically related?

5.2 The Resolution

At the time of the *Biblia Medieval*, the auxiliary and possessive constructions were completely distinct from a lexical perspective: auxiliaries used *ser* and possessives used *haver*. The fact that *haver* was itself the product of an independent syntactic process of incorporation into *be* is irrelevant to the auxiliary-possessive connection since at this time there is no way or reason to connect the incorporation facts to the auxiliary use of *be*. The process of associating *haver* to the auxiliary construction appears to be consistent with a gradual semantic account such as Vincent’s. Given that *haver* in possessives is derived through a process of incorporation, we must assume that the same process was also transferred to *haver*’s use in auxiliaries.

At this point, the possessive and auxiliary constructions were connected in two ways: first, they both used *haver* and second, they both accommodated the syntactic process creating *haver*. (One can see Kayne (1993) as an investigation into the ways that the auxiliary construction makes this accommodation to incorporation.) Since the lexical replacement of *haver* by *ter* shows a Constant Rate effect across auxiliary and possessive contexts, there must be a unary point in the grammar where the replacement occurs. A likely candidate for such a point is the incorporation process. We cannot therefore say that the possessive and auxiliary uses are themselves connected (since the two constructions can diverge lexically as they do before the 15th century) but we can say that the two are associated by virtue of the fact that the same process (incorporation) is used in both. The work of extending the incorporation process from the possessive construction to the auxiliary construction is accomplished gradually, piggy-backing on the semantic extension of *haver*. The replacement of *haver* by *ter* reflects a change in the incorporation process: *be* + an incorporated preposition no longer yields *haver* but instead yields *ter*. Thus, *ter* does not have to gradually establish itself first as a possessive and then extend to an auxiliary use but instead can enter the language at once in all the places that the incorporation occurs.

6 Remaining Problems

There is one major loose end to the analysis presented here. Recall that in Freeze’s analysis, possessive *have* was part of a paradigm containing both the predicate locative and the existential construction. In many Romance languages (Portuguese among them) both the possessive and the existential constructions surface with *have*.

(13) *Houve* um acidente na rua
had-3rd-sing an accident in-the road
‘There was an accident in the road’ (Williams)
Freeze is somewhat unclear about the derivation of existential have. Since it occurs with an overt locative PP, it is not clear what preposition can incorporate into be to create have. Moreover, Freeze never explicitly states that the existential have construction entails any process of incorporation at all. Still, the spirit of Freeze's analysis seems to require incorporation for this construction as well.

In the current investigation, existential uses of have forms were not collected or tabulated. Nevertheless, it is in fact the case that in both 14th century and 20th century Portuguese haver is used in the existential construction. That is, ter categorically did not take over this use of haver. If the existential have is derived in some way other than by incorporation (e.g., if it is base generated as is) then the fact that ter does not take on this use is a positive finding from the point of view of the current analysis. If, however, existential have is derived from incorporation just as possessive have is, then I have no explanation for why ter did not take over the existential construction.

A related problem is the connection of haber and tener in Spanish. In modern Spanish, haber (cognate to Portuguese haver) is used for possessive and auxiliary uses. Spanish tener (cognate to Portuguese ter) however, has only partially replaced haber in possessive uses and not at all in auxiliary uses. Assuming an incorporation analysis is valid for Spanish as well, I again have no explanation for why the transition to the new form (in this case tener) should stop so firmly halfway.

Thus, the extent to which the current analysis can fit the entire range of data still remains for future research.

7 Appendix

Token Information:

13In French, there is a locative morpheme that co-occurs with have in the existential – the y of il y a. However, I am uncertain whether this could be used as evidence for incorporation of some additional locative phrase, and moreover, even if the argument goes through for French, it might not for Portuguese since there is no equivalent locative marker in Portuguese have existentials.

14In a footnote, Freeze claims that ter is used in the modern existential construction and Clarissa Surek-Clark, a Brazilian Portuguese speaker agrees (p.c). However, Williams' (1942) grammar disagrees, as does A. Esposito (p.c). The differing judgments reflect a trans-Atlantic dialect split in Portuguese. Since all of my data comes from Protugal Portuguese, the Williams and Esposito judgments are more pertinent.
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<table>
<thead>
<tr>
<th>Date</th>
<th>Text</th>
<th>Possessive</th>
<th>Auxiliary</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>haver</td>
<td>ter</td>
</tr>
<tr>
<td>1300's</td>
<td>Biblia</td>
<td>40</td>
<td>2</td>
</tr>
<tr>
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<td>Duarte</td>
<td>275</td>
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<td>7</td>
<td>30</td>
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<td>Portugal</td>
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<td>1700's</td>
<td>Aires</td>
<td>6</td>
<td>30</td>
</tr>
<tr>
<td>1900's</td>
<td>Reis</td>
<td>0</td>
<td>24</td>
</tr>
</tbody>
</table>

Example tokens: (a) examples are possessives; (b) examples are auxiliaries.

14th Century (Biblia Medieval)

(14) a. E Y sac ouve temor de lhe tomarem Rebeca sua molher
      and Isaac had fear of him(dat) take R. his wife
      ‘And Isaac was afraid that someone would take Rebecca, his wife’ (p.48)

 b. que aja cuidado de ajuntar
    which he-had take-care of to join
    ‘which he took care to join together’ (p.66)

16th Century (Vicente texts)

(15) a. Tu nao tens nunhum miolo!
      you not you-have no brains
      ‘you don’t have any sense’ (Exortação Da Guerra, p.40)

 b. Ho frio ho tem trespassado
    the cold the he-has pierced
    ‘The cold that he went through’ (Auto de Deus Padre e Justiça e Misericordia. p.73)

17th Century (Portugal and Vieira)

(16) a. mas os titulos nao tinhao limite
      but the titles not he-had limit
      ‘But he had titles without limit’ (Vieira, p. 84)

 b. tanto Sol hâ dado A um Portugues...
    much sun has given to a Portuguese
    ‘...so much of the Sun was given to a Portuguese (man)’ (Portugal, p. 144)

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15 The data reported here are taken from Russo, 1942
18th Century (Aires)

(17)  a. Essa infiníta variedade dos objectos tem a mesma causa por origem
     This infinite variety of objects has the same cause for origin
     ‘This infinitive variety of objects having the same cause of origin’ (p. 10)

     b. tem feito da terra hum espectaculo de sangue
     it-has made on land one spectacle of blood
     ‘It made a spectacle of blood on the land’ (p.113)

20th Century (Reis)

(18)  a. O Dr. Figueira tinha residência ao alto da villa
     the dr F. has house in high of town
     ‘Dr. F had a house in the good part of town’ (p. 69)

     b. ...que se tivesse suicidado
     which refl he-had committed suicide
     ‘...that he had committed suicide’ (p. 71)

References


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Vicente, Gil (151X) *Auto da Festa.* Reprinted 1906, Lisbon: Impresna Nacional. (16th Century)

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