

The Conjugations of Italian

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1. Introduction.

All textbooks of Italian list at least three conjugations: the first, with theme vowel *-a-*; the second, with theme vowel *-e-*; the third with theme vowel *-i-*:

- (1) *portare*
- (2) *tergere*
- (3) *aprire*

Beyond these three categories, however, there is considerable controversy. On the basis of the position of stress and the presence or absence of the additional sequence *-isc-* in some verbal forms, we find arguments for up to five verb conjugations (see Danesi 1976 and Vincent 1987 for discussion). The question is of relevance not only to teachers of Italian, but to scholars interested in the morphophonological analysis of Italian.

This paper addresses the question of how many conjugations there are in the Italian verbal system from a morphological standpoint. We restrict our attention here to what can be called standard Italian. The verbal systems of regional varieties of Italian and of dialects often vary considerably and merit systematic study in their own right (see Rohlfs 1966). We examine in this paper such factors as productivity and the way in which verbal forms participate in various word formation processes, as well as certain historical developments and the usual issues of stress placement and the presence of *-isc-*. Despite interesting points in favor of more or even fewer conjugation classes, we conclude that the most convincing evidence nevertheless requires us to posit three classes.

2. Theme vowel, infinitive stress, and the -isc- affix.

Here we give three types of data that have led some scholars to posit up to five conjugations in Italian.

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Infinitives exhibit three distinct theme vowels: *-a-*, *-e-*, and *-i-*. On the basis of theme vowels alone, three conjugations have been distinguished.

Textbooks usually also note in their discussions of verb classes that while stress on the infinitive falls invariably on the theme vowel in the first and third conjugations (with theme vowels *-a-* and *-i-*), it falls on the theme vowel for only some second conjugation infinitives and on the antepenultimate vowel (a root vowel) for other second conjugation infinitives. This fact leads some texts to posit two conjugations for verbs with the theme vowel *-e-*. In fact, most verbs with the theme vowel *-e-* have root stress on their infinitive, like *tergere* in 2 above. The only ones that have theme vowel stress are the twenty-two in 4 below and other verbs using the same roots, given in parentheses (see Davis, Manganaro, and Napoli 1987). ('+' indicates a root that is archaic when free, but not when bound by a prefix.)

- (4) *avere*
cadere (*accadere*, *decadere*, *scadere*)
calere
dolere
dovere
giacere (*soggiacere*)
godere
licere
+ *manere* (*permanere*, *rimanere*)
parere (*apparere*)
piacere (*compiacere*, *dispiacere*)
potere
sapere
sedere (*possedere*, *soprassedere*)
solere
+ *suadere* (*persuadere*)
tacere
temere
tenere (*appartenere*, *attenersi*, *detenere*, *ottenere*, *ritenere*,
sostenere, *trattenere*)
valere (*equivalere*, *prevalere*, *rivalersi*)
vedere (*avvedersi*, *prevedere*, *provvedere*, *rivedere*)
volere

In addition, textbooks usually note that in the third conjugation there are some verbs that have an *-isc-* added to the root in certain forms, as illustrated in 5:

- (5) *finire*: *finisco*, *finisci*, *finisce*, *finisca* . . .
pulire: *pulisco*, *pulisci*, *pulisce*, *pulisca* . . .

Questions we address below, then, are whether any of the factors of choice of theme vowel, root stress on an infinitive, and the presence of the *-isc-* affix signal distinctions in conjugations.

Illustrations of the various verb paradigms are given in the appendices. Appendix 1 illustrates the forms of regular verbs with the theme vowel *-a-* (the traditional first conjugation, e.g., *amare*); Appendix 2 illustrates the forms of regular verbs with the theme vowel *-e-* and root vowel stress in the infinitive (the traditional second conjugation, e.g., *battere*); Appendix 3 illustrates the forms of regular verbs with the theme vowel *-i-* and without the *-isc-* affix (the traditional third conjugation, e.g., *partire*); Appendix 4 illustrates the forms of regular verbs with the theme vowel *-e-* and theme vowel stress in the infinitive (e.g., *temere*); and Appendix 5 illustrates the forms of regular verbs with the theme vowel *-i-* and the *-isc-* affix (e.g., *finire*).

Other breakdowns of the conjugations based on alternative distinctions (such as the number of different stems within the paradigm) are mentioned in the literature, for example by Hall 1971, though we will not discuss these here.

3. Theme vowel and person/number markers.

A first glance at Appendices 1–3 suggests that it is useful to recognize three conjugations in Italian, distinguished by their theme vowels. Let us begin with a detailed study of the morphological analysis of the forms in the paradigms in these appendices.

If we start with the analysis of the imperfect, things look deceptively regular. We can analyze the imperfect, following traditional usage (e.g., Hall 1971), as composed of:

- (6) verb root + theme vowel + v + p/n endings or, more generally,
root + theme vowel + tense/aspect/mood + p/n endings

In this structure, *-v-* is often analyzed as a morpheme indicating the imperfect aspect. For all three verb classes in Appendices 1–3, furthermore, the p/n (person/number) endings we observe are:

- (7) o, i, a, amo, ate, ano

If we now turn to the past subjunctive, however, we find that the verb root and theme vowel are again distinguishable, but the p/n endings are not the same as those posited in 7, and the marker for the past subjunctive is not clear. Let us assume the following analysis:

- (8) verb root + theme vowel + ss + p/n endings

Here we are led to the following p/n endings, valid for all three verb classes:

(9) i, i, e, imo, te, ero

The presence of only one *s* rather than two in the second person plural form could be handled by a rule such as:

(10) $s\text{---} > \emptyset/__s + C$

As it turns out, however, such a rule is not even needed, as it is merely a reflection of a more general constraint on Italian phonological structure. Since Italian does not permit sequences of *-ss-* followed by another consonant, the reduction of the past subjunctive marker *-ss-* to *-s-* before the p/n ending *-te* would automatically be accounted for by an independently required well-formedness condition that rules out, among others, *sst* clusters (cf. Vincent 1976, Lepschy and Lepschy 1977, Vogel 1982).

If we turn now to the present subjunctive, we find a new situation. Here the root is apparent. But the theme vowel does not emerge. Instead, the marker for present subjunctive seems to be the vowel *-i-* for the first conjugation and the vowel *-a-* for the second and third conjugations. We could then have the analysis:

(11) verb root + {a/i} + p/n endings

The p/n endings we would be led to in this instance are:

(12) $\emptyset, \emptyset, \emptyset, \text{iamo}, \text{iate}, \text{no}$

In order to account for the fact that the first and second persons in the plural have identical desinences added to the roots despite their differing vowels in the position before the p/n endings, we need an adjustment rule such as the one in 13:

(13) $V\text{---} > \emptyset/__ + V$

In fact, this rule is needed elsewhere in Italian (e.g., *fam \emptyset + oso*, *libr \emptyset + aio*) and thus poses no additional complication as far as verbal conjugation is concerned (cf. Vogel and Scalise 1982).

We could go on in this manner, but if we did, we would find that the verbal forms in Appendices 1–3 sometimes grouped the traditional second conjugation with the third conjugation (as in the tense/mood morpheme *-i-* for the present subjunctive seen in 11 above) and sometimes grouped the traditional second conjugation with the first

conjugation (as in the future and conditional, where the theme vowel occurs as part of the tense morpheme in the first and second conjugation but not in the third). The details would accumulate, but the insights on the overall pattern might not. Let us therefore stop at this point and stand back to look at the entire forest once more from a different angle.

We notice, first of all, that first conjugation verbs exhibit distinctions from verbs in both the second and third conjugations in every tense except the future and conditional, though not every single person may be distinct (e.g., the first and second persons plural are indistinguishable across all the conjugations in the present indicative and subjunctive). Furthermore, second and third conjugation verbs exhibit distinctions from each other in every tense except the future, the conditional, and the present subjunctive, though not every single person may be distinct here either. On these grounds we would conclude that Italian distinguishes (at least) these three conjugations.

4. *Stress in the infinitives for verbs with theme vowel -e-*.

Of the twenty-two verbs with theme vowel stress in the infinitive form (listed in 4 above), all but four are in some way irregular and will have to be handled accordingly, regardless of their conjugation class. The only regular ones are listed in 14:

(14) *calere, godere, licere, temere*

Of these, *calere* 'be hot' and *licere* 'be permissible' appear only in the third person (for semantic/pragmatic reasons) and only in a restricted set of tenses.

In Appendix 4 the conjugation paradigms for these verbs are given, using *temere* for illustration. These patterns are identical in every tense to those of the regular second conjugation verbs with root stress in the infinitive, seen in Appendix 2. There is thus no motivation for establishing a different conjugation class for these verbs based on their inflectional patterns. In fact, as we go through a variety of other types of data below that have been claimed to make distinctions between verb classes (such as word formation processes), we will find no differences between verbs with theme vowel *-e-* that have root stress in the infinitive and verbs with theme vowel *-e-* that have theme vowel stress in the infinitive. This single fact of stress in the infinitive is the only difference between the two types of verbs. We accordingly conclude that there is only one conjugation with the

theme vowel *-e-* in Italian, and the pattern for that conjugation is given in Appendix 2 (and repeated in Appendix 4).

One might ask why such a high percentage of the verbs in the list in 4 are irregular. In fact, the person unconvinced by our paragraph above might even propose that the high percentage of irregularity alone is an indication that these verbs form a separate conjugation class. Such a position is untenable, however, since most of the verbs with the theme vowel *-e-* are irregular, whether they are stressed on the theme vowel or on a root vowel in the infinitive form (cf. Lepschy and Lepschy 1981, among others). Regula and Jernej 1965 list only eleven regular verb roots with theme vowel *-e-* and root stress in the infinitive:

- (15) *battere, competere, fervere, fremere, incombere, mescere, pascere, -piere* (as in *empiere, compiere*), *ricevere, tessere, vertere*

In contrast, Trentini 1962 lists over one hundred such irregular verb roots (even after we have set aside verbs that are listed as irregular because they have suppletive paradigms and verbs that are phonologically regular but orthographically irregular).

The first conjugation is markedly different with regard to regularity. Trentini lists only two irregular roots (once we set aside verbs that are listed as irregular simply because they are suppletive, i.e., missing certain persons, usually for semantic/pragmatic reasons, such as *albeggiare, balenare, bastare, bisognare, gelare, grandinare, nevicare*). These roots are:

- (16) *andare, stare*

The third conjugation (*-ire*) is also markedly different in this respect. Trentini lists only eight irregular roots (once we set aside verbs that are listed as irregular simply because they are suppletive (e.g., *gire, inerire, ire*):

- (17) (ap)parire, aprire, morire, offrire, salire, udire, uscire, venire

Two of these verbs have archaic irregular forms alternating with regular more modern forms in the past remote. These are given in 18, where two forms for the first person singular of the past remote tense are given in parentheses:

- (18) aprire (regular: aprii; archaic irregular: apersi)
offrire (offrii vs. offersi)

In the discussion of 28a below we will see, furthermore, that the archaic irregular remote past of these two verbs is correlated in a regular

way to their perfect participles: *aperto* and *offerto*. Finally, it should be noted that Trentini lists the totally regular verb in 19 as irregular, and, we suspect, on orthographic grounds:

(19) *cucire*

The written letter *c* is the palatal affricate [č] before a front vowel, but the velar stop [k] before a back vowel. In order to indicate that the sound [č] is maintained throughout the conjugation, the written letter *i* is inserted after the letter *c* and before back vowels. Thus, the present first person singular of *cucire* is written as *cucio*, whereas the present third person singular is *cuce*. From the standpoint of phonology, then, 19 is totally regular, though the standard rules of orthography may obscure this slightly.

The second conjugation, then, appears to be the conjugation for irregular verbs, with only minor exceptions. That is, Appendix 2 gives the pattern for the minority of second conjugation verbs.

We conclude, then, that the fact that the verbs in 4 have theme vowel stress in the infinitive and that the majority of them are irregular are not sufficient reasons to claim that these verbs form their own conjugation. Instead, these verbs belong to the second conjugation.

5. Regularities among the irregularities.

While the second conjugation has many irregular verbs, their irregularities are not totally unpredictable. In this section we outline some of the regularities among the irregularities. The reader will find no mention of whether a verb has root vowel or theme vowel stress in the infinitive here. That is because this stress fact in no way affects the patterns of irregularity. This section, then, is further demonstration of the morphological benefits of claiming that all verbs with the theme vowel -e- form a single conjugation.

Perfect participle:

One common irregularity in verbs with the theme vowel -e- involves the perfect participle. (We refer the reader also to Matthews 1974 pp. 199 ff. for an excellent discussion of irregularities in perfect participles.) Where we expect to find -(C)*Cuto*, we instead find -*so*.

- (20) a. *Cuto* --- > *so* (where C = root final consonant)
accludere, accluso; ardere, arso; arrogere, arroso; aspergere, asperso; chiudere, chiuso; concludere, conquiso; correre, corso; decidere, deciso; dividere, diviso; elidere, eliso; emergere, emerso; esplodere, esploso; evadere, evaso; in-

tridere, intriso; intrudere, intruso; ledere, lesa; mordere, morso; persuadere, persuaso; radere, raso; ridere, riso; rifulgere, rifulso; rodere, roso; spargere, sparso; tergere, terso; uccidere, ucciso

b. CCuto--- > so

accendere, acceso; appendere, appeso; contundere, contuso; difendere, difeso; prendere, preso; rendere, reso; scendere, sceso; spendere, speso; tendere, teso

This particular irregularity always correlates with an irregularity in the past remote form (see, among others, Vincent 1987). The perfect participle minus the *-o* ending coincides with the root for the past remote form in the singular first and third persons and in the plural third person (only). In 21 we see the first person singular of the remote past for the verbs in 20:

- (21) a. *acclusi* . . .
 b. *accesi* . . .

As further evidence that the form of the past remote is directly related to the perfect participle in these verbs, note that there exist verbs with a regular and an irregular perfect participle. If the irregular perfect participle is on the pattern in 20, there will be an accompanying irregular past remote form. For our informants who have a regular perfect participle, however, the past remote form is also regular. An example of such a verb is *perdere*, where in 22 we give the infinitive, the perfect participle, and the first person singular of the past remote form in both its regular and irregular paradigms:

- (22) *perdere, perduto, perdei*
perdere, perso, persi

Another piece of evidence for this correlation comes from the verb *valere*. Here the perfect participle is formed by the insertion of an *-s-* at the end of the infinitival root. The past remote is formed with the addition of *-s-*, as shown in 23. Whether this is accomplished by a rule of *s* insertion or by listing the form in the lexicon is immaterial here.

- (23) *valere, valso, valsi*

Other verbs form their perfect participles as in 20, but their perfect participle also has a different root vowel from the infinitive root. Again, their remote past forms are correlated to the perfect participle form.

- (24) *espellere, espulso, espulsi*
fondere, fuso, fusi

Still other verbs form their perfect participle with *-ss-* in place of the final C or CC of their infinitival root:

- (25) (C) Cuto-- > sso
 annettere, annesso; concedere, concesso; discutere, discusso;
 figgere, fisso; retrocedere, retrocesso; riflettere, riflesso; scin-
 dere, scisso; scuotere, scosso; vivere, vissuto

And their past remote forms are as expected:

- (26) annessi, concessi, etc.

Diphthongization:

Verbs of the type in 25 may also undergo a vowel change in the root (parallel to the verbs in 24). One type of vowel change is quite regular, that seen in 27b:

- (27) a. comprimere, compresso, compressi
 b. muovere, mosso, mossi; scuotere, scosso, scossi

In 27b we have verbs which regularly display an alternation between *o* and *uo* in the root. When the vowel receives stress within the conjugation, it diphthongizes (see, among others, Muljačić 1972 and Tekavčić 1962). The perfect participle and the remote past are built on the non-diphthongized root, however, even though the root vowel receives stress in these forms. This is because of the consonant cluster here, which allows the relevant syllable to be closed. Diphthongization occurs only in open syllables. Once more the remote past and the perfect participle forms are related.

The pattern of diphthongs alternating with simple vowels in 27b above is not limited to verbs which enter into the particular pattern in 25. Instead, it is also common to other verbs of the second conjugation (in 28a) and to a few verbs of the third conjugation (in 28b). Furthermore, it is found not just for *uo/o*, but for *ie/e*.

- (28) a. cuocere, dolere, nuocere, sedere
 b. morire, venire

(We include *dolere* in 28a, but its diphthongization pattern is actually more complex than that of the other verbs, and in ways not particularly relevant here.)

At least three other verbs, as well, are interesting with regard to diphthongization. *Tuonare* occurs only in the third person (as expected, given its meaning). However, in all its inflected forms the

diphthong appears, regardless of the location of stress. In the present participle and the gerund, on the other hand, we find a simple vowel. This, however, may be a pseudo-problem since the present participle and the gerund forms do not occur freely in today's speech. Instead, they are archaic forms given in verb lists for the sake of completeness. The second example, *udire*, has *u* in unstressed syllables and *o* in stressed syllables. And the third example, *uscire*, has *u* in unstressed syllables and *e* in stressed syllables.

- (29) a. tuonare, tonante, tonando
 b. udire, odo
 c. uscire, esco

Stop-fricative alternations:

Finally, there is a large group of verbs whose infinitival root ends in C or C: (very often [j] or [j:]) where the perfect participle root ends in [t] or [t:], and whose past remote root ends in [s]. In all of these cases, regardless of the root final consonant, the form of the past remote is predictable from the form of the perfect participle. A perfect participle root that ends in [t] corresponds to a remote past root that ends in [s], and a perfect participle root that ends in [t:] corresponds to a remote past root that ends in [s:]

- (30) a. [t] of perfect part. correlated to [s] of remote:
 assolvere, assolto, assolti; cingere, cinto, cinsi; dipingere, dipinto, dipinsi; distinguere, distinto, distinti; ergere, er-to, ersi; fingere, finto, fin-si; frangere, franto, fransi; fungere, funto, funsi; giungere, giunto, giunsi; mungere, munto, munsi; piangere, pianto, piansi; porgere, porto, pors-i; pun-gere, punto, punsi; scorgere, scorto, scorsi; sorgere, sorto, sorsi; svellere, svelto, svelsi; tingere, tinto, tinsi; torcere, torto, torsi; ungere, unto, unsi; vincere, vinto, vinsi; vol-gere, volto, volsi
- b. [t:] of perfect part. correlated to [s:] of remote:
 affliggere, afflitto, afflissi; friggere, fritto, frissi; leggere, letto, lessi; proteggere, protetto, protessi; reggere, retto, ressi; struggere, strutto, strussi

The presence of the [t] in the perfect participle, furthermore, causes a preceding nasal to assimilate for point of articulation, in accordance with the general requirement of Italian that a nasal followed by an obstruent must be homorganic to it (see Camilli 1941, Muljačić 1972). This is illustrated below.

(31) *assumere, assunto, assunti*

The root vowel may also change (compare to 24 and 27–28 above), sometimes with the predictable diphthongization pattern noted above in 27–28, and sometimes in different ways:

(32) *cuocere, cotto, cossi; diligere, diletto, dilessi; dirigere, diretto, diressi; redigere, redatto, redassi*

Again, the presence of the [t] in the perfect participle causes a preceding nasal to assimilate for point of articulation:

(33) *redimere, redento, redensi*

Along the same lines, a palatal liquid becomes dental before the [t] of the perfect participle and the [s] of the remote past, again assimilating for point of articulation, as shown in 34. (Orthographically the palatal liquid is represented by *gl* before a front vowel.)

(34) *cogliere, colto, colsi; scegliere, scelto, scelsi; sciogliere, sciolto, sciolsi; togliere, tolto, tolsi*

The analogous change in palatal nasals, orthographically represented as *gn* (in the isolated example *spegnere, spento, spesi*, where, additionally, the [n] is lost in the past remote), is automatically accounted for by the more general requirement on homorganicity in nasal + obstruent clusters mentioned above.

There is at least one verb whose infinitival root ends in a short C, but whose perfect participle has [t:] and whose remote past has [s:] (contrast to 30a–b above):

(35) *scrivere, scritto, scrissi*

Finally, there are verbs whose infinitival roots end in C or C: and whose perfect participles have [st], while the remote past has [s]:

(36) *chiedere, chiesto, chiesi; nascondere, nascosto, nascosi; rimanere, rimasto, rimasi; rispondere, risposto, risposi*

And at least one verb has [s:] in the perfect participle, but only [s] in the remote past:

(37) *mettere, messo, misi*

Here the remote past exhibits a root vowel change that the perfect participle does not exhibit.

There is, moreover, one verb, *esimere*, whose perfect participle, *esentato*, is totally irregular for that infinitival form, but which would

be regular for the nonexistent infinitival form **esentare*. Significantly, the remote past form is totally irregular for the given infinitival form, but would be completely regular for the nonexistent infinitival form:

(38) *esimere, esentato, esentai*

For most of these verbs the remaining forms are regular. However, many verbs of the second conjugation whose infinitival roots end in a palatal consonant exhibit a velar before back vowels. This is shown in 39, where we give the infinitive form and the present first person singular form. This pattern does not have to be considered an irregularity, however, if we analyze the consonant in question as being underlyingly velar. In this case a palatalization rule would apply before front vowels, making the necessary changes.

(39) *affliggere, affliggo; aspergere, aspergo; cingere, cingo; cogliere, colgo; emergere, emergo; ergere, ergo; esigere, esigo; figgere, figgo; fingere, fingo; frangere, frango; friggere, friggo; fungere, fungo; giungere, giungo; leggere, leggo; mescere, mesco; mungere, mungo; nascere, nasco; pascere, pasco; piangere, piango; porgere, porgo; proteggere, proteggo; pungere, pungo; reggere, reggo; rifulgere, rifulgo; rilucere, riluco; scegliere, scelgo; sciogliere, sciolgo; scorgere, scorgo; sorgere, sorgo; spargere, spargo; spegnere, spengo; stringere, stringo; struggere, struggo; tergere, tergo; tingere, tingo; togliere, tolgo; torcere, torco; ungere, ungo; uscire, esco; vincere, vinco; volgere, volgo*

Anomalies here are verbs which exhibit no palatalization in the infinitival root and before front vowels, but, instead, before back vowels:

(40) *solere, soglio; volere, voglio*

Other verbs have only a single isolated irregularity. For example *assistere* is totally regular except for the fact that it has an irregular perfect participle. The same is true for *esigere* and *mescere*.

(41) *assistere, assistito; esigere, esatto; mescere, misto*

Devolvere is regular except for its remote past root, as is *sedere* (which has regular diphthongization, as in 28a):

(42) *devolvere, devolsi; sedere, sedetti*

Rompere is regular except for its perfect participle and its remote past root, as are *stringere* and *vedere*:

- (43) rompere, rotto, ruppi; stringere, stretto, strinsi; vedere, visto, vidi

Svellere has a perfect participle and remote past with the pattern in 30a. Beyond that, an unexpected [g] shows up in root final position before back vowels. A [g] shows up in the same positions with the second conjugation verbs *tenere* and *valere* and the third conjugation verb *venire*. In 44 we have the infinitive and the present first person singular:

- (44) svellere, svelgo; tenere, tengo; valere, valgo; venire, vengo

Vivere has a perfect participle and remote past that both employ [ss], although not in the usual pattern (seen in 25), and its future is missing the unstressed vowel that we would expect before the final syllable:

- (45) vivere, vissuto, vissi, vivrò

Several verbs are like *vivere* in their future formation, where, furthermore, a sonorant will assimilate to the following [r] to yield [r:], as in 46b.

- (46) a. andare, andrò; avere, avrò; cadere, cadrò; dovere, dovrò; potere, potrò; sapere, saprò; vedere, vedrò
b. dolere, dorrò; parere, parrò; rimanere, rimarrò; tenere, terrò; valere, varrò; volere, vorrò

Several other verbs have even more irregularities:

- (47) cadere, conoscere, crescere, giacere, nascere, nuocere, parere, piacere, rimanere, tacere, tenere, trarre

The most irregular of all are:

- (48) avere, dare, dolere, dovere, essere, fare, porre, potere, sapere, volere

Several verbs also have defective infinitival forms:

- (49) addurre, bere, dare, dire, fare, porre, trarre

Some of these turn out not to seem so irregular if we posit as an infinitival root some longer form, such as:

- (50) adducere, bere, dicere, ponere

With the longer infinitival forms in 50, we can recognize roots that appear in the present and imperfect indicative and in the subjunctive. *Dare*, *fare*, and *trarre*, however, seem to be just highly irregular even

if we were to posit longer infinitival forms for the latter two, such as *facere* and *traggere*.

While our examination of verbs with the theme vowel *-e-* has shown that the overwhelming majority of these verbs are irregular, there are patterns of regularity within the irregularities. And these patterns cut across the range of verbs with theme vowel *-e-*. There is insufficient evidence, therefore, to break up the theme vowel *-e-* group of verbs into more than one conjugation class on the basis of any of the factors examined above.

6. *The -isc- in -ire verbs.*

Let us now turn to the question of whether or not the verbs with the stem vowel *i* that appear with an internal *-isc-* at times should be considered a separate conjugation class. In Appendix 5 we see the pattern for the verb *finire*. If we compare Appendices 3 and 5, we see only two differences: (a) in the present indicative and subjunctive and in the imperative, we find *-isc-* at the end of the infinitival root in all persons except the first and second plural; (b) the present participle can have an *i* before the *-ente* ending in Appendix 5, but not in Appendix 3. Beyond this, to our knowledge, there is only one irregular *-isc-* verb: *inferire*, which follows the pattern in 30a above:

(51) *inferire, inferto, infersi*

Furthermore, while Regula and Jernej 1965 list *finiente* as the present participle of *finire*, this form does not appear in the dictionaries we have consulted and Trentini 1962 lists *finente*. Trentini, in fact, gives the present participle of all *-isc-* verbs in his list without this added *i*. As an additional complication, at least one verb of the second conjugation has an *i* between its root and the present participle desinence:

(52) *sapere, sapiente*

Thus, we must conclude that the *i* in the present participle is not a defining difference between conjugation classes within the set of verbs with theme vowel *-i-*.

The presence of *-isc-* in certain inflected verb forms, on the other hand, is at least potentially evidence for establishing these verbs as a special type of theme vowel *-i-* verb, perhaps even a type that merits its own, separate, conjugation class. Notice, however, that *-isc-* shows up only in a few places in the verbal paradigm and never affects the form of the verbal root, the tense/aspect/mood/morphemes, or the *p/n* endings. That is, verbs with the theme vowel *-i-* with and without *-isc-* show identical inflectional paradigms with the single difference

that a few forms have the additional *-isc-* affix. This is a telling fact since tense/aspect/mood morphemes and p/n endings are not identical across the paradigms between any other conjugations. For this reason we take the position that the third conjugation includes all verbs with theme vowel *-i-*, both those that exhibit the *-isc-* affix and those that don't.

Our final position, then, is that there are only three conjugations in Italian, which can be identified by their theme vowels alone.

7. *Word formation rules and verbs.*

In this section we examine some word formation processes that involve verbs and that look at first as though they might offer evidence for a different arrangement of conjugations from the three that we have argued for thus far. We show that these processes can be adequately described with a model of Italian that distinguishes only the three conjugations argued for above.

Verbs not only undergo numerous inflectional rules, they may also undergo word formation processes involving derivation and compounding. Particularly relevant in determining the number of conjugation classes in Italian is the form of the verb that shows up in the different types of complex words. We will first examine what happens in derivation, and following that, compounding.

7.1. *Verbs and derivation.*

When a verb undergoes derivation by the addition of a suffix, if this suffix begins with a consonant, a vowel appears between the verb root and the suffix. In the case of first conjugation verbs, this vowel is *-a-*, which, it will be recalled, is the theme vowel for this verb class:

(53) *amabile, comportamento, gridatore*

For second and third conjugation verbs, the vowel we find is *-i-*. While this is the theme vowel for the third conjugation, it is not the theme vowel for the second conjugation, which, instead, is *-e-*:

(54) *godibile, godimento, goditore* (2- theme stress)
fondibile, nascimento, fonditore (2- root stress)
apribile, pentimento, apritore (3)
finibile, finimento, finitore (3- *isc*)

It is interesting to compare these forms to the forms of the present participle and gerund. While the first conjugation has *-a-* between the root and the ending, here, too, the situation with the other two

verb classes is somewhat surprising. Again, both have the same vowel, but rather than being *-i-*, it is *-e-*. That is, we find what we would recognize as the theme vowel for the second conjugation used with the third conjugation as well:

- (55) *parlante, parlando*
 (56) *permanente, permanendo* (2-theme stress)
 mettente, mettendo (2-root stress)
 sentente, sentendo (3)
 inferente, inferendo (3-isc)

We consider the present participle and the gerund here since they (like the perfect participle) do not really qualify as inflectional formations. Furthermore, in the case of the participles in particular, there is often the additional factor of change of syntactic category (from verb to adjective), which makes these forms more like derivation than inflection (cf. Scalise 1984, ch. 6).

While we have been considering arguments for more than three conjugation classes prior to this point, now it seems that it may be more appropriate to reduce the number to two (see discussion in Vincent 1987 and Delogu 1989, p. 106). That is, while the first conjugation verbs consistently distinguish themselves from the others, taking the theme vowel *-a-* whenever such a vowel is called for, we cannot say the same about the other types of verbs. To the contrary, both *-ere* and *-ire* verbs take the same vowel, as was just seen, in derivation (i.e., *-i-*) and in the formation of the present participle and gerund (i.e., *-e-*).

While on these grounds it may seem appealing to collapse the last two categories of verbs into a single group, we have already seen that significant distinctions are consistently maintained between these two verb categories elsewhere, specifically in the different conjugated forms and the perfect participle. We thus propose to maintain the conjugation distinction between *-ere* and *-ire* verbs, and seek an alternative account for the base of the various types of formations involving verbs that appear to obscure the conjugation distinctions.

Looking back at our Appendices again, we see that the infinitival root plus the theme vowel form the basis for several tenses (present, imperfect, remote past, past subjunctive, future, conditional). The data in 53–56, however, suggest that this is not the only base form in derivational word formation processes in Italian.

Let us first consider the base for the first conjugation forms in 53 and 55:

- (57) verb root + a

This structure coincides exactly with at least three other forms:

- (58) verb root + theme vowel
 present third person singular
 informal singular imperative

The base for the second and third conjugation forms in 54 can be identified as:

- (59) verb root + i

This form is homophonous with the items in 60 for all the second and third conjugation verbs except those with *-isc-*:

- (60) present second person singular
 informal singular imperative

Finally, let us consider the base for the second and third conjugation forms in 56:

- (61) verb root + e

This form is homophonous with 62 for all the second and third conjugation verbs except those with *-isc-*:

- (62) present third person singular

Comparing 58, 60, and 62, we see that the three forms listed in 58 subsume those in 60 and 62 (given that we can discard the present second person singular, listed in 60, as indistinguishable from the familiar imperative in regular verbs of the second and third conjugations). This leads us to the following interpretation: all three forms in 58 coincide with forms that serve as the base for various types of word formation in Italian.

If this claim is true, then word formation processes do not offer any additional evidence for determining the number of conjugation classes in Italian. Rather, word formation processes make use of conjugation distinctions that are already evident in the verbal paradigms in the appendices.

Support for this claim has already been seen in the demonstration that the first item on the list in 58, the verb root + theme vowel, and the second item on the list in 58, the third person singular (minus the *-isc-* affix), are the bases for some of the derivational rules seen in this section as well as for various verbal forms seen in the appendices.

Evidence that the third item on the list in 58, the informal singular imperative form, coincides with the base for other word formation

processes can be found in the area of compounding, the issue we address in the next subsection.

It should be noted that in the foregoing discussion of derivation, as in the following one on compounding, when we say that the combining form of a verb coincides with an imperative, or some other form, we are not claiming that this is the form the complex structure is actually built on. That is, we are not claiming that an imperative must first be formed and then that any other word formation processes apply. Instead, we are demonstrating only the surface identity between the forms in question.

7.2. *Verbs and compounding.*

A common compound structure involving verbs is that in which a verb form is followed by a noun which is its complement. The result is a noun, as seen below:

- (63) *porta*: portacenero (1)
godi: godifulmine (2-theme stress)
tergi: tergicristallo (2-root stress)
apri: apribottiglie (3)
pulisci: pulisciscarpe (3-isc)

As in the case of derivation, the pattern that emerges here is that the *-are* verbs distinguish themselves from the other two types of verbs in terms of the vowel following the verbal root. Here *-ere* and *-ire* verbs have the same vowel (i.e., *i*), possibly suggesting that they really should not be considered two separate verb classes. As we mentioned above, however, there are still significant differences that argue in favor of distinguishing them. Instead, let us address the problem of what the base form is in the type of compounds under consideration. In this regard, the most telling case is *pulisciscarpe*, which is clearly composed of more than just the infinitival root (which would be *pul*) plus some other vowel. The *-isc-* is a dead giveaway that the base for the compound is a longer form, in fact, precisely the form we find with the familiar imperative.

As we noted above in 60, the present second person singular and the familiar singular imperative are homophonous in second and third conjugation verbs. However, there are two facts that tell us that it is the familiar imperative and not the present second person singular that coincides with the forms in 63. One is that the form *porta* for the first conjugation is not homophonous with the present second person singular form. In fact, the only form that would be identical to the verbal element in all the compounds in 63 is the familiar imperative.

Second, in compounds containing verbs for which the familiar imperative form is somehow irregular, the predicted irregular form shows up:

(64) *fa: fabbisogno*

The present second person singular of this verb is *fai* not *fa*, but we find no compounds using *fai*. (The lengthening of the [b] in 64 would be accounted for by "raddoppiamento sintattico".)

There is another verbal compound of interest here, as well, though it has a somewhat different structure from those we have been considering:

(65) *andirivieni*

This form consists of not one, but two, verbal elements. While the second part, *rivieni*, coincides with the expected imperative form of the verb *rivenire*, *andi* poses more of a problem. That is, *andi* is not an existent form of the verb *andare* at all today. In Dante, however, we do come across it in the line:

(66) Or vo' che sappi, innanzi che più *andi*, (*Inferno*, IV, 33)

Andi is a present second person subjunctive form here, as is *sappi*. In other places, we find that the indicative present second person for both verbs is the same form as today:

(67) *se tòsco se', ben sai omai chi fu* (*Inf.*, XXXII, 66)
carcere vai per altezza d'ingegno (*Inf.*, X, 59)

Interestingly, we also find that the imperative form today for *andare* is used by Dante:

(68) Or te ne *va*; e perchè se' vivo anco (*Inf.*, XVII, 67)

It should be noted, however, that the current imperative form for *sapere* (which is *sa*) is not used in the *Inferno*. Instead, the form *sappi* is used for familiar imperatives in the singular. Thus the line following that given in 68 above is:

(69) *sappi* che 'l mio vincin Vitaliano (*Inf.*, XVII, 68)

Thus *sappi* doubles as the form for the familiar imperative and the present second singular subjunctive. We suggest on these grounds that *andi* (as in 66) did the same (although we have not yet found an instance in which *andi* is used for a familiar imperative). If we are correct here, we have further support for the analysis of the verbal form in compounds being the same as the form used for the familiar im-

perative, rather than any of the other forms that have been suggested. In fact, it is not surprising that the analysis we are proposing for 65 is rarely recognized by native speakers, who tend not to see this word as a compound, a fact suggesting that it was formed long ago and that it contains a form that is no longer available.

Thus, we can conclude on the basis of compounds that the form of the base used across conjugation classes is that which coincides with the familiar imperative form. Compounds, then, do not give any additional ways in which verbs with the theme vowel *-i-* with *-isc-* differ from those without *-isc-*. Rather, the difference in the bases used in compounds for these two types of verbs follows from a single difference in their inflectional paradigms (the difference in the familiar imperatives).

As in the case of derivation, we can maintain precisely three distinct conjugation classes, despite the fact that *-ere* and *-ire* verbs exhibit the same vowel following the verbal root in compounds and despite the fact that some *-ire* verbs have *-isc-* in compounds and others do not.

8. *Conclusions.*

In this paper we have examined Italian verb forms as well as the verbal components of derived and compound words. The primary question addressed was how many conjugation classes exist in Italian. That is, are there only the three corresponding to the three infinitival endings *-are*, *-ere*, and *-ire*, or are there additional ones to allow for (a) the distinction in *-ere* verbs on the basis of where stress falls in the infinitive, and/or (b) the distinction in *-ire* verbs between those that have the affix *-isc-* in certain forms and those that do not? The possibility of collapsing the second and third classes on the grounds that they are similar in derivational processes, participle formation, and compound formation was also examined. We concluded, however, that the verbal paradigms exemplified in the appendices support strongly a three-conjugation model for Italian. Furthermore, with the proper analysis of the base forms used in derivation and word formation processes, this three-conjugation model is both theoretically and empirically adequate.

Appendix 1: *amare*, a regular verb of the 1st conjugation

present:	imperfect:	future:	conditional:
amo	amavo	amerò	amerei
ami	amavi	amerai	ameresti
ama	amava	amerà	amerebbe
amiamo	amavamo	ameremo	ameremmo
amate	amavate	amerete	amereste
amano	amavano	ameranno	amerebbero

remote past:	subj. pres:	subj. past:
amai	ami	amassi
amasti	ami	amassi
amò	ami	amasse
amammo	amiamo	amassimo
amaste	amiate	amaste
amarono	amino	amassero

present participle: amante

gerund: amando

perfect participle: amato

familiar imperative: ama, amate

Appendix 2: *battere*, a regular verb of the 2nd conjugation

present:	imperfect:	future:	conditional:
batto	battevo	batterò	batterei
batti	battevi	batterai	batteresti
batte	batteva	batterà	batterebbe
battiamo	battevamo	batteremo	batteremmo
battete	battevate	batterete	battereste
battono	battevano	batteranno	batterebbero

remote past:	subj. pres:	subj. past:
battei	batta	battessi
battesti	batta	battessi
battè	batta	battesse
battammo	battiamo	battessimo
batteste	battiate	batteste
batterono	battano	battessero

present participle: battente

gerund: battendo

perfect participle: battuto

familiar imperative: batti, battete

Appendix 3: *partire*, a regular verb of the 3rd conjugation

present:	imperfect:	future:	conditional:
parto	partivo	partirò	partirei
parti	partivi	partirai	partiresti
parte	partiva	partirà	partirebbe
partiamo	partivamo	partiremo	partiremmo
partite	partivate	partirete	partireste
partono	partivano	partiranno	partirebbero

remote past:	subj. pres:	subj. past:
partii	parta	partissi
partisti	parta	partissi
partì	parta	partisse
partimmo	partiamo	partissimo
partiste	partiate	partiste
partirono	partano	partissero

present participle: partente

gerund: partendo

perfect participle: partito

familiar imperative: parti, partite

Appendix 4: *temere*

present:	imperfect:	future:	conditional:
temo	temevo	temerò	temerei
temi	temevi	temerai	temeresti
teme	temeva	temerà	temerebbe
temiamo	temevamo	temeremo	temeremmo
temete	temevate	temerete	temereste
temono	temevano	temeranno	temerebbero

remote past:	subj. pres:	subj. past:
temei	tema	temessi
temesti	tema	temessi
temè	tema	temesse
tememmo	temiamo	temessimo
temeste	temiate	temeste
temerono	temano	temessero

present participle: temente

gerund: temendo

perfect participle: temuto

familiar imperative: temi, temete

Appendix 5: *finire*

present:	imperfect:	future:	conditional:
finisco	finivo	finirò	finirei
finisci	finivi	finirai	finiresti
finisce	finiva	finirà	finirebbe
finiamo	finivamo	finiremo	finiremmo
finite	finivate	finirete	finireste
finiscono	finivano	finiranno	finirebbero

remote past:	subj. pres:	subj. past:
finii	finisca	finissi
finisti	finisca	finissi
finì	finisca	finisse
finimmo	finiamo	finissimo
finiste	finiate	finiste
finirono	finiscano	finissero

present participle: *finiente* or *finente*

gerund: *finendo*

perfect participle: *finito*

familiar imperative: *finisci, finite*

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