

INFINITIVAL RELATIVES IN ITALIAN

DONNA JO NAPOLI

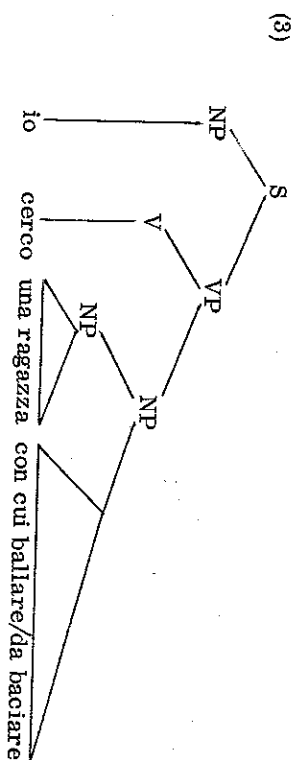
Georgetown University

0. This paper is a study of the syntax of infinitival relatives in Italian. In the first section it will be established that strings of NP+Infinitival Relative constitute a noun phrase. In section 2 it is argued that infinitival relatives are reduced relative clauses, i. e. they are full sentences in deep structure. In section 3, I consider the mood of the underlying clauses. Finally, the reduction rules for deriving infinitival relatives are examined in section 4, and a parallel with English infinitival relatives is drawn in the last section, which closes with a suggestion for a similar analysis in English.

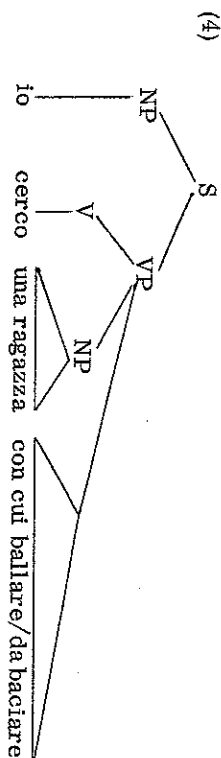
1. Constituency. The following sentences illustrate the infinitival clauses under consideration:

- (1) *Cerco una ragazza con cui ballare.*
'I'm looking for a girl with whom to dance.'
- (2) *Cerco una ragazza da baciare.*
'I'm looking for a girl to kiss.'

There is abundant evidence from the syntactic behavior of these clauses that they form a NP constituent with the preceding NP, as shown in (3),

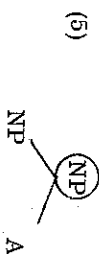


and that these infinitival clauses are not directly dominated by the VP of the main sentence in a structure such as the following:



The evidence for (3) and against (4) comes from sentences that have undergone movement transformations, and from the distributional facts about infinitival relatives.

1.1 Movement transformations. There are a number of transformations which move NP's and are subject to Chomsky's (1964b) A-over-A principle (cf. Ross's (1967) Complex NP Constraint). These transformations may move only the circled NP in a structure like the following, where A is any node:



Thus, for instance, PASSIVE may move a NP+Prepp string provided it forms a NP:

- (6) *Le ciambelle nel frigo sono state mangiate da Claudio.*
'The doughnuts in the refrigerator were eaten by Claudio.'

But it cannot move a similar string when it does not constitute a NP:

- (7) **Le ciambelle nel frigo sono state messe da Claudio.*
'The doughnuts in the refrigerator were put by Claudio.'

Clearly, facts of this sort constitute evidence in establishing constituent structure.

Other transformations which move a NP and are subject to the A-over-A principle are SUBJECT-RAISING, OBJECT-RAISING, and OBJECT-PREPOSING. SUBJECT-RAISING is observed in sentences with the verbs sembrare 'seem' and parere 'appear':

- (8) *Sembra che le ciambelle nel frigo siano ancora fresche.*
'It seems that the doughnuts in the refrigerator are still fresh.'
(9) *Le ciambelle nel frigo sembrano essere ancora fresche.*
'The doughnuts in the refrigerator still seem to be fresh.'

OBJECT-RAISING (or TOUGH-MOVEMENT in Postal 1971) relates pairs of sentences whose predicates contain Cop+Adj, with adjectives such as difficile 'difficult', facile 'easy', and interessante 'interesting':

- (10) *È difficile leggere quel libro sulla guerra.*
'It's hard to read that book on the war.'
(11) *Quel libro sulla guerra è difficile da leggere.*
'That book on the war is hard to read.'

OBJECT-PREPOSING (cf. Napoli, in preparation), on the other hand, is a transformation which fronts a direct object NP in indefinite-si constructions, relating pairs of sentences such as:

- (12) *Si vendono tutti i tipi di pesce nel mercato.*
'They sell all kinds of fish in the market.'
(13) *Tutti i tipi di pesce si vendono nel mercato.*
'All types of fish are sold in the market.'

These transformations, like PASSIVE, observe the A-Over-A principle, as illustrated by the ungrammatical sentences that follow.

- (14) **Le ciambelle sembrano nel frigo essere ancora fresche.*
(S-R)
'The doughnuts seem in the refrigerator to be still fresh.'
(15) **Quel libro è difficile da leggere sulla guerra.* (O-R)
'That book is hard to read on the war.'
(16) **Tutti i tipi si vendono di pesce nel mercato.* (O-P)
'All types are sold of fish in the market.'

I now examine the behavior of the infinitival relatives with respect to the four transformations cited.

PASSIVE:

- (17a) *Ogni sera Enzo cerca una ragazza con cui ballare/da baciare.*
'Every night Enzo looks for a girl to dance with/to kiss.'
(17b) *Ogni sera una ragazza con cui ballare/da baciare è cercata da Enzo.*
(17c) **Ogni sera una ragazza è cercata con cui ballare/da baciare da Enzo.*

SUBJECT-RAISING:

- (18a) *Sembra che una ragazza con cui ballare/da baciare è la perfetta soluzione.*
'It seems that a girl to dance with/to kiss is the perfect solution.'
(18b) *Una ragazza con cui ballare/da baciare sembra essere la perfetta soluzione.*
(18c) **Una ragazza sembra con cui ballare/da baciare essere la perfetta soluzione.*

OBJECT-RAISING:

- (19a) *È difficile trovare una ragazza con cui ballare/da baciare.*
'It's difficult to find a girl to dance with/to kiss.'
(19b) *Una ragazza con cui ballare/da baciare è difficile da trovare.*
(19c) **Una ragazza è difficile da trovare con cui ballare/da baciare.*

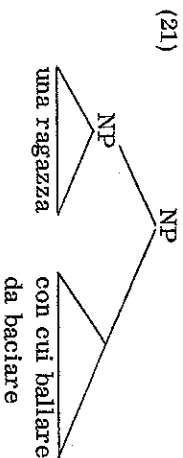
OBJECT-PREPOSING:

- (20a) *Si può trovare una ragazza con cui ballare/da baciare.*
'One can find a girl to dance with/to kiss.'
(20b) *Una ragazza con cui ballare/da baciare si può trovare.*
(20c) **Una ragazza si può trovare con cui ballare/da baciare.*

As can be observed in the foregoing (c) sentences, the noun phrase una ragazza cannot be moved and separated from the infinitival relatives by any of these movement transformations. Rather, una ragazza con cui ballare/da baciare is always treated as a NP constituent.

Since these transformations are all subject to the A-over-A principle, these data clearly indicate that the constituent structure of una ragazza con cui ballare/da baciare cannot be that shown in (4). Rather, they constitute convincing evidence supporting the structure

postulated in (3), where the infinitival relative forms a NP with the noun phrase it follows:



1.2 Distribution. Infinitival relatives may follow a noun phrase appearing in any position in a sentence. That is, they may be constructed with a subject NP, a direct object NP, an indirect object NP, an NP object of a preposition, and so forth:

- (22) Una ragazza con cui ballare è appena entrata.
'A girl to dance with just entered.'
- (23) Cerco una ragazza con cui ballare.
'I'm looking for a girl to dance with.'
- (24) Parlo alla perfetta ragazza con cui ballare.
'I was speaking to the perfect girl to dance with.'
- (25) Cammino dietro della perfetta ragazza con cui ballare.
'I was walking behind the perfect girl to dance with.'

But their position is fixed with respect to that noun phrase: they must always follow it. In fact, infinitival relatives cannot occur unless they are constructed with a preceding noun phrase.

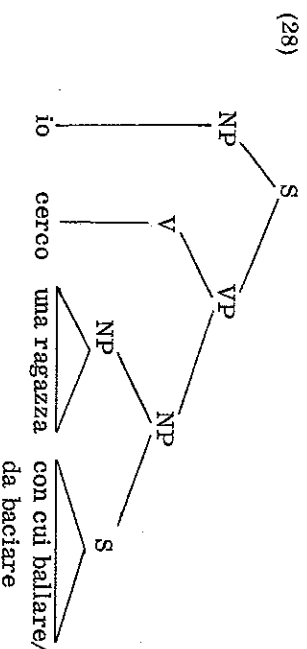
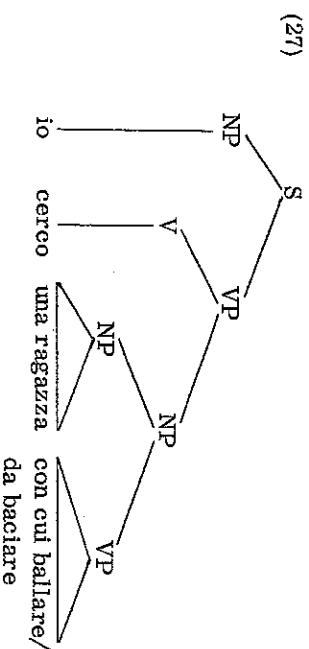
If it is assumed that these infinitival phrases form a constituent with their preceding noun phrase, these distributional facts are all an automatic consequence of the distribution of that preceding noun phrase. If this constituent structure is not assumed, then their distribution will have to be defined separately by each phrase structure rule that puts out a NP. Every such rule would have to generate optionally an infinitival phrase after a NP. Assuming for the moment that infinitival phrases originate as S, the rules needed, for instance, to describe the structure of sentences (22)-(25) would be as follows:

- (26) S → NP (S) VP
 VP → V NP (S)
 Prepp → Prep NP (S)

But there is no evidence, apart from the sentences bearing infinitival relatives, to support such rules. Clearly, they would be ad hoc, and would completely miss the generalization underlying the distributional facts previously noted.

In short, unless it is assumed that these infinitival phrases are part of a complex NP structure, as in (21), there is no satisfactory way to explain why they do not appear without a preceding NP, and why they may occur after a noun phrase in any position that such noun phrase may assume in a sentence.

2. Deep structure. I have so far established that (3) is the proper underlying constituent structure of sentences (1) and (2) at some stage in their derivation. One question to be examined now is whether the node dominating the infinitival phrase is a VP in deep structure, as shown in (27), or whether it is an S, as shown in (28).



In this section I argue that the operations of Equi-NP DELETION and Fare-ATTRACTION show that (28) is the proper deep structure of sentences (1) and (2). Then I present facts concerning relative pronouns, coreference, and pied-piping, which support the contention that the infinitival phrases under consideration are reduced relative clauses; that is, they have the deep structure of a full relative clause, namely, an underlying S.

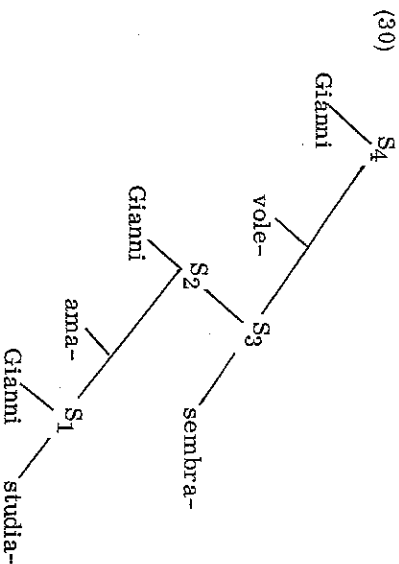
2.1 An underlying S. EQUI-NP DELETION is the rule that deletes the subject of a complement sentence when it is coreferential with a noun phrase in the next higher sentence. It can be shown that EQUI

is cyclic and that it applies to the structure underlying the infinitival phrases. Then, for EQUI to be operative on these phrases, they must be dominated by an underlying S node rather than by a VP node.

One may begin by considering a sentence like the following:

- (29) Gianni vuole sembrare amare (di) studiare.
'John wants to seem to love to study.'

This sentence has roughly the following underlying structure:¹



Its surface form is derived through applications of EQUI and SUBJECT-RAISING in the following way. In the second cycle, EQUI applies to yield:

- (31) [Gianni ama- (di) studiare]
S₂ S₂

In the third cycle, SUBJECT-RAISING applies and gives:

- (32) [Gianni sembra- amare (di) studiare]
S₃ S₃

Then, in the fourth and final cycle, EQUI applies again, yielding:

- (33) [Gianni vole- sembrare amare (di) studiare]
S₄ S₄

In the derivation of (29) two rules were applied in the order that follows:

- (34) EQUI
SUBJECT-RAISING
EQUI

This ordering is the only one possible in this derivation. EQUI must apply in S₂ before SUBJECT-RAISING raises its subject to S₃. Then, EQUI must apply again in S₄ to erase the derived subject of S₃. But unless SUBJECT-RAISING applies in S₃ there is no environment for EQUI in S₄. Thus, (34) is the proper ordering of the rules in the derivation of (29).

Given a theory of rule application in which rules are ordered, the only way to solve the ordering paradox of (34) is to assume that these rules apply in a cyclic fashion, so that each of the two applications of EQUI is on a different cycle.

Given a theory of rule application in which rules are not ordered, but rather apply whenever their structural description is met, the cycle is still needed. Otherwise, there is no way to explain why certain rules must apply before others in a derivation. Within such a theory the ordering in (34) is a natural outcome as long as EQUI and SUBJECT-RAISING are cyclic. If they were not cyclic, there would be no way to prevent SUBJECT-RAISING from applying in S₃ before EQUI applied in S₂, to generate *Gianni vuole sembrare amare che Gianni studi(a) 'John wants to seem to love that John studies'. Thus, even within this theory EQUI must be a cyclic rule (cf. Perlmutter 1973, and in preparation, for arguments for the cycle).

Consider now sentences bearing infinitival relatives. It may be observed that EQUI applies in these phrases, as illustrated here:

- (35) Cerco una ragazza con cui provare a ballare.
'I'm looking for a girl to try to dance with.'
(36) Cerco una ragazza da provare a baciare.
'I'm looking for a girl to try to kiss.'
(37) Cerco una ragazza con cui cominciare a ballare.
'I'm looking for a girl to begin to dance with.'
(38) Cerco una ragazza con cui fingere di ballare.
'I'm looking for a girl to pretend to dance with.'

In all these sentences EQUI takes place between the subjects of the two infinitives. Thus, the infinitival phrases beginning with *con cui* and *da* must be dominated by an S node. Furthermore, EQUI was shown to be cyclic; therefore, the node dominating the infinitival phrases, again, must be a cyclic node, in this case, an S node.

I now turn to another rule, Fare-ATTRACTION, which furnishes another argument that the infinitival relatives are dominated by an underlying S node. Fare-ATTRACTION is the rule that derives

sentences in which the verb *fare* 'make' (also *lasciare* 'let', and verbs of perception, such as *vedere* 'see', and *sentire* 'hear') is followed immediately by an infinitive, e.g.

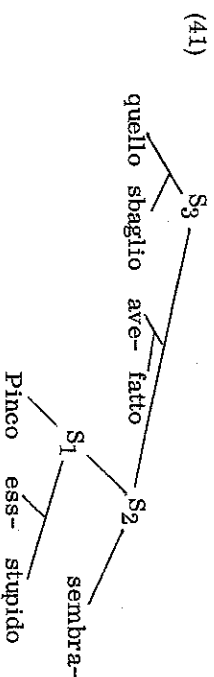
- (39a) *Faccio piangere.*
'I make people cry.'
(39b) *Faccio andare Martina.*
'I make Martina go.'
(39c) *Faccio mangiare la pasta a Martina.*
'I make Martina eat the pasta.'
(39d) *Faccio leggere la lettera a Silvia da Martina.*
'I make Martina read the letter to Silvia.'

To show that *Fare-ATTRACTION* is cyclic, it is sufficient to show that it is neither precyclic nor postcyclic.

Fare-ATTRACTION is not precyclic for it must apply after *SUBJECT-RAISING*, which is cyclic. The evidence that it must apply after *SUBJECT-RAISING* comes from sentences like:

- (40) *Quello sbaglio ha fatto sembrare (?essere) stupido Pinco.*

The underlying structure of such a sentence is roughly the following:³



Its surface form is derived by application of *SUBJECT-RAISING* in the second cycle, yielding:

- (42) [*Pinco sembra- (essere) stupido*]
S₂ S₂

and application of *Fare-ATTRACTION* in the final cycle, yielding:

- (43) [*quello sbaglio ave-fatto sembrare (essere) stupido Pinco*]
S₃ S₃

In the operation of *Fare-ATTRACTION*, S₂ is pruned. This must be so because *REFLEXIVE*, which applies within S boundaries, may

apply between the subject of *fare* and some object of the verb in the complement of *fare*, e.g.

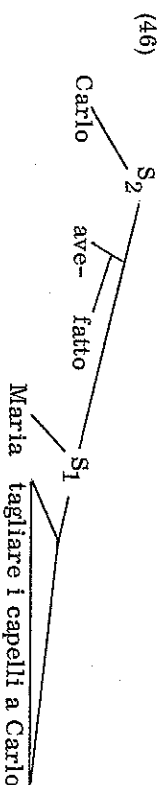
- (44) *Gianni si è fatto tagliare i capelli dal barbiere.*
John to-himself had cut the hair by the barber
'John had his hair cut by the barber.'

If *Fare-ATTRACTION* applied before *SUBJECT-RAISING* instead of after it in the derivation of (40), then the environment for the latter rule would be destroyed, since S₂ would be pruned. Then, the fact that *Fare-ATTRACTION* must here apply after *SUBJECT-RAISING*, which is cyclic, indicates that *Fare-ATTRACTION* cannot be precyclic.

Fare-ATTRACTION can apply before *REFLEXIVE*. This can be seen in the derivation of a sentence like the following:

- (45) *Carlo si è fatto tagliare i capelli da Maria.*
'Carlo had his hair cut by Maria.'

The underlying structure of such a sentence being roughly as follows:



Fare-ATTRACTION applies in the second cycle, yielding:

- (47) [*Carlo ave-fatto tagliare i capelli a Carlo da Maria*]
S₂ S₂

Then, *REFLEXIVE* applies in the same cycle (since the previous operation of *Fare-ATTRACTION* causes S₁ to prune), yielding the surface structure of sentence (45). If *Fare-ATTRACTION* were not to precede *REFLEXIVE*, there would be no way to derive the reflexive pronoun in that sentence. Thus, *Fare-ATTRACTION* must precede *REFLEXIVE* in this derivation.

Now, *REFLEXIVE*, which is an obligatory rule, must be able to operate before *EQU*, which was shown earlier to be a cyclic rule. Evidence that *REFLEXIVE* must apply before *EQU* comes from sentences like the following:

- (48a) Giorgio vuole pettinarsi.
George wants to comb-the-hair to himself
'George wants to comb his hair.'
(48b) *Giorgio vuole pettinarlo.
George wants to comb-the-hair to him

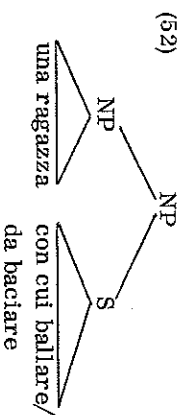
If REFLEXIVE can apply before the cyclic rule EQU, then REFLEXIVE must not be postcyclic. Further, since Fare-ATTRACTION was shown to be able to precede REFLEXIVE, Fare-ATTRACTION also cannot be postcyclic. Since it has been seen that Fare-ATTRACTION cannot be precyclic either, it must be concluded that Fare-ATTRACTION is a cyclic rule.

Let us now examine the following sentences in whose derivation Fare-ATTRACTION has applied in the infinitival phrases concerned:

- (49) Cerco una ragazza da fare cantare.
'I'm looking for a girl to make sing.'
(50) Cerco una ragazza a cui fare cantare la canzone.
'I'm looking for a girl to make sing the song.'
(51) Cerco una ragazza da cui farmi tagliare i capelli.
'I'm looking for a girl to make cut my hair.'

Since Fare-ATTRACTION is cyclic, and since it applies in the infinitival phrases introduced by *da*, *a* *cui*, and *da* *cui* in these sentences, the node dominating these infinitival phrases must be a cyclic node, in this case, an S node.

2.2 A relative clause. It is clear, then, that the underlying structure of NP-infinitival phrase is a complex noun phrase:



This structure is common to two well-known types of complex noun phrase in Italian, namely, a complex NP with a sentential complement, as in (53),

- (53) Il fatto che Giorgio non può venire mi fa piangere.
'The fact that George cannot come makes me cry.'

and a complex NP with a relative clause, as in (54).

- (54) Cerco una ragazza con cui io possa ballare.
'I'm looking for a girl with whom I can dance.'

A natural question is whether the complex NP structure in (52) is one of these two kinds of structure, or whether it is a third kind, to be distinguished from the others.

There is abundant and convincing evidence that the complex NP structure underlying the infinitival phrases under consideration is the same as underlies relative clauses. That is, these infinitival phrases are not different in deep structure from the commonest relative clause.

First, there is the matter of relative pronouns. Relative clauses may be introduced by *che* 'that', by a form of the relative pronoun *il* *quale*, or, when preceded by a preposition, by *cui* or a form of *il* *quale*, e.g. 4

- (55a) Cerco una ragazza che posso baciare.
'I'm looking for a girl that I can kiss.'
(55b) (*)Cerco una ragazza la quale posso baciare.
'I'm looking for a girl whom I can kiss.'
(55c) Cerco una ragazza con cui posso ballare.
'I'm looking for a girl with whom I can dance.'
(55d) Cerco una ragazza con la quale posso ballare.
'I'm looking for a girl with whom I can dance.'

Complex noun phrases like the one in (53) never employ a form of *il* *quale*:

- (56) *Il fatto il quale Giorgio non può venire mi fa piangere.
'The fact which George cannot come makes me cry.'

These facts, together with the fact that *il* *quale* cannot appear in any other complement construction, as illustrated here:

- (57a) *Il quale Carlo l'ha fatto è triste ma vero.
'Which Carlo did it is sad but true.'
(57b) *Ho detto il quale Sandro veniva.
'I said which Sandro was coming.'
(57c) *Volevo il quale Romolo restasse.
'I wanted which Romolo would stay.'

indicate that the relative pronoun *il* *quale* may not occur in structures other than relative clauses. But the infinitival phrases under

consideration may bear cui or any form of il quale when introduced by a preposition,

- (58a) Cerco una ragazza con cui/la quale ballare.
 'I'm looking for a girl with whom to dance.'
 (58b) Cerco una ragazza a cui/la quale dare l'anello.
 'I'm looking for a girl to whom to give the ring.'

Moreover, relative clauses in which the NP coreferential with the head NP is possessive may be introduced by cui preceded by the definite article and followed by the possessed noun. In many dialects this type of relative clause is well formed provided the possessed noun is not accusative, e.g.

- (59a) Conosco l'uomo la cui figlia è bella.
 'I know the man whose daughter is pretty.'
 (59b) Conosco l'uomo alla cui figlia Giorgio parla.
 'I know the man whose daughter Giorgio is speaking to.'
 (59c) ??Conosco l'uomo la cui figlia Giorgio ama.
 'I know the man whose daughter George loves.'

Likewise, infinitival phrases may be introduced in a similar fashion, and with the same restriction:

- (60a) Cerco un uomo ricco colla cui figlia ballare.
 'I'm looking for a rich man with whose daughter to dance.'
 (60b) ??Cerco un uomo ricco la cui figlia (da) sposare.
 'I'm looking for a rich man whose daughter to marry.'

Clearly, the occurrence of relative pronouns and their behavior in these constructions must be taken as evidence that these infinitival phrases are relative clauses.

Consider now the question of coreference in relative clauses. A relative clause must contain in underlying structure a noun phrase which is coreferential with its head noun phrase. The relative pronoun is derived from this coreferential noun phrase in the clause. The fact that it has the same gender and number as the head noun phrase indicates that at some point in its derivation there was a coreferential noun phrase in its place.

Not all embedded clauses must have a coreferential noun phrase. For instance, complements of noun phrases like il fatto 'the fact' do not. Other complements may have a coreferential noun phrase, but, unlike relative clauses, there is no trace of such noun phrases in these embedded clauses. Consider, for instance, the following sentences which illustrate complements that require coreference:⁵

- (61a) Le ragazze cercano di venire.
 'The girls try to come.'
 (61b) *Le ragazze cercano che vengano.
 'The girls try that they come.'
 (61c) Maria è bella da guardare.
 'Mary is pretty to look at.'
 (61d) *Maria è bella da guardare Maria.
 'Mary is pretty to look at Mary.'
 (61e) *Maria è bella da guardarla.
 'Mary is pretty to look at her.'

The infinitival phrases under consideration may be introduced by relative pronouns, and, as in relative clauses, these pronouns must have a head coreferential noun phrase. Witness the ungrammaticality of the following examples:

- (62a) *Cerco una ragazza da baciare Maria.
 'I'm looking for a girl to kiss Mary.'
 (62b) *Cerco una ragazza con il quale ballare.
 'I'm looking for a girl with whom (masc. sg.) to dance.'
 (62c) *Cerco una ragazza alle quali dare l'anello.
 'I'm looking for a girl to whom (fem. pl.) to give the ring.'

If the infinitival phrases under discussion are derived from relative clauses, the fact that their coreferential noun phrase may leave a trace (i.e. the relative pronoun) is thereby explained.

In short, then, the fact that these infinitival phrases require coreference, and that the coreferential noun phrase may appear in the surface as a relative pronoun, is evidence that these infinitival phrases are reduced versions of relative clauses.

I now turn to another aspect of relative clauses, namely, the fronting of prepositions and case markers, commonly referred to as Pied-Piping. When the object of a preposition is relativized, the preposition must be fronted along with its object:⁶

- (63a) Cerco una ragazza con { cui } io possa ballare.
 { la quale }
 (63b) *Cerco una ragazza { cui } io possa ballare con.
 { la quale }

Likewise, in the infinitival phrases under consideration, prepositions must be pied-piped:

- (64a) Cerco una ragazza con { cui } ballare.
 { la quale }

- (64b) *Cerco una ragazza { cui } ballare con.
 { la quale }

If the subject of a verb embedded in the complement of fare is relativized, the case marker of that subject must be pied-piped:

- (65a) La ragazza a cui faccio cantare questo si chiama Pina.
 'The girl I make sing this is named Pina.'
 (65b) La ragazza dalla quale mi faccio tagliare i capelli si chiama Pina.
 'The girl by whom I have my hair cut is named Pina.'

Likewise, in the cited infinitival phrases, case markers must be fronted:

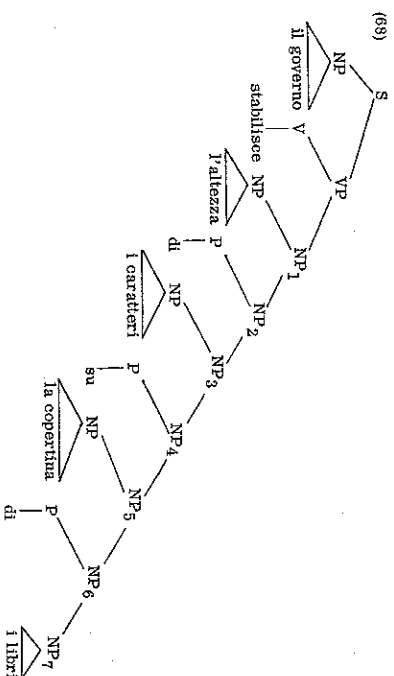
- (66a) Cerco una ragazza a { cui } fare cantare questo.
 { la quale }
 (66b) Cerco una ragazza da { cui } farmi tagliare i capelli.
 { la quale }

Thus, with respect to prepositions and case markers, the infinitival phrases under discussion observe the same conditions on Pied-Piping as relative clauses. Moreover, their similarity is more striking when one considers pied-piping of noun phrases.

Consider the following sentence:

- (67) Il governo stabilisce l'altezza dei caratteri sulla copertina dei libri.
 'The government prescribes the height of the lettering on the cover of books.'

The structure of this sentence is roughly as in (68).



If NP₇ is relativized, NP₁ and everything dominated by it must be pied-piped (contrast to the facts on English given in Ross 1967):⁷

- (69) i libri l'altezza dei caratteri sulla cui copertina/sulla copertina dei quali il governo stabilisce . . .
 'the books the height of the lettering on whose cover/on the cover of which the government prescribes . . .'
 (70) *i libri dei caratteri sulla cui copertina/sulla copertina dei quali il governo stabilisce l'altezza . . .
 (71) *i libri sulla cui copertina/sulla copertina dei quali il governo stabilisce l'altezza dei caratteri . . .
 (72) *i libri di cui/dei quali il governo stabilisce l'altezza dei caratteri sulla copertina . . .

Likewise, in the cited infinitival phrases when an NP in a similar structure is fronted, every NP dominating that NP must also be fronted:

- (73) Cerco una ragazza nella tasca della cui blusa/della blusa della quale mettere il garofano.
 'I'm looking for a girl in the pocket of whose blouse to put the carnation.'
 (74) *Cerco una ragazza della cui blusa/della blusa della quale mettere il garofano nella tasca.
 (75) *Cerco una ragazza della quale mettere il garofano nella tasca della blusa.

Thus, with respect to Pied-Piping of noun phrases, relative clauses and the infinitival phrases under discussion exhibit the same behavior. This fact is the more remarkable when one examines pied-piping in questions. In questions the fronting of prepositions and case markers is obligatory. However, questions do not require fronting of noun phrases; in fact, they do not even allow it:

- (76) Di quali libri stabilisce l'altezza dei caratteri sulla copertina il governo?
 'Of which books does the government prescribe the height of the lettering on the cover?'
 (77) *Sulla copertina di quali libri stabilisce l'altezza dei caratteri il governo?
 (78) *Dei caratteri sulla copertina di quali libri stabilisce l'altezza il governo?
 (79) *L'altezza dei caratteri sulla copertina di quali libri stabilisce il governo?

The fact that the same conditions on Pied-Piping hold in relative clauses and in infinitival relatives, and are different from those observed by other structures (e.g. questions) follows from a theory in which the infinitival phrases are reduced forms of relative clauses. If they do not derive from relative clauses, this set of facts would seem purely accidental, and the grammar must duplicate the conditions on Pied-Piping in relative clauses for Pied-Piping in these infinitivals. Thus, the fact that these conditions are identical for both structures provides an argument in favor of relating these structures.

In short, it has been shown that the infinitival relatives under consideration behave like relative clauses in at least three important respects. First, they may be introduced by a relative pronoun; second, they require coreference, and, finally, they pied-pipe noun phrases. I submit that these infinitival phrases behave like relative clauses simply because they are relative clauses.

3. Mood. If infinitival relatives are reduced clauses, there are four logical possibilities as to their derivation. Either they derive from indicative clauses only, or from subjunctive clauses only, or from both indicative and subjunctive clauses, or from nontensed clauses. All these possibilities will be examined and the conclusion will be reached that infinitival relatives derive from both indicative and subjunctive clauses.

The mood of a relative clause is determined by the semantic nature of its head noun phrase. If this is specific or generic, the clause is in the indicative mood. If it is nonspecific or irrealis, the clause is in the subjunctive mood in many dialects. These facts are illustrated here. The indicative in (81) is accepted by some speakers.

- (80) Cerco una ragazza con cui { posso (Ind.) } ballare--ma
 { *possa (Subj.) }
- non ricordo il suo nome. 'I'm looking for a girl with whom I can dance--but I don't remember her name.'
- (81) Cerco una ragazza con cui io { *posso } ballare--ne
 { possa }
- conosci una? 'I'm looking for a girl with whom I may dance--do you know one?'

The fact that the speaker in (80) once knew but has forgotten the name of the girl he is looking for imposes the specific interpretation of *una ragazza*. Thus the subjunctive is rejected while the indicative is appropriate. In (81), on the other hand, the specific interpretation is ruled out by the fact that the speaker asks the listener if he knows

any girl to dance with. Thus, the indicative is rejected while the subjunctive is preferred by many speakers.

It may be observed in the examples that follow that infinitival relatives may be constructed with specific head noun phrases, or with nonspecific ones. Again, notice that the indicative is allowed in (83) by some speakers.

- (82) Ho trovato un uomo da cui { posso } comprare i biglietti.
 { *possa }
- 'I found a man from whom I can/may buy the tickets.'
- (83) Devo trovare la perfetta compagna da cui { fo { *posso } }
 { possa }

dipendere.

'I must find the perfect companion I can/may depend on.'

These facts thus lead to the rejection of the proposals that infinitival relatives derive from indicative clauses only, or from subjunctive clauses only.

However, there is a fact which leaves one puzzled. On looking at (80) and (81), one finds that there is no corresponding sentence with an infinitival relative for the former, while there is for the latter:

- (84) *Cerco una ragazza con cui ballare--ma non ricordo il suo nome.
- (85) Cerco una ragazza con cui ballare--neosci una?

These sentences are not isolated examples. Many indicative clauses, in contrast to subjunctive clauses, do not have corresponding infinitival relatives. Furthermore, proper nouns may not be constructed with infinitival relatives, just as they may not be constructed with subjunctive relative clauses.⁸

- (86) *Cerco Maria con cui ballare.

'I'm looking for Mary with whom to dance.'

- (87) Ho trovato l'impiegato (*Rossi) da cui comprare i biglietti.

'I found the employee (Rossi) from whom to buy the tickets.'

However, proper nouns in the non . . . che construction may appear with an infinitival relative.⁹

- (88) Non ho trovato che Maria con cui ballare.
 'I found only Mary to dance with.'

I have no explanation for these facts. However, they suggest that if infinitival relatives derive from tensed clauses, then the reduction of subjunctive clauses may be more general and less restricted than the reduction of indicative clauses.

All full relative clauses in Italian are either indicative or subjunctive. There are no nontensed full relative clauses. The hypothesis that infinitival relatives derive from nontensed clauses requires an obligatory reduction rule that goes along with the assumption that these relatives constitute the only type that must undergo reduction. This consequence makes the hypothesis very unappealing.

Since every infinitival relative has a corresponding full relative that is either indicative or subjunctive, it seems preferable to propose an optional reduction rule for these attested relatives rather than an obligatory reduction rule for hypothetical nontensed relatives.

Various linguists have proposed tenseless sentences as the source for infinitives (cf. Chomsky 1973), despite the fact that such sentences never occur. For instance, Bordelais (1972) has proposed that many (perhaps all) infinitives have such a source. She refutes Kiparsky and Kiparsky (1970), who proposed that infinitives arise when their subject is removed, by citing Spanish infinitives which appear with nominative pronouns. In Italian, however, no such examples exist. No infinitive retains its subject. Infinitive constructions in the complement of verbs of perception cannot be considered counterexamples, for the NP subject of the infinitive is never nominative and is, in fact, treated as a direct object by PASSIVE.

- (89a) Ho visto il ladro scappare. 'I saw the thief escape.'
 (89b) L'ho visto scappare. 'I saw him escape.'
 (89c) Il ladro è stato visto scappare. 'The thief was seen to escape.'

But there are also gerunds and participles whose subjects may have been removed, e.g. 10

- (90a) Camminando per la strada, ho visto Giorgio.
 'Walking down the street, I saw George.'
 (90b) Arrivata in fretta, Carla apparve affannata.
 'Having arrived in a hurry, Carla appeared out of breath.'

Thus, it cannot be claimed that the loss of the subject automatically makes a verb an infinitive. Either the complement is already marked as to which form of the verb appears after deletion, or there are several subject-deletion rules which determine the form of the verb. The latter possibility would require at least two additional, distinct rules to produce gerunds and participles. This proposal, however,

may well find support if one considers sentences like the ones cited, which suggest that deletion conditions and results are distinct. Therefore, it is not unreasonable to assume that the reduction rule producing infinitival relatives determines the form of the verb.

The main reason why Bordelais proposes tenseless sentences as the source for infinitives is that the understood tense of the infinitive is dependent upon and predictable from the tense and aspect of the main clause. But in Italian the tense of a subjunctive verb also depends on the tense and aspect of the main clause, and is thereby predictable.

In order to account for the sequence of tenses with subjunctive clauses, Bordelais proposes that subjunctive clauses derive from tenseless clauses by a 'Subjunctive Projection Transformation'. As far as I can see, there are no arguments which require that tenseless verbs be mapped onto subjunctive ones rather than vice versa. Thus, the facts about temporal features of tenseless clauses and subjunctive clauses could follow just as well from a hypothesis that infinitives come from subjunctives.

In addition, when one moves away from purely mechanical considerations of rules for sequences of tenses, one finds that in many instances the tense of indicative verbs must be concordant with the tense in the main clause, just as the temporal features of an infinitive depend on its main clause:

- (91a) Finalmente, ho trovato un uomo da cui comprare i biglietti. Così li ho comprati subito. 'Finally, I found a man from whom to buy the tickets. So I bought them immediately.'
 (91b) Finalmente ho trovato un uomo da cui potevo/ho potuto comprare i biglietti. Così li ho comprati subito. 'Finally I found a man from whom I was able to buy the tickets. So I bought them immediately.'
 (91c) *Finalmente ho trovato un uomo da cui avevo potuto/posso/potei/ebbi potuto/potei/potrei/avrò potuto/avrèi potuto comprare i biglietti. Così li ho comprati subito. 'Finally, I found a man from whom I had been able/can/was able/was able/will be able/would be able/will have been able to buy the tickets. So I bought them immediately.'

The infinitive in (91a) has the reading corresponding to an imperfect or present perfect verb. Likewise, the indicative relatives in the subsequent examples are limited to these two sentences. Thus, temporal features of verbs in the indicative mood are also determined to varying degrees by the context in which they occur. Any argument

based on the interpretation of the temporal features of infinitives, therefore, cannot provide conclusive evidence for underlying tenseless sentences.

To sum up, it has been argued that infinitival relatives cannot be reduced exclusively from indicative relatives, nor exclusively from subjunctive relatives. Since no good motivation for underlying tenseless relatives was found, and there are full indicative or subjunctive relatives corresponding to infinitival relatives, I conclude that infinitival relatives must be reductions from both indicative and subjunctive relatives.

4. Rules. I have proposed that infinitival relatives are derived from subjunctive and indicative relatives. In this section the rules responsible for the reduction of such clauses are examined. First, I consider the conditions that control the deletion of the subject of an infinitival relative. Second, I propose that infinitival relatives come from relatives containing a modal, and that the modal is optionally deleted. Third, I argue that relative pronouns must be deleted when not preceded by a preposition. Finally, I argue that the complementizer *da* is inserted initially in any clause whose direct object is deleted.

I am going to begin by considering the subject of the infinitives. In sentences (1) and (2) (*Cerco una ragazza con cui ballare/da baciare*) the subject of the infinitive is coreferential with the subject of the matrix sentence. However, this is not always the case. In other instances the subject of the infinitive has no antecedent in the immediate linguistic context, and must be interpreted according to the immediate situation. To illustrate this point, consider (92b) in the following dialogue.

- (92a) *Cerco una ragazza con cui ballare, ma non ci riesco.*
 'I'm looking for a girl to dance with, but I'm not succeeding.'
 (92b) *Che dici? La perfetta ragazza con cui ballare è là,
 vicino alla fontana. 'What are you saying? The perfect
 girl to dance with is over there, by the fountain.'*

The subject of the infinitive in (92b) is coreferential with the listener. In fact, the antecedent of the subject of the infinitive is not present in that sentence.

In other cases, the subject of an infinitive is not a specific person but rather anyone, in which case there is no antecedent NP, e.g.

- (93a) *La perfetta ragazza con cui ballare fa sentire importante
 il suo compagno. 'The perfect girl to dance with makes
 her partner feel important.'*

If a full relative is used, the subject of the relative is the indefinite *si*:

- (93b) *La perfetta ragazza con cui si possa ballare fa sentire
 importante il suo compagno.*

Green (1972) has studied the conditions on subject deletion in English relatives. She argues that this deletion rule cannot be the same as Super Equi, and points out that it violates the Complex NP Constraint and the Coordinate Structure Constraint (Ross 1967). In Green (1973) she points out further problems of the controller-to-delete relationship.

Since the subject of the infinitive in a sentence like (93) has no antecedent, it seems that the safest generalization one could make about a rule that deletes such a subject is that the discourse information must make it possible to recover it.

The same facts might lead to a different proposal, namely, that the relative clauses underlying these infinitives have a dummy PRO subject in deep structure which receives its interpretation at surface level by interpretive semantic rules. The fact still remains that such interpretive rules would need to account for all the various ways in which the subject of an infinitival relative may be understood, as illustrated in (92) and (93). The interpretive approach has one advantage, however: it presents no violation of Ross's constraints.

Moreover, regardless of whether the subject of these relatives is deleted or interpreted, one important fact to be accounted for is that the subject of the infinitive cannot be understood as coreferential with the head NP of the infinitival relative.

Consider now the modal interpretation of infinitival relatives. Infinitival relatives may appear with the modal *potere* 'can' with basically the same meaning as without it. 11

- (94a) *Cerco una ragazza con cui poter ballare.*
 (94b) *Cerco una ragazza da poter baciare.*
 'I'm looking for a girl with whom to be able to dance/
 to be able to kiss.'

The corresponding sentences with full relatives, on the other hand, must have the modal *potere*:

- (95a) *Cerco una ragazza con cui io possa ballare.*
 (95b) **Cerco una ragazza con cui io balli.*
 (95c) *Cerco una ragazza che io possa baciare.*
 (95d) **Cerco una ragazza che io baci.*

I propose that the modal of these relatives optionally deletes in the infinitival relatives. 12

Many people have argued that infinitival phrases often receive a modal interpretation despite the fact that no modal is present.¹³ But not all infinitivals are thus understood. Consider, for instance, the following examples:

- (96a) Ho detto di averlo fatto. 'I said that I did it.'
 (96b) Ho detto di poter averlo fatto/di aver potuto farlo.
 'I said that I could have done it/I was able to do it.'
 (96c) Ho detto di *dover averlo fatto/di aver dovuto farlo.
 'I said that it should have been that I did it/I had to do it.'

Clearly, these sentences are not synonymous. Likewise, the sentences that follow are not equivalent in meaning:

- (97a) Ho dimenticato di farlo. 'I forgot to do it.'
 (97b) Ho dimenticato di poter farlo. 'I forgot that I could do it.'
 (97c) Ho dimenticato di dover farlo. 'I forgot that I had to do it.'

Any account which tries to avoid deleting a modal from infinitival relatives must explain why they have a modal interpretation while many other infinitival phrases do not. A theory which allows modal deletion, on the other hand, has a natural explanation for the lack of modal interpretation in infinitival phrases such as (96a) and (97a), namely, no modal is present in their deep structure.

Modal deletion, just like copula deletion, seems to be common to various structures in Italian. For instance, there is good reason to suppose that infinitival embedded questions, as in (98a), are derived from full questions. The full questions, however, must have a modal, as shown in (98b), for one notes that (98c) without a modal is not synonymous with (98a). So the derivation of infinitival questions must also involve modal deletion.

- (98a) Non so dove andare. 'I don't know where to go.'
 (98b) Non so dove posso/potrei/devo/dovrei andare. 'I don't know where I can/could/must/might go.'
 (98c) Non so dove vado. 'I don't know where I'm going.'

Given these facts, a rule of modal deletion seems well motivated, independent of infinitival relatives. This rule operates only on clauses whose subject has been deleted, and may well be restricted to structures containing a WH-question or relative word.

I now turn to the occurrence of the relative pronoun in infinitival relatives. The relative pronoun il quale may show up in infinitival relatives if and only if a preposition or a case marker precedes it:¹⁴

- (99a) Cerco una ragazza con la quale ballare.
 (99b) Cerco una ragazza da baciare.
 (99c) *Cerco una ragazza la quale baciare.
 (99d) *Cerco una ragazza dalla quale baciare.

Da in the last three sentences is a complementizer. Notice that il quale occurs with da, when it is a locative preposition, or when it is the agentive marker, as illustrated in (100a) and (100b), respectively:

- (100a) Cerco una ragazza dalla quale andare. 'I'm looking for a girl whose house to go to.'
 (100b) Cerco una ragazza dalla quale farmi tagliare i capelli.
 'I'm looking for a girl by whom to have my hair cut.'

Very similar facts appear in both English and French. In English one can say I'm looking for a girl with whom to speak, but never *I'm looking for a girl who(m) to photograph. In French one can say Je cherche une fille avec laquelle parler, but never *Je cherche une fille laquelle photographier. Emonds (1969a) proposes that since infinitival relatives in English can be introduced by for followed by the subject of the relative clause (e.g. I'm looking for a girl for Jack to photograph), the complementizer position, if filled, must be filled by a prepositional phrase. Thus, if no for introduces the infinitival relative, only WH-fronted PPs can move into COMP position, but NPs cannot. (This proposal accounts for the difference between infinitival relatives and infinitival indirect questions, the second of which never have for followed by the subject and accordingly always keep the WH-word.) Unfortunately, Emonds' proposal cannot account for the Italian or French facts, since neither of these languages allows the subject of the infinitival relative to appear in a prepositional phrase:

- (101a) Cerco una ragazza per Gianni da fotografare.
 (101b) *Je cherche une fille pour Jean photographier.

In the Italian example, per Gianni does not form a constituent with da fotografare. Rather, it is a matrix dative. Moreover, the sentence is ambiguous. The subject of fotografare may be interpreted to be coreferential with the matrix subject, or with the matrix dative, or with neither. Thus, the subject of fotografare has not been moved into COMP position in a prepositional phrase.

Kayne, in this volume, proposes that since full relative clauses in French cannot be introduced by lequel unless it is preceded by a preposition, lequel cannot introduce infinitival relatives either. Again, unfortunately, Kayne's proposal cannot account for the Italian

and English facts, since in both these languages the direct object relative pronoun may introduce full relative clauses.¹⁵

- (102a) (*) Il ragazzo il quale Maria preferisce si chiama Al.
 (102b) The boy who(m) Mary prefers is named Al.

To my knowledge, no one has offered an explanation for the non-occurrence of direct object relative pronouns in infinitival relatives that will account for the facts in all three languages. Furthermore, no one has offered an explanation that will work for Italian alone. And once more, unfortunately, I have no explanation to offer.

In full relative clauses either il quale, cui, or che must occur.

- (103a) Cerco una ragazza la quale/che io possa baciare.
 (103b) *Cerco una ragazza io possa baciare.

Kayne (ibid.) proposes that the complementizer que in French is inserted if lequel is deleted, but that que can introduce tensed clauses only. Thus, it cannot occur in infinitival relatives. A similar explanation would rule out che in Italian and that in English infinitival relatives, respectively.¹⁶ Thus one needs to account only for the nonoccurrence of il quale.

In all sentences in Italian in which the relative pronoun of an infinitival relative is not preceded by a preposition, the complementizer da is present. Thus, one may say that the relative pronoun deletes after da in infinitival relatives. Assuming that infinitives arise only when their subjects are removed, the rule that deletes the relative pronoun must operate after the subject of the relative has been deleted. I assume, then, that the rule RELATIVE PRONOUN DELETION has the following form:

- (104) il quale → \emptyset / da V
 [+complementizer] [-infinitive]

Next, I consider the insertion of da. It was seen that complementizer da introduces infinitival relatives only when the direct object of the infinitival is coreferential with the head of the infinitival relative:

- (105a) Cerco una ragazza da baciare.
 'I'm looking for a girl to kiss.'
 (105b) *Cerco una ragazza da ballare.
 'I'm looking for a girl to dance.'
 (105c) *Cerco una ragazza da dare l'anello.
 'I'm looking for a girl to give the ring.'

If one turns to other infinitival phrases whose direct object has been moved or deleted, one finds that da shows up:

- (106a) Maria è difficile da capire.
 'Mary is hard to understand.'
 (106b) *Maria è difficile da parlare.
 'Mary is hard to talk to.'
 (106c) *Maria è difficile da ballare (con).
 'Mary is hard to dance with.'
 (107a) Maria è bella da guardare.
 'Mary is pretty to look at.'
 (107b) *Maria è bella da parlare.
 'Mary is pretty to talk to.'
 (107c) *Maria è bella da ballare (con).
 'Mary is pretty to dance with.'
 (108a) La Turchia è un paese da scoprire.
 'Turkey is a country to discover.'
 (108b) *La Turchia è un paese da far visita.
 'Turkey is a country to pay a visit to.'
 (108c) *La Turchia è un paese da dipendere.
 'Turkey is a country to depend on.'
 (109a) Ho molto da fare.
 'I have a lot to do.'
 (109b) *Ho molto da fare attenzione.
 'I have a lot to pay attention to.'
 (109c) *Ho molto da pentirmi.
 'I have a lot to regret about.'

The infinitival phrases in these examples are not infinitival relatives; the relative pronoun cannot occur in any of them. In the grammatical sentences, where da occurs, the direct object of the infinitive has been moved or deleted. In the ungrammatical sentences, an oblique object has been moved or deleted.

I propose that da is inserted in complementizer position whenever any rule deletes or moves a direct object out of the 'S proper' in an infinitival clause. In relative clauses, the direct object is placed in complementizer position. The complementizer is considered to be outside the S proper (inside the S proper are NP and VP, cf. Chomsky 1970a). Da shows up in the surface, however, without a relative pronoun, WH-question word, or noun phrase following it. RELATIVE PRONOUN DELETION (see (104)) deletes relative pronouns after da.

Thus, what is to be accounted for is the nonoccurrence of *da* before a WH-question word and before a noun phrase, as illustrated here.

(110a) Non so (**da*) chi baciare.
'I don't know who to kiss.'

(110b) Cerco un uomo ricco (**dal*)*la* cui figlia sposare.
'I'm looking for a rich man whose daughter to marry.'

To account for the facts illustrated in (105)-(110), I propose the following rules:

(111) Da-INSERTION:

Insert da in complementizer position in an infinitival clause whose direct object has been deleted or moved out of the S proper.¹⁷

(112) Da-DELETION

$$\underline{da} \rightarrow \emptyset / \text{ ______ } \left\{ \begin{array}{l} \text{WH-question word} \\ \text{NP} \end{array} \right.$$

The rules proposed so far to derive infinitival relatives describe the facts observed, but they are certainly not the only rules that might be proposed. For example, one might wish to claim that da is inserted into empty complementizer position before infinitives. This approach would avoid the question of deleting da before a NP or a WH-question word, since the COMP would not be empty in such cases. The problem of the nonoccurrence of direct object relative pronouns still remains for this analysis, and must be handled by some relative pronoun deletion rule--not unlike mine--or by an interpretive rule stating that da plus a relative pronoun must be interpreted as a prepositional phrase. One unsurmountable problem in this analysis faces, however, is how to prevent da from being inserted before some infinitives that should not have it, as shown here.

(113a) Voglio (**da*) andare. 'I want to go.'

(113b) Faccio (**da*) andare Carlo. 'I make Carlo go.'

Alternatively, one might propose that da is inserted before infinitival relatives. Then a rule could delete da before prepositional phrases. This analysis, however, makes the explicit claim that the da of infinitival relatives is not the same as the one in infinitival phrases like those in (106)-(109). Also, the fact that da, in all these cases, occurs only when the direct object has been removed from its clause is purely accidental in this analysis. This undesirable

consequence springs from a failure to recognize an important generalization that the rule of DA-INSERTION in (111) does capture.

The arguments for deriving infinitival relatives from relative clauses are sound. Therefore, while the rules needed for the reduction process may not be as I have proposed, there is little doubt that some such rules exist. Thus, despite the unwieldiness of the rules sketched in (104), (111), and (112), they must stand until a better analysis is proposed.

5. Implications. The analysis of infinitivals presented in this study may be duplicated for many languages other than Italian--including, of course, other Romance languages. This analysis, however, may not be duplicated point by point for English, since part of the crucial evidence is not available in English. Still, the Italian data may help to shed light on the English construction.

If one goes through the arguments, one finds that many of them are applicable to English, while others are simply inapplicable because of the lack of corresponding data in English. However, no data in English seem to conflict with the Italian data. Moreover, the differences between English and Italian infinitival relatives parallel differences between English and Italian full relative clauses. Thus, while English can extrapose both full and infinitival relatives, Italian extraposes neither. While English can optionally pied-pipe prepositions, Italian must pied-pipe them. While English can optionally pied-pipe NPs in relatives but never in questions, Italian must pied-pipe them in relatives but never in questions.

Although these facts are less than conclusive with respect to the analysis of English infinitival relatives, they become more important when viewed in comparison with the Italian facts. Why should Italian and English infinitival relatives be so similar syntactically, and why should their few differences parallel their differences between full relatives if these infinitivals are not reduced from full relatives in both languages? Furthermore, if an analysis of a given construction is well motivated in one language, and if that same analysis works for another language in which it might be less well motivated but in which no data are inconsistent with the given analysis, it is reasonable to think that the analysis may be valid for both languages.

In conclusion, it has been seen that infinitival relatives in Italian are reduced from full relative clauses. I have suggested that English infinitival relatives, as well, derive from full relatives. Major questions left unanswered in this study are why the relative pronoun cannot appear unless preceded by a preposition, and why subjunctive relatives in Italian lend themselves to this reduction process much more frequently than indicative ones. Both questions await further study.

NOTES

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1. That an infinitive in an Equi construction occurs in an S in deep structure is clear from the fact the PASSIVE may apply in that S.

(i) *Fingo di esser stato ferito.*

'I pretend to have been wounded.'

(ii) *Anno di essere considerato intelligente.*

'I love to be considered intelligent.'

Thus *S₁* in (30) is justified.

2. Notice that if *da* is used in a sentence like (38), we get an ungrammatical sentence:

(i) **Cerco una ragazza da fingere di baciarlo.*

'I'm looking for a girl to pretend to kiss.'

Many speakers reject these infinitivals when *da* precedes one infinitive and *di* precedes the next, regardless of structure. I have no explanations for these facts.

3. The arguments given by Kayne (1975) for such deep structures with *faire* in French are applicable to the Italian parallel constructions.

4. (55b) is marked with an asterisk in parentheses because for some speakers *il quale* cannot function as direct object.

5. In poetic style, a sentence like the following is acceptable:

(i) *Maria è bella da guardarsi.*

'Mary is pretty to look at.'

See Napoli (in preparation) for evidence that this *si* is not a reflexive pronoun coreferential with *Maria*, but rather the indefinite *si*.

6. There are some prepositions that may be used without objects as adverbials. These prepositions need not be pied-piped when their object is relativized:

(i)a. *Stavo davanti alla ragazza.*

'I was standing in front of the girl.'

(i)b. *La ragazza davanti a cui stavo . . .*

'the girl in front of whom I was standing . . .'

(i)c. *La ragazza a cui stavo davanti . . .*

However, all prepositions that cannot be used without an object as an adverbial must be pied-piped. Thus *con*, *senza*, and *di*, etc. must be pied-piped. For further discussion, see Napoli (1974a).

7. Many speakers do not agree with the judgments given in (69)-(72). Such speakers accept (71) and reject (69), (70), and (72).

However, no one I know of disagrees with the grammaticality assigned to the sentences in (73)-(75) and (76)-(79).

8. Example (87) is due to Mario Saltarelli.

9. Example (88) is due to Richard Kayne.

10. For a discussion of the deletion rule that is operative in a sentence like (90a), see Napoli and Nespor (1976), and Napoli (in preparation).

11. The glosses might mislead the reader as to the interpretation of the infinitival relatives in Italian. In English the equivalent construction may be ambiguous. Thus (i) has two paraphrases:

(i) I'm looking for a girl to dance with.

(ii) I'm looking for a girl so that I can dance with her.

(iii) I'm looking for a girl who I can dance with.

Italian infinitival relatives are not ambiguous. They do not have a purpose interpretation. To say (ii) in Italian one must use *per* 'for':

(iv) *Cerco una ragazza per ballare con lei.*

12. The modal that is deleted need not be *potere*; it could also be *dovere* 'must'. This is suggested by examples like the following:

(i) *Ho qualcosa da fare.*

'I have something to do.'

(ii) *Ho qualcosa che devo/dovrei fare.*

'I have something that I must/should do.'

13. Bordelouis (1972) gives a history of the dispute over modal deletion versus modal interpretation.

14. (99d) is grammatical in the reading 'I'm looking for a girl at whose house to kiss', but not with the reading of (99b).

15. (102a) is ungrammatical for some speakers.

16. There is at least one instance in which *che* occurs with an infinitive:

(i) *Non ho niente che fare con lui.*

'I have nothing to do with him.'

However, in general one can say that *che* introduces tensed complements only.

17. This condition on the insertion of *da* is global. That is, it must have access to an earlier stage in the derivation in which the direct object of an S is moved or deleted. As an alternative to the global rule, one might have *da*-insertion as part of any rule involving movement or deletion of a direct object. However, this alternative seems to miss the generalization that *da* is inserted always in the same environment regardless of which rule produces the environment.