Transparency in Italian: A diachronic study

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This diachronic study on Latin, Early Italian and Modern Italian is part of the ‘Transparency in Language’ research project conducted at the University of Amsterdam. It studies the ‘transparency’, as defined in Leufkens (2015), of these three stages of the Italian language, asking itself whether there has been a change in the measure of their transparency through time. Two hypotheses are tested: 1) whether heightened language contact in the Middle Ages shows through a relative transparency of Early Italian, or 2) whether Italian has become more opaque through time, like many other languages have. Modelling itself on Leufkens’ (2015) dissertation, written from a Functional Discourse Grammar perspective, it tests for 21 opaque features whether and in which measure they apply to Latin, Early Italian and Modern Italian. The findings show unexpected results with respect to my hypotheses as well as previous findings.

1 Introduction

This paper contributes to the ‘Transparency in Language’ research project led by Kees Hengeveld at the University of Amsterdam and bases itself largely on Sterre Leufkens’ (2015) dissertation Transparency in Language. The dissertation is a typological study which sheds light on the transparency (a term I will explain in more detail below) of 22 languages. It does so from the perspective of the Functional Discourse Grammar (Hengeveld & Mackenzie 2008) framework (henceforth FDG). I refer the reader to Hengeveld & Mackenzie (2008) for a detailed understanding of FDG; I believe it is sufficient here not to give an exhaustive overview of the framework, but rather to explain what ‘transparency’ means in FDG and this research project, and how I will use Leufkens’ (2015) work as a basis for this study. This specific study is a diachronic one, which focuses on Latin, Early Italian and Italian.

1.1 Transparency

Transparency as defined in FDG means that there is a one-to-one relation between meaning and form. Non-transparency then, or opaqueness, obtains
when there is a violation of this principle, e.g. when there is a many-to-one relation between meaning and form. This happens for instance when one unit of form, such as a verbal inflectional suffix, expresses simultaneously tense, mood, person and number, such as in Italian mangi-o (‘I eat’), where -o expresses present tense, indicative mood, and first person singular.

What exactly is a unit of meaning or a unit of form in FDG? A unit of meaning is a unit pertaining to one of the ‘higher’ levels of FDG, i.e. the Interpersonal Level and the Representational Level (IL & RL), which deal with pragmatics and semantics respectively. A unit of form is a unit which pertains to the ‘lower’ Morphosyntactic Level or the Phonological Level (ML & PL), the names of which speak for themselves. Transparency obtains when one unit at the higher levels corresponds to one unit at the lower levels, but that does not cover the whole spectrum of possible interfaces between levels. For example, there can also be a mismatch between IL and RL, such as when a speaker only communicates a pragmatic wish (e.g. wanting a reply or asking for a repetition) without communicating any state-of-affairs to the interlocutor: ‘Hm?’.

The definition then becomes the following:

Transparency obtains when one unit at one level of linguistic organization corresponds to one unit at all other levels of organization. (Leufkens 2015: 13)

Leufkens (2015) goes on to use the shorthand definition ‘one-to-one relation between meaning and form’ to refer back to the definition cited above, and so will I. In her dissertation, she establishes to which extent languages are transparent by counting how many non-transparent features they contain, with the following reason:

[...] it is quite impossible to count transparent features, since in most cases, transparency involves the absence of certain phenomena, e.g. the absence of grammatical gender, and one cannot count what is not there. (Leufkens 2015: 14)

What non-transparent features Leufkens (2015) looked at exactly will be explained under ‘Results’, where I treat each feature separately with respect to their behavior in subsequently Latin, Early Italian and Modern Italian.

1.2 Latin and Italian

A brief discussion of the language(s) studied is in order here. Latin was an Indo-European language originally spoken in Latium in central Italy. It is the mother language of the Romance languages; Italian could be viewed as the most direct
successor if we take into consideration its geographical origin and distribution. Italian is the official language of the Italian Republic and has about 63 million native speakers (Ethnologue, *Italian*). It is relevant here to give a (short) summary of the history of the Roman Empire and Italy for as far as I believe it is relevant with respect to language transparency. I will do this from a perspective that could be of importance for this study: that of language contact. I would say that there has been a historic ‘up-and-down’ in the degree of contact between Italian and other languages; I will focus on this here. The following should not in the slightest degree be taken as an attempt at writing an exhaustive history of Italy.

### 1.3 Quick history of Italy

The fall of the Western Roman Empire, the following Migration Period and the political turmoil during and after it have had a profound impact on European society as a whole – not in the least on Italy (especially northern Italy), which has been exposed to their influences in a substantial measure. I will briefly explain in this section what could be relevant for this study if we take into consideration my hypotheses.

The fall in 476 A.D. of the fledgling Western Roman Empire at the hands of Germanic general Odoacer can be seen as the beginning of ‘barbarian’ disruptions, but more importantly the start of foreign political influences in Italy. Political turmoil characterizes the ages to follow, in which the Gothic War (535–553) and the conquest of northern Italy by the Lombards in 568 – from which the eponymous northern region takes its name – are the most significant events.

Following the Lombard conquest of the North, the South remains under Byzantine influence, bringing about a North-South division that lasts in many respects until this day. There is then the Frankish conquest of the Lombards in 774 by Charlemagne in the name of the Holy Roman Empire, which however does not go hand in hand with mass immigration of Franks; rather, a quickly ‘Italianizing’ elite takes residence in Italy. The Holy Roman Empire holds official power in the following ages, but its actual power eventually diminishes, so much so that in the 12th century Frederick Barbarossa feels the need to reaffirm the command of the Holy Roman Empire over the Kingdom of Italy in northern and central Italy. He attempts to do so by invasion; however, the many northern Italian *comuni* (more or less autonomous city-states) form an alliance, the Lombard League, and resist these attempts. Their defeat of Barbarossa in 1176 is symbolic for the reaffirmation of self-governing Italian peoples. From then until modern times, northern and central Italy has not necessarily been stable as far as their political organization is concerned, but there have been no large-scale immigrations of foreign peoples up until very recently (e.g. African/Middle Eastern refugees). Seen as the northern-central Tuscan dialect.
has subsequently served as the basis of Standard Italian, I will take the previous facts to be linguistically important (Ferroni 1992: 3–5).

During the same period, the South of Italy is politically organized as the Kingdom of Sicily (comprising the island proper as well as part of the peninsula) which is controlled by the Angevins; following the rebellion of the Sicilian Vespers in 1282, Sicily oxymoronically secedes from the Kingdom of Sicily; this is seen as a symbol a self-affirmation of an Italian people as well (Ferroni 1992: 5–8). In the many ages to come, the South suffers many rulers from many nations; this gives much political instability and also has substantial cultural impact: linguistically, we for example see artefacts of Greek influence in Calabrian dialects and influence of both Greek and Arab in Sicilian (Sala 2013). Standard Italian however is, as said, essentially based on a northern variety, so this social, cultural and political truth of Italy is of lesser relevance for this study.

2 Hypotheses & predictions

It has been stated by many that, absent contact, languages change from being more transparent to less transparent through time. On the basis of this, my first hypothesis is that Italian has become more opaque through time. The relevant prediction would be that (some) transparent features in Latin and/or Early Italian have become (more) opaque in Modern Italian.

However, many languages can be seen to have changed in the opposite direction, i.e. from opaque to transparent; one explanation given for this is precisely that of language contact (Leufkens 2015: 43–44). Because of the history of the Roman Empire, we might expect that language contact has had an impact on the Romance spoken in Italy. On the other hand, in modern times the Italian language has had far less second-language learners than, say, English or Spanish, which might root against Italian having become more transparent through contact.

In Section 1, I gave an extremely concise review of Italian history for as far as I deem possibly relevant for this study. On the basis of this history and of what has been theorized and found about language contact with respect to transparency, I posit a second hypothesis: Latin/Italian has undergone a rise and fall in transparency. The prediction is that however opaque or transparent Latin may be, Early Italian is relatively the most transparent for reasons of contact, and after that, Italian has become more opaque due to relative isolation compared to the Middle Ages. This holds especially for Modern Italian, because Italy has been a sovereign, unified nation state privy of foreign political influence since 1861, without having received large amounts of immigrants up until only very recently.
3 Method

This paper investigates whether, from Roman civilization to modern times, Italian has undergone a change in transparency as defined in Leufkens (2015). I will search for the answer to this question primarily through the study of reference grammars (Renzi, Salvi & Cardinaletti 2001; Salvi & Renzi 2010; Pinkster 2015); in addition, book(s) (sections) and articles dealing with specific linguistic phenomena for the varieties studied will be consulted.

3.1 Sample

To test my hypotheses (explained in detail below), I will study the following stages of the language:

- Different varieties of Latin (200 B.C. – A.D. 450)\(^1\)
- Early Italian (italiano antico, 1200–1300)
- Modern Italian (1950–)

The reason for studying these periods is that to test the hypotheses which presuppose the mentioned ‘up-and-down’ of contact, and by consequence possibly an up-and-down of the transparency of the language, three periods suffice. The motivation for choosing these exact periods is that comprehensive grammars exist for Latin and Early Italian: respectively Pinkster (2015) and Salvi & Renzi (2010). As a heritage speaker of Modern Italian, I will rely on my personal competence in the language; in case of doubt, a native speaker from Northern Italy (Genoa) is asked and/or the Grande grammatica di consultazione (Renzi, Salvi & Cardinaletti 2001) is consulted.

Of these language stages, I will study the same features as in Leufkens (2015). These features will be categorized as being opaque or transparent; where it is opportune, I categorize them along a ‘gradient’ of transparency, i.e. I will take into account the fact that features are never one-hundred percent transparent or opaque, but that they rather find themselves somewhere on a transparency spectrum. The terms used, going from less to more transparent, are the following:

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\(^1\) The corpus of Pinkster’s (2015) syntax consists of a wide variety of texts from authors with different styles, levels of proficiency and purposes of communication (from poems to letters to public announcements etc.). The fact that they are from a period spanning six centuries adds a diachronic element as well. The two most cited sources, often in combination to account for this diachrony, are 1) comedies in verse by Plautus (251–184 B.C.) and 2) private correspondences and speeches delivered in court by Cicero (106–43 B.C.). Furthermore, commentaries by grammarians and writers on rhetoric are taken into account.
- opaque
- mostly opaque
- quite opaque
- somewhat opaque
- transparent

3.2 Glossing

The glosses in this work are in accordance with the Leipzig Glossing rules. In principle, every gloss is done by me, as the authors of the exploited reference grammars do not gloss their examples. For every example, I gloss in detail what is necessary to elucidate the argument I am making; other parts of the example are glossed in less detail. Also, target language text are in bold text whenever I believe it is useful to highlight part of the example. Both choices above (amount of detail and bold text) are made mainly for the sake of readability and ease of comprehension.

For example, in example (1) below I gloss Latin *meus* as “my-SG.M.NOM”, because the number, gender and case morphology is relevant to the feature I am discussing (phrasal agreement). In contrast, in example (12) I gloss Italian *mia* as just “my”, because the details of its number and gender morphology are irrelevant to the feature discussed (tense copying).

4 Results

4.1 Redundancy

Redundancy is the multiple formal expression, be it lexical, morphological, phonological or syntactic, of single pragmatic, semantic or morphosyntactic components. The latter could all be expressed one single time, but instead they are repeated: they are redundant and as such give rise to one-to-many relations between meaning/conceptual units and formal units.

4.1.1 Clausal agreement or cross-reference

Clausal agreement is defined as the expression of semantic and/or formal properties of an argument on the predicate. These properties can for example be person, number, gender and grammatical role; in the case of Latin-Italian, the argument in question is the subject.

Cross-reference is defined as the optional dropping of arguments, such that the predicate agrees with (an) argument(s) that is not overtly expressed; rather, it is present in the Contextual Component as defined in FDG (Leufkens 2015: 51, 54). Clausal agreement and cross-reference are non-transparent, because they involve a one-to-many meaning-to-form relation.
Latin

Subject-predicate agreement is one of two forms of grammatical agreement in Latin (the other being noun-modifier agreement). Verbal morphology in principle matches that of the subject of the clause with respect to person and number (1); in the case of nominalized forms, such as participles, it matches their number, gender and case properties. Latin allows for the dropping of arguments when they are present in the Contextual Component (2), so Latin is a cross-referring language (Pinkster 2015: 72).

(1) \textit{Pater huc me mis-it ad vos ora-tum me-us.}
\begin{tabular}{ll}
father,SG.M.NOM & here me send,PRF-3SG.PRF to you plead,PRF.PTCP my-SG.M.NOM
\end{tabular}
\textasciitilde{My father sent me here to plead with you.} (Pinkster 2015: 1243)

(2) \textit{Nullum adolescent-em plus am-o.}
\begin{tabular}{ll}
NEG & adolescent-M.SG.ACC more love-1SG.PRS.IND
\end{tabular}
\textasciitilde{There’s no young man I love more.} (Pinkster 2015: 67)

Early Italian

In Early Italian, as a general rule the predicate agrees with the subject. For finite verbs this means agreement in person and number, and for nominal(ized) and/or adjectival verb forms this means agreement in number and gender. Overt, (pro)nominal expression of the subject is not obligatory; if it is not expressed, the context determines the form of the verb. Thus, Early Italian is a cross-referring language just as Latin was before and Modern Italian would be after (Salvi & Renzi 2010: 547).

An interesting exception to the above occurs with the perfect participle when it is used in impersonal constructions (3):

(3) \textit{si-a impost-o loro degni-a penitentia.}
\begin{tabular}{llll}
be,SG.M.SBJ & impose,PRF.PTCP-M.SG & to.them appropriate-F.SG & punishment
\end{tabular}
\textasciitilde{Suitable punishment be imposed upon them.}

In this context the unmarked masculine singular form is used (Salvi & Renzi 2010: 562). What is interesting about this example is that this lack of agreement is ungrammatical in Modern Italian, which is more regular in this respect.

Early Italian thus shows exceptions to its general rule of subject-verb agreement, but not in a way that can be semantically motivated; rather, the
motivations for deviating from the standard pattern are morphosyntactic. Concluding then, Early Italian is opaque with respect to this feature.

**Modern Italian**

Like its predecessors, Modern Italian exhibits cross-reference: the unobligatory, overt expression of the subject is pragmatically motivated, but the predicate *does* have to agree in person and number with the subject, whether expressed or not. For example, if it is clear that in a conversation the participants are talking about a particular person, (pro)nominal expression of that person as the subject of a clause is unnecessary and even pragmatically infelicitous:

(4) a. \( Cosa \text{ sta facendo } \text{ Gianni? } \)  
\[ \text{ what AUX.PROG.3SG.PRS.IND doing Gianni} \]  
‘What is Gianni doing?’

b. \( (??Lui) \text{ sta ballando. } \)  
\[ \text{ He AUX.PROG.3SG.PRS.IND dancing} \]  
‘He is dancing.’

In (4a) we see that the finite verb (which is the progressive auxiliary) agrees with the subject (Gianni); in (4b) we see that the auxiliary still agrees with the subject, even though it is not expressed. (4b) is the neutral response to (4a); expressing *Gianni* or pronominal *lui* (‘he’) in that sentence would be either pragmatically infelicitous, because it is clear that it is Gianni that is being talked about, or it would serve the purpose of foregrounding the fact that Gianni is dancing, but someone else is not. Thus, Modern Italian is opaque with respect to this feature, because it exhibits cross-reference.

### 4.1.2 Phrasal agreement

Phrasal agreement is defined as the expression of semantic and/or formal properties of nouns on their modifiers (Leufkens 2015: 55). These properties can for example be number, gender, case, noun class, etc. Phrasal agreement is opaque, because it involves a one-to-many meaning-to-form mapping.

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**Latin**

Noun-modifier agreement is the second form of grammatical agreement in Latin. It is expressed by an agreement in number, gender and case of the modifiers noun phrases with their respective heads (Pinkster 2015: 1272). Latin
thus has phrasal agreement, as we could already see in (1), where *pater* is singular, masculine and in (non-overt) nominative case, and the possessive takes the nominative singular masculine suffix -*us*.

**Early Italian**

Early Italian also shows phrasal agreement: in a noun phrase that is modified by an adjective, the adjective agrees with the noun in number and gender – case morphology is lost in Early Italian.

(5) *lingu-a*  *ebre-a*  *e  grec-a*
language-\text{f.sg}  Hebrew-\text{f.sg}  and  Greek-\text{f.sg}
‘Hebrew and Greek language’

(6) *due nom-i*  *grec-i*
\text{two name-m.pl}  Greek-m.pl
‘two Greek names’  \cite{Salvi&Renzi:2010:605}

Thus, like Latin, Early Italian is non-transparent when it comes to phrasal agreement.

**Modern Italian**

Modern Italian is essentially the same as Latin and Early Italian for what concerns phrasal agreement: as Leufkens (2015: 55) already shows, phrasal agreement is present in Italian. Further, examples (5) and (6) are grammatical in Modern Italian. Only the conclusion that Modern Italian is as opaque as its predecessors with respect to phrasal agreement need be added here.

4.1.3 **Plural concord in noun phrases containing a numeral**

Plural concord is the simultaneously lexical and grammatical expression of the semantic property of number, i.e. through the use of both a numeral and a plural-marking affix \cite{Leufkens:2015:56–57}. It is non-transparent in the sense that there is a one-to-many meaning-to-form relation.

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**Latin**

Count nouns are always marked for number, whether a numeral is present or not. When there is a numeral present, the noun still takes plural morphology:
Latin is thus opaque with regard to numeral concord.

**Early Italian**

In the previous section we saw that adjectives agree with their head noun; numerals can be used as adjectives in Early Italian, and they form no exception to the phrasal agreement rule – so Early Italian is opaque with respect to plural concord:

(8) _e però convien-e che questa un-a scienz-a [...]
and thus be.convenient-3SG.PRS.IND that this-F.SG one-F science-F.SG
si-a partit-a in tre scienz-ie
be-3SG.PRS.SUBJ divide.PFV.PTCP-F.SG in three science-F.PL
‘and so this one science should be divided into three sciences’

(Salvi & Renzi 2010: 390)

**Modern Italian**

Modern Italian is as opaque as its predecessors in showing plural concord with numerals:

(9) _un gatt-o
one cat-M.SG
‘one cat’

(10) _quarantaquattro gatt-i
forty-four cat-M.PL
‘forty-four cats’

4.1.4 **Tense copying**

Tense copying, or *consecutio temporum*, involves the expression of the tense of the main clause in the embedded clause. For example, the verb of an embedded clause can be in the past tense purely because the verb of the main clause is in the past tense: in languages with tense copying, the verb of this embedded clause has to be interpreted as occurring at the same time as that of the main clause. This feature is opaque, because the expression of tense in the embedded clause

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is motivated by morphosyntax and not by semantics or pragmatics; as such, there is a null-to-one meaning-to-form relation (Leufkens 2015: 61–62).

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Latin  
In subordinate clauses, Latin allows for a) absolute tense marking as well as b) relative tense marking: a) is tense marking in relation to the speaker’s position in time, and b) is tense marking with the tense of the main clause taken as a reference point. The latter strategy, shown in (11), is statistically predominant in writers such as Cicero and Caesar, and according to Pinkster (2015: 557) “seems to have been the ‘default’ option”. It being the go-to strategy nevertheless did not mean that it was grammatically obligatory; rather, it was a semantically motivated decision from which could be departed if, for example, the time of the expressed event with respect to the time of speaking was to some degree relevant (12) (Pinkster 2015: 552–558).

(11) Dux impera-vit ut milites proced-erent.  
commander order-3SG.PRF that soldiers proceed-3PL.IPFLV.SUBJ  
‘The commander ordered that the soldiers move forward.’

(12) Dux impera-vit ut milites proced-ant.  
commander order-3SG.PRF that soldiers proceed-3PL.PRS.SUBJ  
‘The commander ordered that the soldiers move forward.’

Both sentences are grammatical; the difference in meaning would lie in that in (11) the soldiers’ moving forward would have to take place in the past, whereas in (12) the commander’s past order is still relevant in the present. Concluding, we can say that sequence of tenses is possible, but not obligatory; Latin is thus somewhat opaque in this respect, but not entirely.

Early Italian  
As in Modern Italian, Early Italian subordinated clauses are subject to a mechanism of tense concordance with respect to the main clause (Salvi & Renzi 2010: 921). This makes Early Italian opaque with respect to tense copying.

(13) Addomand-o che mi fa-cciate ragione.  
ask-1SG.PRS.IND that to.me do-2PL.PRS.SUBJ right  
‘I ask that you do me justice.’
Addomand-ava che lli fa-cesse ragione.
ask-3SG.PST.IPFW.IND that to.him do-3SG.PST.SUBJ right
‘He asked that he’d do him justice.’

However, like Latin, in some contexts Early Italian does allow for the use of absolute tense: whereas it prefers the use of relative tense between matrix and complement clauses, it prefers absolute tense in relative and adverbial clauses (Salvi & Renzi 2010: 922):

L’altre donne, che non son-o si belle com’io
the other women who not be.PRS-3PL.PRS.IND as beautiful as I
er-ano sguardate; e io no, per mia laida cotta.
be.PST-3PL.PST.IPFW.IND looked.at and I not for my ugly tunic
‘The other women, who aren’t as pretty as I am, were looked at – but I wasn’t, because of my ugly dress.’

This difference in preferences, i.e. relative tense for complement clauses vs. absolute tense for relative/adverbial clauses, is present in Early Italian, but not as clear-cut and as systematic as in Modern Italian (Salvi & Renzi 2010: 933).

Modern Italian

The same as for Latin and Early Italian, absolute and relative tense are grammatical in Modern Italian:

Gli chied-o se dev-o telefonare.
to.him ask-1SG.PRS.IND if must-1SG.PRS.IND call
‘I(‘ll) ask him if I should call.’

Gli ho chiesto se dov-evo telefonare.
to.him have-1SG.PRS.IND asked if must-1SG.PST.IPV.IND call
‘I asked him if I should call.’

Gli ho chiesto se dev-o telefonare.
to.him have-1SG.PRS.IND asked if must-1SG.PRS.IND call
‘I asked him if I should call.’

(16) and (17) are unmarked in Modern Italian; (18) is perfectly acceptable, but with a more restricted meaning: reminiscent of (12) for Latin, it specifically means that the speaker has asked in the past whether she should call at the moment of speaking.
As stated above then, Modern Italian has a preference for relative tense in complement clauses, and for absolute tense in relative and/or adverbial clauses. Modern Italian is in this respect slightly different than Early Italian, but it nonetheless is as opaque as both its predecessors: tense copying is the unmarked strategy between dependent clauses, but absolute tense is grammatical as well in semantically more specific contexts.

4.2 Discontinuity

Units are discontinuous when their integrity is violated, that is when meaning units that constitute one morphosyntactic or phonological unit are truncated and separated, resulting in a discontinuous formal item. This means that a single meaning unit is distributed overall multiple formal units, which results in a one-to-many relation between meaning and form

4.2.1 Extraposition & extraction

Extraposition and extraction are defined as the discontinuous, or ‘broken’, expression of head-modifier complexes. Extraposition involves the discontinuous expression of the modifier to the right of its head; extraction means the opposite. Both are considered non-transparent because they bring about a one-to-many meaning-to-form relation (Leufkens 2015: 63–64).

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Latin

Returning to example (1) (repeated below), we can also see that extraposition is possible in Latin: the expression of a modifier non-adjacently to its head, i.e. at the end of the sentence:

(1) *Pater* *huc me mis-it ad vos ora-tum me-us.* 
father.SG.M.NOM here me send.PRF-3SG.PRF to you plead.PRF.PTCP my-SG.M.NOM  
‘My father sent me here to plead with you.’ (Pinkster 2015: 1243)

We see here that modifying *meus* appears non-adjacently to its head *pater*, which shows us that Latin allows for the morphosyntactic separation of elements that belong together at the Representational Level. Extraction is the opposite of extraposition in the sense that it involves the non-adjacent expression of a modifier to the left of its head, and it too is possible in Latin:
Here we can see that the modifier *meum* is expressed to the right of its head *vidulum*. Latin is thus an opaque language with respect to this feature.

**Early Italian**

Extraposition is more common in Early Italian than in Modern Italian. The antecedents are typically definite, preverbal subjects or complements that have been ‘anteposed’ into preverbal position; the relatives are in postverbal position (Salvi & Renzi 2010: 504):

(20) *Le promesse non sono da osservare che non sono utile.*
    the promises not are to observe that not are useful
    ‘Promises that aren’t useful shouldn’t be kept.’
    (Salvi & Renzi 2010: 505)

It is questionable however if the kind of extraposition possible in Latin, i.e. of an adjective from its head noun, as in (1) and (19), is possible in Early Italian. The closest resemblance of discontinuous placement of modifiers I found is with coordinated adjectives, which is possible in Early Italian:

(21) *Ciò è amar-a parol-a e noios-a.*
    that is bitter-F.SG word-F.SG and painful-F.SG
    ‘That is a bitter and painful story.’
    (Salvi & Renzi 2010: 601)

Of course we have discontinuity in the head-modifier complex in (21), but as a whole there is nothing that comes in between the head and its modifiers. As such, I would say Early Italian is opaque, but less so than Latin: it does allow for extraposition, but not to the extent that Latin does.

**Modern Italian**

As I said above, extraposition is less common for Modern Italian than for Early Italian. However, it is still perfectly acceptable under the right pragmatic conditions. For example, a close translation of Leufkens’ (2015: 64) examples for English gives three grammatical Modern Italian sentences:
(22) *Abbiamo* **parecchi libri importanti sul riscaldamento globale**
we.have several books important about warming global

in negozio.
in shop

‘We have several important books about global warming in stock.’

(23) *Abbiamo* **parecchi libri importanti in negozio sul riscaldamento globale.**
we.have several books important in shop about warming global

‘We have several important books about global warming in stock.’

(24) *Sul riscaldamento globale abbiamo parecchi libri importanti***
About warming global we.have several books important

in negozio.
in shop

‘About global warming we have several important books in stock.’

Thus, Modern Italian is opaque with respect to this feature, because it allows for extraction/extraposition. Basing myself on Salvi & Renzi (2010: 504) however, I characterize Modern Italian as more transparent than Early Italian, because the former allows for less extraposition than the latter.

4.2.2 Raising

Raising is defined as the behavior of an argument that belongs semantically to an embedded clause, as a syntactic argument of the main clause. Akin to extraposition/extraction, this creates a mismatch between meaning and form, so it is non-transparent (Leufkens 2015: 65–66).

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<tbody>
<tr>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

**Latin**

Latin allows for the extraction of arguments from embedded clauses to main clauses. This happens for example in accusative and infinitive (AcI) constructions, where the nominative subject of an embedded clause ‘raised’ to the object position of the main clause, where it receives accusative case. The latter fact proves that it behaves as an argument of the main clause. The construction is in fact present in English, albeit in a less obvious way: in English
it is possible to say both *I see that he runs to the store* and *I see him running to the store*. In the first sentence, *he* is the subject of the embedded clause introduced by *that*, where it has received nominative case according to some theoretical accounts (Schoof 2004: 25); in the second sentence, *him* is the object of the main clause, so it receives accusative case – which becomes obvious through the use of the pronoun *him*. In Latin, the same happens:

(25) *Vide-o Caesar-em infirm-um esse.*

\[ \text{see-1SG.PRS.IND Caesar-M.ACC ill-M.ACC be-INF} \]

‘I see that Caesar is ill. (lit. I see Caesar be ill.)’

It might be interesting to note that it is debatable whether Latin also exhibits raising-to-subject. An English example of raising-to-subject is *John seems ill*, which has the complement-clause counterpart *It seems that John is ill*. The only Latin verb that appears to show such behavior is *videor*, which Jøhndal (2013) treats exactly the same as English *seem*; he uses it for his discussion of raising in Latin. However, this ignores the fact that *videor* is formally speaking the passive voice of *video* (‘I see’). This means that any construction where *videor* appears, may better be described as a passive construction: *videor infirmus* then could very well be translated as ‘I seem ill’, but the literal translation should be ‘I am seen ill’. This view is corroborated by the fact that other Latin verbs do not allow this behavior, whereas this is possible for English:

(26) It appears that John is weak.

(27) John appears to be weak.

(28) *Quid rectum sit appareat.*

\[ \text{what right is appears.} \quad \text{(Pepicello 1977: 212)} \]

(29) *Marcus appareat mortuus esse.*

\[ \text{(Pepicello 1977: 212)} \]

The reader is referred to Pepicello (1977) and Jøhndal (2013) for a more detailed discussion of raising in Latin. Here, it suffices to say that Latin exhibits raising, because constituents can be raised from embedded clauses to main clauses.

*Early Italian*

Early Italian verbs *seembrare, parere, apparire, convenire/bisognare* (‘seem’, ‘seem/appear’, ‘appear’, ‘be convenient/necessary’) all allow for the raising of the subjects of the complement clauses that they govern (Salvi & Renzi 2010: 828–829):
In (30), the main verb takes a regular complement clause. In (31) however, *queste cose* behaves as the subject of the matrix clause; we can see this from the verbal morphology of the finite verb. Whether raising-to-object was also possible in Early Italian does not become evident from the reference grammar. However, Early Italian does exhibit raising, and is by consequence opaque in this respect.

Modern Italian

Modern Italian is non-transparent with respect to this feature, because it exhibits raising of arguments from embedded clauses to main clauses. The classic example is of course a construction with *sembra* (‘seem’):

(32)  
\[ \text{Sembr-a che Gianni si-a malato.} \]  
\[ \text{seem-3SG.PRS.IND that Gianni be-3SG.PRS.SBJ ill} \]  
‘It seems that Gianni is ill.’

(33)  
\[ \text{Gianni sembr-a essere malato.} \]  
\[ \text{Gianni seem-3SG.PRS.IND be-INF ill} \]  
‘Gianni seems to be ill.’

Raising-to-object is allowed in some contexts, but not all. It seems, for example, that it is more acceptable with past tense than with present tense:

(34)  
\[ \text{Ho visto che Gianni andava a scuola.} \]  
\[ \text{I.have seen that Gianni was.going to school.} \]

(35)  
\[ \text{??Vedo Gianni andare a scuola.} \]  
\[ \text{I.see Gianni go to school.} \]
4.2.3 Circumfixes

Circumfixes are bipartite affixes which pertain to one semantic unit, but are expressed in two, discontinuous elements. For example, Dutch employs circumfixes for the formation of past participles:

(36) \textit{lop-en}  \\
    \textit{walk-INF}

(37) \textit{ge-lop-en}  \\
    \text{PST.PTCP-walk-PST.PTCP}

Circumfixes are opaque in the sense that there is a one-to-many meaning-to-form mapping (Leufkens 2015: 66).

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>transparent</td>
<td>transparent</td>
<td>transparent</td>
</tr>
</tbody>
</table>

Latin, Early Italian & Modern Italian

Pinkster’s (2015) grammar about Latin does not mention circumfixes, nor can I think of or find any. The same holds for Early Italian (reference grammar by Salvi & Renzi (2010)), as well as for Modern Italian. For this reason I characterize all stages of the language as transparent.

4.2.4 Infixes

Infixes are affixes that are inserted into an existing stem, splitting the stem into multiple parts. Because infixes create discontinuity in the unit that they attach to, they are non-transparent: they ‘break up’ what would otherwise be a transparent one-to-one meaning-to-form relation (Leufkens 2015: 66).

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>somewhat opaque</td>
<td>transparent</td>
<td>transparent</td>
</tr>
</tbody>
</table>

Latin

A case could be made for the existence of infixation in Latin: the -\textit{n}- in the verb vinc-\textit{o} (‘win’) for example, shows the properties of an infix in that it breaks up the stem used for the verbs with the perfect stem vic-, adding the -\textit{n}- for those with the present/imperfect stem (\textit{Verbix}: Latin: vinco). This nasal infix also appears in other verbs verbs like confundo and rumpo (‘diffuse’, ‘break’), etc., which have perfect stems confud- and rup- respectively (\textit{Verbix}: Latin: confundo; Latin: rumpo). It appears that Latin and Greek among others have
Inherited this nasal infix from PIE in which it marked the ‘infectum’, or non-perfect tenses, as opposed to perfect tenses for certain stems (Laurent 1999).

Now this might be seen as a case of irregular stem formation, but that would ignore the clear indications we have of its meaning component, which appears quite clear and predictive for the stem forms that it changes. The process in Latin does in fact seem fairly regular for some verbs, as we can see from vinco, confundo, rumpo etc., but it is not for others: ping-o (‘paint’) for example has perfect past participle pict-us, but perfect indicative pinx-i, where the nasal infix does appear in a perfective stem. Thus, we have a not so clear-cut case of an opaque feature: yes, the PIE ‘infectum’ nasal infix does appear in Latin, but it does so only for certain stems and it seems to have already undergone some irregularisation and loss of productivity in the stems in which it did appear. For the sake of completeness, I will point out that the fact that it was not a productive infix for all verbs means that it was not fully productive in the first place. For these reasons, I will characterize Latin as somewhat opaque: infixation was not a fully productive process in Latin, but it did exist and it was inherited from quite a productive system of infixation with a clear meaning component.

**Early Italian**

I characterize Early Italian as transparent with respect to infixation, because Salvi & Renzi (2010) does not mention the process and it can quite safely be assumed that the erosion of the Latin infixation system would all but be complete in Early Italian.

**Modern Italian**

I characterize Modern Italian as transparent with respect to infixation as well; there is certainly no productive system of infixation in the language.

### 4.3 Fusion

Fusion obtains when more than one pragmatic or semantic unit is expressed in a single form. As such, there is a many-to-one relation between meaning and form.

#### 4.3.1 Cumulation of TAME & Cumulation of case

Cumulation, more commonly known as fusional morphology, is defined as the joint expression of multiple semantic and/or pragmatic units into one grammatical unit, which can be affixes or grammatical words. Cumulation involves ‘portmanteau morphemes’, i.e morphemes that express multiple meanings which cannot be teased apart by looking at the form of the morpheme.
As such, they produce a many-to-one relation between meaning and form, which makes them non-transparent.

Some meanings are typologically likely to be expressed jointly, such as number and gender. In languages with case morphology, case is frequently fused with these, but not necessarily. Languages that do this are characterized as opaque by Leufkens (2015: 70), and so will they be here. Another domain in which fusion is likely to take place is the verbal domain, where tense, aspect, mood and evidentiality can all be expressed into portmanteau morphemes, see (38) – (40). Again, languages that do this are considered opaque (Leufkens 2015: 68–71). Following Leufkens (2015), I treat both forms of cumulation in the same section; it is useful however to treat them as separate features, considered the languages studied.

<table>
<thead>
<tr>
<th>TAME</th>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>case</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td></td>
<td>case</td>
<td>does not apply</td>
<td>does not apply</td>
</tr>
</tbody>
</table>

Latin

Latin verbs take fusional inflectional morphology: alongside the expression of person and number, tense and mood are also marked within a single inflectional ending. For example, currere (‘run’) may take the following finite forms:

(38) **curr-o**
    run-1SG.PRS.IND
    ‘I run’

(39) **curr-es**
    run-2SG.FUT
    ‘you will run’

(40) **curr-at**
    run-3SG.PRS.SUBJ
    ‘that/may he run’

As we see in (38) – (40), person, number, tense and mood are all encoded in one portmanteau morpheme.

Apart from the verbal domain, Latin exhibits cumulation in the nominal domain as well: nouns and adjectives are marked for number and gender, as well as for case – all within a single portmanteau morpheme. Let us consider the noun *dominus*, -a (‘master’, ‘mistress’) and the adjective *bonus* (‘good’):
Not only can we see from the examples above that case is cumulated with number and gender in Latin, it also shows ambiguous meaning-to-form mapping in some cases, as in (43): some nominal inflections with the same form may have different meanings. Considering all that is said, Latin is a highly opaque language with respect to cumulation of TAM(E) and case.

Early Italian

A great difference between Early Italian and Latin is of course the loss of the productive case system. The functions of the cases have been overtaken by prepositions, and the basic form of nouns most often resembles the Latin singular ablative. Case is only visible in the pronominal paradigm, as in many other languages which have lost their productive case system (cf. English, Dutch as opposed to German). Cumulation of case then does not apply to Early Italian.

However, what Early Italian has in common with Latin is the cumulation in the verbal domain of tense and mood with person and number. It need be said that for some tenses, one can actually tease apart a ‘tense part’ of the affix and a ‘person-and-number part’, as for example for the imperfect: for example, as is visible in Table 1, every imperfect contains -av- as part of the affix; the last part of the affix is then person-and-number dependent. However, the person-and-number inflection is very similar to its counterpart for the present, but not quite the same – it is somehow influenced by the fact that is attaches to an imperfect verb form. In other words, it is not -av- exclusively that gives the imperfect meaning. As for other tenses then, for example the perfect, the stem for the present and the perfect are identical, and tense can only be recognized by the inflection. In Table 1, I exemplify the above at the hand of addomandare (‘ask’), a verb which we will see more of in this paper, in its present, its imperfect and its perfect form:
Table 1 shows the somewhat mixed behavior of Early (and Modern) Italian verbal inflection with respect to person, number, tense and mood: in some cases tense and mood are clearly cumulated with person and number (present & perfect), while in other cases tense can be recognized from a separate affix, as for example -av- for the imperfect. However, for the imperfect also the ‘termination’, i.e. the final affix as it is called by Salvi & Renzi (2010: 1431), shows tense-specific forms; we only need to look at the 1st person singular and plural to see this. As such, I would say that cumulation of person and number with tense and mood is very much present in Early Italian.

Thus, considering all the above, I characterize Early Italian as opaque with respect to cumulation of TAM(E), but not regarding cumulation of case, which does not apply to Early Italian because of the loss of the case system.

Modern Italian

Modern Italian is virtually the same as Early Italian with respect to cumulation of TAM(E) and case: productive case is not present, and tense and mood are cumulated with person and number in verbal inflection; Table 1 could be repeated here for the equivalent Modern Italian domandare, which shows the same inflection as Early Italian addomandare. Thus, Modern Italian is opaque with respect to this feature in the verbal domain; in the nominal domain this feature does not apply.

4.3.2 Suppletion

Suppletion is defined as a morphological process in which for a single lexeme, different stems that are underivable from each other are used to mark grammatical information. In English for example, the past simple of ‘to walk’ is plainly derivable from the stem + inflection: ‘I walk-ed’. On the other hand, the same is not the case for ‘to go’: past simple ‘I went’ is not derivable from the stem that holds for present simple ‘I go’; this is an English case of suppletion. Suppletion is non-transparent because it means that one meaning component can
be expressed by different forms, which results in a one-to-many mapping of meaning onto form (Leufkens 2015: 71–72).

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

**Latin**

Latin possesses suppletive verbs such as *sum* and *eo* (‘to be’, ‘to go’) (Pinkster 2015: 53). The different verb forms are unpredictable in the sense that they are underivable from each other, and as such suppletive. One simple example is the fact that ‘to be’ has infinitive *esse* and first person singular present *sum* – these two forms are underivable through regular Latin verbal inflection.

**Early Italian**

As in Modern Italian, *andare* (‘to go’) is an irregular verb which has two suppletive stems: *and*- and *vad*-, the latter sometimes in complementary distribution with v-: *vad-o* vs. *v-o* (‘I go’). A good example of the suppletion between *and*- and *vad* is for the first person indicative singular vs. plural: *vad-o* vs. *and-iamo* (Salvi & Renzi 2010: 1480). This is only one example of suppletion, but more verbs behave like this in Early Italian, such as *essere* and *avere* (‘to be’, ‘to have’). Early Italian is thus opaque with respect to this feature.

**Modern Italian**

Nothing particularly different from Latin or Early Italian happens in Modern Italian: many of the same verbs as in Latin and/or Early Italian have suppletive stems in Modern Italian, such as *essere*, *avere* and *andare* (‘to be’, ‘to have’, ‘to go’). For example, *avere* has 1st person singular present indicative *ho*, while it has 1st person singular perfect *ebbi*: these are clearly underivable from each other. As such, Modern Italian is opaque with respect to this feature.

### 4.3.3 Irregular stem formation

Irregular stem formation is defined as the marking of grammatical information through partial modification of the stem. If this/these modification(s) is/are irregular and only applies/apply to certain stems arbitrarily, they qualify as irregular stem formation. It is non-transparent in the sense that the stem expresses both lexical and grammatical information, thus giving a many-to-one mapping of meaning onto form (Leufkens 2015: 72).
Irregular stem formation happens in the Latin verbal system, for instance in the 1st conjugation (verbs with infinitive in -are). In Table 2, I contrast regular portare (‘bring’) with irregular stare (‘stand’):

**Table 2**: Present and perfect indicative paradigms of *portare* ‘bring’ & *stare* ‘stand’ (from Verbix: Latin: *sto*; Latin: *porto*)

<table>
<thead>
<tr>
<th></th>
<th>1st singular</th>
<th>2nd singular</th>
<th>3rd singular</th>
<th>1st plural</th>
<th>2nd plural</th>
<th>3rd plural</th>
</tr>
</thead>
<tbody>
<tr>
<td>present</td>
<td>port-o</td>
<td>port-as</td>
<td>port-at</td>
<td>port-amus</td>
<td>port-atis</td>
<td>port-ant</td>
</tr>
<tr>
<td>perfect</td>
<td>port-avi</td>
<td>port-avisti</td>
<td>port-avit</td>
<td>port-avimus</td>
<td>port-avistis</td>
<td>port-averunt</td>
</tr>
<tr>
<td></td>
<td>st-o</td>
<td>st-as</td>
<td>st-at</td>
<td>st-amus</td>
<td>st-atis</td>
<td>st-ant</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>stet-imus</td>
<td>stet-istis</td>
<td>stet-erunt</td>
</tr>
</tbody>
</table>

In Table 2, we can see that *stare* behaves unpredictably when it comes to its perfect forms: instead of a regular form like *sta-vi* for the 1st singular, or *stav-isti* for the second plural, it employs a stem with reduplication for its perfect forms. This is obviously not a case of suppletion, because the stem is not unrecognizable with respect to its ‘regular’ stem *st(a)-*, and it is also not purely morpho(phonologically conditioned. Rather, it is lexically determined that *stare* undergoes this alternation, so I categorize this as irregular stem formation; by consequence, I characterize Latin as non-transparent when it comes to this feature.

**Early Italian**

Like Latin and Modern Italian, Early Italian possesses irregular verbs for which the stem behaves unpredictably across the paradigm. I give an example of both a regular verb (*addomandare*, ‘ask’) and an irregular verb (*dare*, ‘give’) from the 1st conjugation in Table 3.
The only difference that regular verb stems show between the present and perfect paradigms is that the thematic vowel is always accented in the perfect (in this case -\(\text{-a}\)-), while it can be either accented or unaccented in the present, as I have clarified in the table (Salvi & Renzi 2010: 1431); the same holds for Modern Italian.

**Modern Italian**

As I have done for Latin and Early Italian, I give an example of irregular stem formation from the verbal domain for Modern Italian as well. I give an example from the 2\(^{\text{nd}}\) conjugation, i.e. the verbs with infinitive ending in \(-\text{ere}/-\text{rre}\). Let us consider *vedere* and *temere* (‘see’ and ‘fear’):

<table>
<thead>
<tr>
<th>1(^{\text{st}}) singular</th>
<th>Present</th>
<th>Perfect</th>
<th>Present</th>
<th>Perfect</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>vedere</em></td>
<td>tem-o</td>
<td>tem-etti</td>
<td>ved-o</td>
<td>(\text{vid-i/ved-etti})</td>
</tr>
<tr>
<td><em>temere</em></td>
<td>tem-i</td>
<td>tem-est</td>
<td>ved-i</td>
<td>ved-esti</td>
</tr>
<tr>
<td>2(^{\text{nd}}) singular</td>
<td>tem-e</td>
<td>tem-et</td>
<td>ved-e</td>
<td>(\text{vid-e/ved-et}e)</td>
</tr>
<tr>
<td>3(^{\text{rd}}) singular</td>
<td>tem-iamo</td>
<td>tem-emmo</td>
<td>ved-iamo</td>
<td>ved-emmo</td>
</tr>
<tr>
<td>1(^{\text{st}}) plural</td>
<td>tem-eto</td>
<td>tem-este</td>
<td>ved-eto</td>
<td>ved-est</td>
</tr>
<tr>
<td>2(^{\text{nd}}) plural</td>
<td>tem-ono</td>
<td>tem-ett</td>
<td>ved-ono</td>
<td>(\text{vid-ero/ved-et}e)</td>
</tr>
<tr>
<td>3(^{\text{rd}}) plural</td>
<td>tem-ero</td>
<td>tem-ett</td>
<td>ved-ero</td>
<td>(\text{vid-ero/ved-et}e)</td>
</tr>
</tbody>
</table>
second conjugation) Italian seems to be changing into a more regular, transparent direction.

4.4 Form-based Form

Form-based form constitutes a null-to-one relation between meaning and form. This means that forms have no basis in pragmatics or semantics.

4.4.1 Grammatical gender

Grammatical gender is a lexical property that words can have in languages. It indicates the grammatical masculinity/femininity/neutrality (or some other category) of words; this may be motivated semantically, e.g. when a word for ‘man’ has masculine gender, but also purely formally, by which a word for ‘table’ may have lexical feminine gender (e.g. French la table). It is non-transparent in the sense that it need not, and usually does not, have a basis in semantics, which means that there is no relation between meaning and form (Leufkens 2015: 75–76).

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

**Latin**

Gender is encoded in Latin grammar, and not only in cases where this has a semantic motivation. Grammatical gender may thus for example map onto biological gender, such that male animate entities have masculine grammatical gender and females have feminine grammatical gender, but it may also be a mere formal property of lexemes. Latin has masculine, feminine and neuter gender. It is thus a non-transparent language in this respect, because grammatical gender may not be related to meaning.

The grammatical gender of nouns is an intrinsic property of theirs and is not necessarily overt; their gender however becomes visible when they are modified by an adjective:

(45) *Bon-us est hic hom-o, mea voluptas.*  
    good-SG.M.NOM is this man-SG.M.NOM my darling  
    ‘This man is a good one, my darling.’

(46) *flav-us Tiber-is*  
    yellow-SG.M.NOM Tiber-SG.M.NOM  
    ‘the yellow Tiber’

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As visible in (45) and (46), gender can be either semantically or purely lexically motivated. In (45), a male entity noun is modified with an adjective that takes masculine gender, and a female interlocutor is addressed with properly encoded feminine grammatical gender; in (46), an inanimate entity is assigned masculine gender in the lexicon, as becomes visible from the adjective (Pinkster 2015: 39).

**Early Italian**

Like Latin, Early Italian has grammatical gender; with respect to Latin however, it has lost the neuter. Grammatical gender is lexically determined for nouns and can be marked on modifying adjectives through affixation (Salvi & Renzi 2010: 1390). It often has no basis in semantics, and as such is form-based-form. Below we see the influence that nominal inflection has on the meaning of nouns, or better vice-versa: a different meaning gives different grammatical gender, which is usually visible from the final vowel.

(47) *prim-o* *giorn-o*
    first-M.SG day.M-M.SG
    ‘first day’

(48) *ultim-a* *giorn-a*
    last-F.SG day.F-F.SGL
    ‘last day’

(49) *cas-a* *bianc-a*
    house.F-F.SG white-F.SG
    ‘white house’

(50) *cas-o* *curios-o*
    case.M-M.SG curious-M.SG
    ‘curious case’

We see in the examples above that we cannot just ‘play around’ with grammatical gender: doing this may give an ungrammatical form, or otherwise a completely different meaning. Grammatical gender is thus conventional and arbitrary, so Early Italian is opaque with respect to this feature.

**Modern Italian**

Like Early Italian, Modern Italian encodes masculine and feminine gender. The same as for Latin and Early Italian, it is usually lexically motivated and has no semantic motivation:
(51) *un-Ø armadi-o* *bian-co*
a-M  cupboard,M-SG  white-M-SG
‘a white cupboard’

(52) *un-a scatol-a* *ner-a*
a-F  box,F-SG  black-F-SG
‘a black box’

As such, Modern Italian is opaque with respect to the feature of grammatical gender as well.

### 4.4.2 Nominative expletives

Expletives are syntactic units which satisfy the need of some languages to have a subject in all sentences, even when there is no real subject for what concerns semantics, i.e. with zero-valent verbs like weather verbs. Expletives do not refer to any real subject or participant, so they comport a null-to-one meaning-to-form mapping. As such, they are non-transparent.

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>transparent</td>
<td>mostly transparent</td>
<td>transparent</td>
</tr>
</tbody>
</table>

**Latin**

Nominal expletives do not occur in Latin. Weather verbs, which can reasonably be held to be indicators of whether nominal expletives occur at all in a language (Travis 1984), are expressed without them in Latin:

(53) *plu-it*
    rain-3SG.PRS.IND
    ‘it is raining’

(54) *ton-at*
    thunder-3SG.PRS.IND
    ‘it is thundering’

  (Pinkster 2015: 193)

**Early Italian**

Some verbs may appear with an expletive subject in Early Italian, but this is never obligatory (Salvi & Renzi 2010: 168, 170–172):
Nominal expletives may thus appear with weather verbs, but also with impersonal passives, psych-verbs (e’ mi duol, ‘it saddens me’), inaccusatives, presentative essere (‘to be’), and essere + adjective/noun-constructions:

(57) **Egli è bene ch’io la con-per-i.**  
**EXPL is good that I it pay.for-1SG.PRS.SUBJ**  
‘It is good that I pay for it.’

As Dardano (2012: 72) stresses, the use of an expletive subject is possible, but rare in Early Italian: as he puts it, it is a syntactic road that is always open, but normally not taken. As Ulleland (1961: 15) and Palermo (1997: 147–148) find, in Early Italian texts such as Boccaccio’s *Decameron*, the expletive appears with zero-valent verbs when the author gives his characters the word: in other words, the expletive appears in direct speech, the reason being that the author wishes to liven up the conversations and make them more realistic. It is argued that we should take this to reflect the spoken, popular variety of the Tuscan language, as opposed to the higher, literary style employed by the authors. The absence or presence of the nominal expletive thus seems to be sociolinguistically and/or stylistically motivated.

However, the fact remains that both earlier (Latin) and later (Modern Italian) stages do not exhibit nominal expletives, and this needs to be explained. Having given a part of the explanation here, I will go into this further in the section below. For now, however, I characterize Early Italian as somewhat opaque regarding nominal expletives: it does have them, but they are rare and never obligatory.

**Modern Italian**

Modern Italian does not allow expletive subjects; in this sense it seems to ‘return’ to the Latin pattern from the Early Italian, where they are allowed. However, I should say that this is true for *Standard* Italian; many dialects, northern as well as southern, in fact do allow them (Vitolo 2006; Svenonius 2002: 165, 185, 195). To stay with *rain*, below are examples from Standard Italian, a northern dialect and a southern dialect (Vitolo 2006: 62, 64):
(58)  
\begin{align*}
\text{piov-e} & \\
\text{rain-3SG.PRS.IND} & \\
\text{‘it rains’} & \\
\end{align*}

(Standard Italian)

(59)  
\begin{align*}
\text{el pjöf-Ø} & \\
3\text{SG rain-3SG.PRS.IND} & \\
\text{‘it rains’} & \\
\end{align*}

(Trentino)

(60)  
\begin{align*}
\text{chelle chiov-e} & \\
\text{DEM.N.SG rain-3SG.PRS.IND} & \\
\text{‘it rains’} & \\
\end{align*}

(Salernitano)

Even more interestingly, it also happens in modern Tuscan (Vitolo 2006: 62):

(61)  
\begin{align*}
\text{gli è piovuto tanto} & \\
3\text{SG is rain-PST.PTCP.M.SG much} & \\
\text{‘it has rained much’} & \\
\end{align*}

This presents us with a puzzle, because if all across Italy dialects are spoken that exhibit nominal expletives, and if Standard Italian descends from a dialect which used, and continues to use, nominal expletives, then why are they ungrammatical in Standard Italian?

As hinted at in the previous section, the explanation seems to be a sociolinguistic-stylistic one. If we want to understand why Modern Standard Italian does not allow expletive subjects, we have to consider the following: the ‘new’, national language after the unification of the Italian state in 1861 was modelled upon a literary, ‘high’ Tuscan dialect, as in (the definitive edition of) Alessandro Manzoni’s *Promessi sposi* (‘The Betrothed’, 1842). Already in the 13th and 14th century there was a distinction between literary and popular Tuscan, and the publication of Pietro Bembo’s influential, normative *Prose nelle quali si ragiona della volgar lingua* (‘Prose in which the vulgar language is reasoned upon’, 1525), in which he argues that Italians should take the language of Petrarca and Boccaccio as model, has only solidified this stratification. As I argued above, expletives were in principle not used in the medieval, ‘high’ dialect – only in the popular variety. Two things now seem to make sense: 1) that the modern Tuscan dialect does exhibit nominal expletives, having continued a process already started in the spoken, popular medieval variety, and 2) that Modern Standard Italian does not exhibit expletive subjects, because it is modelled upon a literary variety of Tuscan in which the expression of these subjects was considered unseemly.
All in all then, Modern Italian is transparent as far as nominal expletives are concerned: it does not allow for their expression, which would bring about a null-to-one relation between the Representational Level and the Morphological Level. Still, the presence of nominal expletives in many Italian dialects should make us wonder about possible contact-induced change in the national language – or vice versa.

4.4.3 Syntactic functions

When the grammatical marking or behavior of arguments is based in morphosyntax rather than in pragmatics or semantics, we can speak of syntactic functions in a system with morphosyntactic alignment. This means that arguments are marked for example for being subjects or objects, which are grammatical functions, as opposed to topic or focus (pragmatic notions) or agent and patient (semantic roles). For example, a language which has syntactic functions will treat the agent of an active clause the same as the patient of a passive clause; other languages however may not have passive constructions, rather marking the arguments on the basis of their pragmatics and/or semantics, such that the identical grammatical expression of agents and patients becomes impossible. Syntactic functions are non-transparent because they are not motivated by any meaning: they are purely formal and have a null-to-one meaning-to-form relation.

Diagnostics used by Leufkens (2015) to determine whether a language has syntactic functions are 1) whether they have a passive construction and/or 2) whether they show neutralisation of pragmatic/semantic roles in intransitive clauses, i.e. whether the subjects of unaccusative verbs behave morphosyntactically the same as the subjects of unergative verbs (Leufkens 2015: 78–84). The same diagnostics will be used here.

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>opaque</td>
<td>mostly opaque</td>
<td>mostly opaque</td>
</tr>
</tbody>
</table>

Latin

Latin has verbal morphology for marking passive voice and shows neutralisation of pragmatic and semantic roles in intransitive clauses (Pinkster 2015: 81–84):

(62) Quin tu istas omitt-is nugas ac mecum
why.notyou.SG.NOM those stop-2SG.PRS.IND nonsense and with.me
huc intro ambul-as?
here into walk-2SG.PRS.IND
‘Why won’t you stop that nonsense and come in here with me?’
(63) *Si os-Ø exulcera-tor, rub-et faci-es.*
  if mouth.SG.NOM ulcerate-3SG.PRS.PASS.IND become.red-3SG.PRS.IND face-SG.NOM
  ‘If the mouth becomes ulcerated, the face turns red.’

In (62) we have an unergative verb (‘walk’), and in (63) an unaccusative verb (‘turn red’). For both verbs the arguments are subject and take nominative case, which shows Latin’s neutralization of semantic roles. Also in (63), we see a passive (‘become ulcerated’).

**Early Italian**

As in Modern Italian, the Undergoer of unaccusative structures may appear in the same syntactic positions as the Actor of transitive and unergative structures as in (64), i.e. before and/or after the finite verb; however, it may also occupy the position typically taken by direct objects as in (65), i.e. after the lexical verb:

(64) *primieramente avea ella fatta a llui ingiuria*
  first had she done to him injustice
  ‘first she had done injustice to him’

(65) *delle quali s’-era facto [...] grande quistione*
  of which REFL-was done great question
  ‘of which a great debate was made’ (Salvi & Renzi 2010: 124, 126)

Also in common with direct objects, it has the possibility for pronominalization with clitic *ne* (66), and the characteristic that it does not necessarily agree in number and gender with the verb (67):

(66) *delle quali *ne* sono scritte qui alquante*
  of which ‘ne’ are written here some
  ‘some of which are written here’

(67) *là si trov-ava sempre più ribald-i*
  thereREFL find-3SG.PST.IPFW.IND ever more miserable-M.PL
  ‘there they found themselves ever more miserable’
  (Salvi & Renzi 2010: 126)

Differently from Modern Italian, the subject of unaccusatives has these traits (*ne*-cliticization and lack of agreement) not only in postverbal position, but also in preverbal position. It is important to note this, because this means that Early Italian syntactically treats Undergoers the same as Actors more often than Modern Italian does, which instead treats Undergoers in a more restricted way:
it appears in principle in the same syntactic positions as the direct object, which often has the semantics of Undergoer.

Further, as in Latin and Modern Italian, Early Italian has the possibility to passivize sentences:

(68)  
i    Viniziani *presero* la  città di Costantinopoli
the Venetians took the city of Constantinople
‘the Venetians took the city of Constantinople’

(69)  
la   città di Costantinopoli *fu presa* da’ Veneziani
the city of Constantinople was taken by Venetians
‘the city of Constantinople was taken by (the) Venetians’

(Salvi & Renzi 2010: 142)

Thus, Early Italian is an opaque language with respect to syntactic functions. For what concerns unaccusative subjects then, I noted that they exhibit behavior similar to that of transitive/unergative subjects more often than they do in Modern Italian. This means that Modern Italian has a lesser neutralization of semantic roles than Early Italian, and as such that it is more transparent than the latter.

*Modern Italian*

Passive constructions are present in Modern Italian, so in that respect it is non-transparent:

(70)  
*Gianni pesta Mario.*
Gianni beats Mario
‘Gianni beats Mario.’

(71)  
*Mario viene pestato da Gianni.*
Mario becomes beaten by Gianni
‘Mario is being beaten by Gianni.’

When it comes to the neutralization of semantic and pragmatic roles in intransitive sentences, Modern Italian behaves somewhat like Early Italian, but not quite: unaccusative subjects, which are typically postverbal (72), may appear in the same position as unergative/transitive subjects, which are typically preverbal (66), for pragmatic reasons – and vice-versa, see (73) – (74):
È arrivato Gianni.
‘Gianni has arrived.’

Gianni ha ballato.
‘Gianni has danced.’

Gianni è arrivato, non partito.
‘Gianni has arrived, not left.’

Ha ballato Gianni, non Mario.
‘Gianni has danced, not Mario.’

Interesting to note is that *ne*-cliticization of un accusative subjects is only possible when they are in postverbal position, see (76) – (79), as opposed to Early Italian which allowed it also for preverbal subjects, as in (66). This is however a formal distinction which cannot be related to semantics; as such, this does not make Modern Italian more or less transparent than Early Italian:

Erano arrivati alcuni de-gli studenti.
‘Some of the students had arrived.’

Ne erano arrivati alcuni.
‘Some of them had arrived.’

Alcuni de-gli studenti erano arrivati.
‘Some of the students were arrived’

*Alcuni ne erano arrivati.
‘Some of them were arrived’

Another difference with respect to Early Italian is that the lack of verbal agreement of un accusative subjects possible in Early Italian, cf. (68), is ungrammatical in Modern Italian:
(80) \textit{Cad-ono} le fogli-e.  
fall-3PL.PRS.IND the.F.PL leaf-F.PL  
‘The leaves fall.’

(81) \textit{*Cad-e} le fogli-e.  
fall-3SG.PRS.IND the.F.PL leaf-F.PL  
‘The leaves fall.’

In this sense, Modern Italian treats unaccusative subjects more like unergative/transitive subjects than Early Italian. Thus, the neutralisation of semantic roles, which is an opaque feature, is greater in Modern Italian than in Early Italian. As noted however, there is more regular distinction between unaccusative and unergative/transitive subjects, which is more transparent than the more neutral treatment of these subjects in Early Italian. This leads me to the conclusion that I cannot decide whether Modern Italian is more or less transparent than Early Italian with respect to syntactic functions; as such, I classify it as mostly opaque.

4.4.4 Influence of complexity on word order

Influence of complexity on word order means that the morphosyntactic complexity, or ‘weight’ of constituents, determines their place in sentences. For instance, it often happens that heavy constituents appear near or at the end of a sentence, whereas their canonical place in a sentence would be elsewhere. Consider ‘the mailman’ in the following:

(82) I saw the mailman who I told you last week had lost his wife to leukemia in the street.

(83) I saw in the street the mailman who I told you last week had lost his wife to leukemia.

(84) I saw the mailman in the street.

(85) ??I saw in the street the mailman.

The acceptability of the NP ‘the mailman (who I told you last week had lost his wife to leukemia)’ in different places depends on how heavy it is. The sentences in (82) and (84) present the usual ordering of constituents in English and are both acceptable; the ordering in (85) borders on the ungrammatical, while the same ordering in (83) is acceptable; this is often called ‘heavy NP-shift’, which could be accounted for by planning and processing reasons. However,
morphosyntactic complexity is not a component of meaning, so the influence of it on the form that sentences may take is non-transparent: there is a null-to-one meaning-to-form relation. Because it is hard to objectively measure complexity, Leufkens (2015) bases herself on statements of reference grammars or expert judgements on her studied languages, as will I (Leufkens 2015: 84–86).

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

**Latin, Early Italian & Modern Italian**

For all three stages studied, Italian I find no statement regarding the influence of complexity on word order in the relevant reference grammars, neither do I find evidence for it in other sources. As such, I have to leave this matter undecided.

4.4.5 Function marking is predominantly head-marking

If a language marks grammatical information predominantly through head-marking, for example through the use of affixes, instead of through phrase-marking, which can be phrase-marking clitics or particles, it is considered opaque. The reason for this is that the nature of affix-marking is determined by morphosyntactic properties, which bare no meaning, of the hosts that the markers attach to. An example: plural marking in Italian can be -i/-e on nouns, but plural marking on verbs takes other forms, such as -(i)amo for the first person plural. As such, there is a null-to-one relation of meaning-to-form. If languages show a clear preference for head-marking, they are considered opaque (Leufkens 2015: 87–88).

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

**Latin**

Latin is clearly abundant in head-marking affixes, as is evident from its case-number-gender morphology, its TAM morphology, etc. However, it also exhibits clitics, such as -que (‘and’), -ve (‘or’) and -ne (interrogative marker), which can be attached to any word (Pinkster 2015: 69, 324):

(86) *Haec est vita solut-orum miser-a*

dothat life set.free,PRF.PTCP-PL.M.GEN miserable-SG.F.ABL

*ambition-e gravi=que.*

*ambition-SG.F.ABL heavy=and*
‘Such is the life of those set free from miserable and burdensome ambition.’

(87) *Colo* calathis=ve Minerv-ae.
distaff basket.of.wool=or Minerva-F.SG.GEN
‘Minerva’s distaff or basket of wool’

(88) *Tibi* omnis=ne anim-i commotio vid-etur
you.SG.DAT every=q mind-SG.M.GEN agitation see-3SG.PRS.IND.PASS
insania?
insanity
‘Is every agitation of the mind seen as insanity by you?’

Latin function-marking thus clearly manifests itself both as head-marking and as phrase-marking. Latin is thus mixed, but I would say it tends more toward head-marking than to phrase-marking: there is virtually no sentence in which there is no verbal or nominal morphology, whereas clitics and particles may or may not be present in any given sentence. I thus characterize Latin as opaque with respect to function-marking.

*Early Italian*

For Early Italian it is hard to determine whether it is predominantly head-marking. Clearly, it is mixed like Latin, but it has lost a substantial amount of head-marking with the loss of its productive case system. However, prepositions have in essence taken over the functions of the case system, and these can be argued to be another strategy of head-marking. So, where Early Italian is obviously mixed as far as head-/phrase-marking is concerned, I still tentatively classify it as predominantly head-marking, and as such as opaque with respect to function-marking.

*Modern Italian*

That which holds for Early Italian, I believe to hold for Modern Italian as well. Being arguably a predominantly head-marking language, it can be called non-transparent when it comes to function marking.

*4.4.6 Morphophonologically conditioned stem alternation*

When morphological processes, such as for example affixation, have an influence on the form that stems take, we speak of morphophonologically conditioned stem alternation. An example given by Hengeveld (2007: 39) (cited in Leufkens 2015: 89) is from Hungarian:
In this case, stem-final /t/ palatalizes under the influence of suffix /-s/; however, this is not purely phonologically motivated, because only the imperative suffix has this influence. This is opaque, because form is determined by form, and this entails a null-to-one meaning-to-form relation.

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

*Latin*

Latin exhibits morphophonologically conditioned stem alternation. If we consider *rex*, ‘king’, we see that the absence/presence of inflection endings influences the phonological realization of the stem *rex/reg-*:

**Table 5**: Inflectional paradigm of *rex* ‘king’ (Pinkster 2015: 35)

<table>
<thead>
<tr>
<th>Case</th>
<th>Singular</th>
<th>Plural</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Nominitive</strong></td>
<td><em>rex</em></td>
<td><em>reg-es</em></td>
</tr>
<tr>
<td><strong>Genitive</strong></td>
<td><em>reg-is</em></td>
<td><em>reg-un</em></td>
</tr>
<tr>
<td><strong>Dative</strong></td>
<td><em>reg-i</em></td>
<td><em>reg-ibus</em></td>
</tr>
<tr>
<td><strong>Accusative</strong></td>
<td><em>reg-em</em></td>
<td><em>reg-es</em></td>
</tr>
<tr>
<td><strong>Ablative</strong></td>
<td><em>reg-e</em></td>
<td><em>reg-ibus</em></td>
</tr>
<tr>
<td><strong>Vocative</strong></td>
<td><em>rex</em></td>
<td><em>reg-es</em></td>
</tr>
</tbody>
</table>

Affixes can thus influence the form of the stem, so Latin is opaque regarding to this feature.

*Early Italian*

Staying in the nominal domain, we can show a process of morphophonologically conditioned stem alternation for Early Italian as well. It is for example the case that masculine nouns ending in *-co/-go, /ko/ /go/*, had ‘palatal’ plurals (Salvi & Renzi 2010: 1398–1399):

(90) *amic-o* /amiko/  
‘friend’

(91) *mag-o* /mago/  
‘wizard’

(89) *köt*  
*köš-s*  
tie-  
tie_IMP.INDEF.2SG

‘Tie!’
It should be noted that in Early Italian, for cases like (91) both the ‘palatal’ plural as well as a ‘velar’ plural /magi/ were grammatical, which is something that Renzi & Salvi (2010: 1432) define as allotropia, ‘allotropy’: two possible forms for one meaning. The palatal forms were however much preferred, whereas in Modern Italian only the velar forms are in principle grammatical. In this particular case Modern Italian is thus more transparent than Early Italian – which I both characterize as opaque with respect to morphopohonologically conditioned stem alternation.

Modern Italian

Modern Italian verb stems may undergo a change in their suprasegmental phonology when for instance in the participle is made formation: for battere (‘to hit’) for example, the infinitive battere and first person singular indicative batto have stressed first syllables; however, the past participles battuto has it on the second syllable, such that the /a/ in the stem loses its stress. Modern Italian is thus non-transparent with respect to this feature.

4.4.7 Morpho(phono)logically conditioned affix alternation

Morphologically and morphophonologically conditioned affix alternation are treated as one opaque feature, because they both involve form-based-form and as such entail a null-to-one meaning-to-form relation. Morphological motivation for affix alternation may be nominal declension, where affixes take a form based on the noun class that they attach to. A morphophonological motivation may be verbal conjugation, where a stem-final vowel may influence the form that the affix takes (cf. 1st person plural in Early Italian below) (Leufkens 2015: 89–92).

<table>
<thead>
<tr>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

Latin

As Leufkens (2015: 91) already shows in her dissertation, Latin is opaque with respect to this feature. I will cite her for the sake of completeness and readability:
Table 6: Inflectional paradigm of *stella* ‘star’ and *murus* ‘wall’ (Leufkens 2015: 91)

<table>
<thead>
<tr>
<th></th>
<th>1st declension</th>
<th>2nd declension</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Singular</td>
<td>Plural</td>
</tr>
<tr>
<td>Nominative</td>
<td>stell-a</td>
<td>stell-ae</td>
</tr>
<tr>
<td>Genitive</td>
<td>stell-ae</td>
<td>stell-arum</td>
</tr>
<tr>
<td>Dative</td>
<td>stell-ae</td>
<td>stell-is</td>
</tr>
<tr>
<td>Accusative</td>
<td>stell-am</td>
<td>stell-as</td>
</tr>
<tr>
<td>Ablative</td>
<td>stell-a</td>
<td>stell-is</td>
</tr>
</tbody>
</table>

Early Italian

Verbs in Early Italian, as in Modern Italian, can be categorized into three different conjugational classes.

Table 7: Indicative present paradigms of *addomandare* ‘ask’, *temere* ‘fear’ and *venire* ‘come’

<table>
<thead>
<tr>
<th></th>
<th>1st conjugation</th>
<th>2nd conjugation</th>
<th>3rd conjugation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinitive</td>
<td>addomanda-re</td>
<td>teme-re</td>
<td>ven/-re</td>
</tr>
<tr>
<td>1st singular</td>
<td>addomand-o</td>
<td>tem-o</td>
<td>veng-o</td>
</tr>
<tr>
<td>2nd singular</td>
<td>addomand-i/e</td>
<td>tem-i</td>
<td>vien-i</td>
</tr>
<tr>
<td>3rd singular</td>
<td>addomand-a</td>
<td>tem-e</td>
<td>vien-e</td>
</tr>
<tr>
<td>1st plural</td>
<td>addomand-iamo/a-mo</td>
<td>tem-iamo/e-mo</td>
<td>ven-iamo/i-mo</td>
</tr>
<tr>
<td>2nd plural</td>
<td>addomand-a-te</td>
<td>tem-e-te</td>
<td>ven-i-te</td>
</tr>
<tr>
<td>3rd plural</td>
<td>addomand-a-no</td>
<td>tem-ono</td>
<td>veng-ono</td>
</tr>
</tbody>
</table>

In Table 7, the inflectional endings are in bold, and the thematic vowel is in italics. The thematic vowel is lexically determined, and neither part of the bare stem of the verb, nor an actual part of the inflectional ending. There is a tight relation between the endings and the thematic vowels, so we can really speak of phonological as well as morphological influence on the affix (Salvi & Renzi 2010: 1433).

It should be noted that Early Italian shows some differences with respect to Modern Italian as far as the second person singular (1st conjugation) and the first person plural (especially 2nd conjugation) are concerned. The Early Italian second person singular could both end in -i and -e in the 1st conjugation; Modern Italian only allows -i, so the endings are the same across the paradigm. The first person plural then could take the ending -iamo, possible for across the conjugations, but also an ending including the thematic vowel: rare for the 1st and 3rd conjugation, it was most common for the 2nd, even surpassing the -iamo option in frequency (Salvi & Renzi 2010: 1433-1434); Modern Italian only allows for -iamo, so again there is no influence of morphology on the affix. As far as verbal conjugations are concerned then, Modern Italian is somewhat more
transparent than Early Italian, because in the former there is less influence of morphological class on the affix than in the latter, which I characterize as opaque with respect to the feature of morpho(phonologically) conditioned affix alternation.

**Modern Italian**

Modern Italian verbal affixes behave in a more regular way than their Early Italian counterparts for as far as the second person singular (1st conjugation) and the first person plural (especially 2nd conjugation) are concerned. However, the form that the third person singular takes is still conjugation-dependent, so however more transparent Modern Italian may be than Early Italian, it is still opaque with respect to this feature.

4.4.8 *Phonologically conditioned stem alternation*

Phonologically conditioned stem alternation is the influence that (near-)adjacent phonemes have on the phonological shape of stems. For example, place of articulation or voicing may be altered because of a surrounding phoneme. This counts as form-based-form and as such as opaque, because meaning is not involved in determining form.

<table>
<thead>
<tr>
<th></th>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

**Latin**

Latin stems may undergo phonological changes due to the presence of surrounding phon(ems) and/or the influence of surrounding affixes. *Facilis* (‘easy’) is such an example: the vowel in the penultimate syllable is front unrounded -i- because precedes a palatal, ‘light’ -l-; the vowel in the equivalent syllable of corresponding noun *facultas* (‘ability’) is back rounded -u-, because it precedes a velar, ‘dark’ -l- (Nishimura 2010: 224). What also immediately catches the eye is that these vowels occur in open and closed syllables in the adjective and the noun respectively, which may also very well be of influence. Extending the *facilis* example, we also see that prefixes can influence the phonology of stems: its antonym through negative prefixation, *dif-ficilis* (‘difficult’), shows alternation of the first vowel of the stem, i.e. harmony with the vowel of prefix *di(f)*- (Nishimura 2010: 233–234). To make the circle round, we see that the corresponding negative noun is *difficultas* (‘difficulty’): vowel harmony in the first syllable of the stem, and a back rounded vowel in the penultimate syllable through influence of an adjacent velarized lateral – we have here an elegant mirror image of positive adjective *facilis*. From this case and
many others, we can conclude that Latin is opaque regarding phonologically conditioned stem alternations, which have no semantic or pragmatic function.

**Early Italian**

Early Italian shows phonologically conditioned stem alternation, as does Modern Italian, in words which contain diphthongs in the stem (Salvi & Renzi 2010: 1521). For example, the words for ‘ten’ and ‘to die’ show an alternation between accented diphthongs and unaccented simplexes:

\[(92) \text{dieci} /ˈdjɛtʃi/ \quad \text{‘ten’} \\
\text{decina} /deˈtʃina/ \quad \text{‘group of ten’} \]

\[(93) \text{muore} /ˈmwɔre/ \quad \text{‘he dies’} \\
\text{morire} /moˈrire/ \quad \text{‘to die’} \]

Thus, influence of suprasegmental phonology on stems is present in Early Italian, which for this reason I characterize as opaque with respect to the feature of phonologically conditioned stem alternation.

**Modern Italian**

Examples of phonologically conditioned stem alternation in Modern Italian are again with diphthongs in accented stems, and simplexes in their unaccented counterparts:

\[(94) \text{uomo} /ˈwɔmo/ \quad \text{‘man’} \\
\text{ometto} /omˈetto/ \quad \text{‘little man’} \]

\[(95) \text{piede} /ˈpjede/ \quad \text{‘foot’} \\
\text{pedone} /pedˈone/ \quad \text{‘pedestrian’} \]

Thus, Modern Italian is non-transparent with respect to this feature.

4.4.9 **Phonologically conditioned affix alternation**

Phonologically conditioned affix alternation is defined as the influence of phonology, for example of stems, on the form that affixes may take. It is non-transparent because phonological rather than pragmatic or semantic information determines the final phonological form of the affix. As such, a null-to-one relation of meaning-to-form relation stands.
Latin

In Section 4.48 we already briefly looked at negative prefixation; negative prefixes can also be employed to show that Latin exhibits phonologically conditioned affix alternation. For example, a usual negative prefix for adjectives is in-, as in in-imicus (‘unfriendly’) vs. amicus (‘friendly’), where again we see the phonologically conditioned stem alternation discussed in the previous section (Nishimura 2010: 233). What is relevant here is that the phonological realization of this prefix is susceptible to the phonological context in which it appears. For example, if it appears in prelabial context, it is realized as im-: im-probus (‘unsound’), im-possibilis (‘impossible’), and so on (Pinkster 2015: 734). Interestingly, we can see that this is actually quite easily visible in English word of Latin origin as well. Latin (and English for that matter) is thus opaque with respect to this feature.

Early Italian

Negative prefixes can also be used to illustrate phonologically conditioned affix alternation in Early Italian. The same as in Modern Italian, negative prefix s- can be used for adjectives which begin with a consonant, but not for adjectives which begin with a vowel; for those, dis- has to be used: usato, uguale (‘used’, ‘equal’) vs. disusato, disuguale ‘unused’, ‘unequal’), and formato, consolato (‘handsome’, ‘comforted’) vs. sformato, sconsolato (‘ugly’, ‘hopeless’) (Salvi & Renzi 2010: 1507–1508). Thus, like Latin, Early Italian is opaque as far as phonological conditioning of affixes is concerned.

Modern Italian

Again exploiting negative prefixes, I will show that Modern Italian is opaque with respect to phonologically conditioned affix alternation. For example, negative prefix s- is realized as /s/ before voiceless consonants, but as /z/ before voiced consonants: contento, cortese (‘pleased’, ‘well-mannered’) become scontento, scortese, which are phonologically realized as /skontento/, /skorteze/ (‘displeased’, ‘ill-mannered’); gradito, blocco (‘appreciated’, ‘stoppage’) become sgradito, sblocco, which are realized as /zgradito/, /zblokko/. As we see, we have a different form for the same meaning, which is opaque by definition. It should be noted that this is part of a more general rule of voicing sibilants before voiced consonants: in spaccare (‘to break’) it occurs before a voiceless consonant, so it is voiceless: /spakkare/; however, in sdraio (‘deckchair’) it precedes a voiced consonant, so it is voiced: /zdraio/.
5 Analysis

Table 8 provides an overview of the results.

Table 8: Transparency features in Latin, Early Italian and Modern Italian (per feature)

<table>
<thead>
<tr>
<th>Redundancy features</th>
<th>Latin</th>
<th>Early Italian</th>
<th>Modern Italian</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Clausal agreement / cross-reference</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>2. Phrasal agreement</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>3. Plural concord in noun phrases containing a numeral</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>4. Tense copying</td>
<td>mostly opaque</td>
<td>mostly opaque</td>
<td>mostly opaque</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Discontinuity features</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Extraction / extraposition</td>
<td>opaque</td>
<td>mostly opaque</td>
<td>quite opaque</td>
</tr>
<tr>
<td>2. Raising</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>3. Circumfixes</td>
<td>transparent</td>
<td>transparent</td>
<td>transparent</td>
</tr>
<tr>
<td>4. Infixes</td>
<td>somewhat opaque</td>
<td>transparent</td>
<td>transparent</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Fusion features</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Cumulation of TAME</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>2. Cumulation of case</td>
<td>opaque</td>
<td><em>does not apply</em></td>
<td><em>does not apply</em></td>
</tr>
<tr>
<td>3. Suppletion</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>4. Irregular stem formation</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Form-based form features</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Grammatical gender</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>2. Nominal expletives</td>
<td>transparent</td>
<td>somewhat opaque</td>
<td>transparent</td>
</tr>
<tr>
<td>3. Syntactic functions</td>
<td>opaque</td>
<td>mostly opaque</td>
<td>mostly opaque</td>
</tr>
<tr>
<td>4. Influence of complexity on word order</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>5. Function marking is predominantly head-marking</td>
<td>mostly opaque</td>
<td>mostly opaque</td>
<td>mostly opaque</td>
</tr>
<tr>
<td>6. Morphophonologically-conditioned stem alternation</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>7. Morpho(phono)logically-conditioned affix alternation</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>8. Phonologically-conditioned stem alternation</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
<tr>
<td>9. Phonologically-conditioned affix alternation</td>
<td>opaque</td>
<td>opaque</td>
<td>opaque</td>
</tr>
</tbody>
</table>

A count of the transparency of these features in the three languages is given in Table 9.
Table 9: Count of transparency features in Latin, Early Italian and Modern Italian

<table>
<thead>
<tr>
<th></th>
<th>opaque</th>
<th>mostly opaque</th>
<th>quite opaque</th>
<th>somewhat opaque</th>
<th>transparent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Latin</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>2(^2)</td>
</tr>
<tr>
<td>Early Italian</td>
<td>12</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Modern Italian</td>
<td>12</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>

From table 9 we can see that through time, Italian has become slightly more transparent: 1) there are fewer opaque features than in Latin; 2) ‘in between’ features are more toward the transparent end of the spectrum; 3) one feature has been lost altogether with respect to Latin. In Table 8 we can see that of the 21 features examined, 15 have not undergone a change in their transparency, 1 has to remain undecided, and 5 have undergone some type of change through time. Of these 5, only 3 have become more transparent, and 1 has become more opaque in Early Italian only to become transparent again in Modern Italian, and 1 has been lost. The transparency of 1 feature, namely influence of complexity on word order, has to remain undecided due to lack of mention in the relevant reference grammars.

The feature that has been lost is cumulation of case. Italian has shifted from the use of case to the use of prepositions, so we cannot say whether Italian is more or less transparent than Latin with respect to this feature; rather, Italian uses a different strategy to fulfill the grammatical functions that case has fulfills in Latin. As such, the feature does not apply.

The features that have changed are extraction/extraposition, infixes (discontinuity), nominal expletives and syntactic functions (form-based form). For extraction/extraposition, I rely heavily on Salvi & Renzi (2010: 504) in determining whether Modern Italian is more or less transparent than Early Italian; how Early Italian relates to Latin is my own judgment. With respect to infixation, I rely both on (Laurent 1999) and my own reasoning and pre-existing knowledge of Latin. For syntactic functions, I rely on the differences between Latin and Early Italians that I find in Pinkster’ (2015) and Renzi & Salvi’s (2010) reference grammars; for the differences between Early and Modern Italian I rely on Salvi & Renzi (2010: 124–126) as well as my own competence in Modern Italian. However, these lead me to the verdict that it is not clear whether Italian has become more or less transparent.

The most interesting feature is that of nominal expletives. At a first glance, the development and subsequent loss of an opaque feature seems peculiar. However, as argued above, the case of nominal expletives in Italian

\(^2\) The Latin features add up to 20, whereas the Early Italian and Modern Italian add up to 19: the reason is that one feature has been lost altogether.

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can be explained as such: spoken Early Italian (dialects) has/have acquired the feature, and the modern variants of these dialects retain these expletive subjects. However, the phenomenon has never been accepted in ‘higher’, literary styles of Early Italian, regarded as lowly and/or impure. Modern Italian being modeled on this higher style of Early Italian, it becomes logical that nominal expletives do not appear in Modern Standard Italian.

Overall then, we can say that Italian has not changed a great deal with respect to transparency through time; only two to four features, depending on how one wishes to look at them, have undergone a distinguishable change in transparency. Nonetheless, what we do find is a trend toward more transparency: the features that have undergone change, have all become more transparent in Modern Italian. If we consider the particular case of nominal expletives, we should say that natural language development has tended toward less transparency; we only need to consider popular medieval varieties and modern dialects for this. However, ideology has reversed this development in Modern Standard Italian. Thus, there is a pattern toward more transparency.

6 Conclusion

If we relate the results and analyses to my hypotheses, we have to conclude that my findings are opposite to my expectations. My first hypothesis was that Italian, like many other languages, has become more opaque through time; my second hypothesis that Early Italian would me more transparent than both Latin and Modern Italian for reasons of heightened contact. Both hypotheses are disproven by my findings: if anything, Italian has become more transparent through time; also, Early Italian does not exhibit a greater transparency than either its predecessor or its successor. The interesting finding here is that the ‘oddity’ of Early Italian lies in its having nominal expletives, but this is an opaque feature rather than a transparent one – contrary to what my language contact hypothesis would predict.

However, contact may have had an influence nonetheless, precisely on this feature. If we take into consideration surrounding languages, such as French, but most importantly Germanic languages we see that they all have expletive subjects. Now it may very likely be the case that these languages and their speakers have had an influence on Northern Italian dialects, such as Tuscan, which now all exhibit nominal expletives. As argued above, their loss in Modern Italian would then be due to stylistic-sociolinguistic reasons.

Relating these findings to what has been found in previous studies, we have to say that Italian is a curious, contradictory case. We have to ask ourselves why it is that Italian has not become more opaque through time, but rather the contrary; and why heightened contact in the Middle Ages has not made Early
Italian more transparent. The obvious remark here is that we would need to study these stages of the language in more detail, and it is exactly the remark I wish to make. With respect to transparency in language contact, I would on the basis of my findings argue that we cannot take ‘language contact’ per se as a factor influencing transparency; rather, through language contact features may become more/less transparent as a result of how (non-)transparent specific features are in the languages in contact. As such, I would not necessarily argue for any general rule regarding an increase or decrease in transparency by influence of language contact.

I believe this study serves as a beginning towards answering the questions raised above, the answers to which could contribute a great deal to an even more precise characterization of what transparency is and what it is that contributes to it. Surely, there are reasons for which Italian has changed like it has, and these reasons should be accounted for in the theory about transparency. This study does not answer these questions fully or conclusively; as such, I believe it is best seen as passing a threshold, after which further steps need to be taken. I do not exclude the possibility these will be taken by me, but if not, I very much welcome contributions and/or contradictions made by others.

References


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