Towards a Grammar of Adult Root Infinitives

Ricardo Etxepare and Kleanthes K. Grohmann
CNRS/LEHIA and University of Cyprus

1 Introduction

For adult registers of English, it was Akmajian (1984) who first drew attention to the grammatical phenomenon of infinitival constructions used in matrix contexts, which he dubbed “Mad Magazine sentences” (see also Lambrecht 1990). The 1990s have seen focused interest on a at first glance similar phenomenon observed in child language, the so-called “root infinitives” (Rizzi 1993/4 and much follow-up work) or “optional infinitives” (Wexler 1994 and subsequent research). In line with our previous characterization (Grohmann & Etxepare 2003, henceforth G&E), we call these root infinitives as well, but for current purposes — and in the absence of conclusive evidence that the child and adult phenomena are indeed (closely) related — refer to them as adult root infinitives (henceforth ARIs).

The phenomenon at hand, illustrated with our main languages (from G&E), is the following: 1

1. a. Me go to that party?! I would never do such a thing! (English)
   b. John go to the movies?! No way, man!
2. Yo ir a esa fiesta?! Jamás! (Spanish)

ARIs consist of two overtly expressed parts: the root infinitive proper (RI), orthographically indicated by ‘?!’ (evoking a question-like exclamation), and what G&E called the Coda (a further exclamation that seems to deny the truth value of the RI). We use the term ARI to refer to the full phenomenon, while RI is reserved for the specific infinitival part of the construction.

In this paper, we want to come to grips with the formal properties underlying the ARI-construction. For this purpose, we will first sketch the syntactic structure of ARIs as assumed in G&E (section 2) and then address the semantics that is involved (section 3). This will lead us to a slight refinement of the syntax and general structure of ARIs and allow us to express variation found in temporal modification (section 4) before we conclude (section 5).

2 The Syntax of ARIs

Our two main languages under investigation, Spanish (as a representative of Romance) and English (as a representative of Germanic), will serve as a first illustration of the G&E-analysis. (Throughout we present the Spanish data as the a- and the English translation as the b-example with a gloss in between, unless otherwise mentioned, and for presentation purposes we leave out the Coda when irrelevant.)

* For feedback and discussion, we are grateful to the audiences at Going Romance 18 (Leiden, December 2004), WCCFL 24 (Vancouver, March 2005), CGG 15 (Barcelona, April 2005), and ISTAL 17 (Thessaloniki, April 2005), especially Pranav Anand, Alex Dimitriadis, Marika Lekakou, Arhonto Terzi, and George Tsoulas. Remaining errors will hopefully be removed in the future. Ricardo Etxepare acknowledges financial help from the Projet TUL “Architecture de la Phrase” (Axe CP, directed by Hans-Georg Obenauer and Alain Kihm, and Axe VP, directed by Brenda Laca) and project BFF2002-04238-C02-01 from the MCYT (Ministerio de Ciencia y Tecnología, Spain).

1 As documented in Etxepare & Grohmann (in press; E&G), this phenomenon goes well beyond English and Spanish. Other Romance and Germanic languages exhibit the phenomenon of ARIs as well, and we were able to identify two groups. Group I contains languages that exhibit similar properties to Spanish in the effects tested: Catalan, Galician, and Italian. Group II-languages pattern like English, and these include all Germanic languages as well as French and (European as well as Brazilian) Portuguese. In ongoing research, we are investigating further Romance varieties to establish the respective groupings (Italian dialects, Occitan, Provencal, and so on).
a. Pedro comprar vino?! No me lo creo!
   Peter buy.INF wine NEG I CL believe
b. Peter buy wine?! I don’t believe that!

Assuming a clausal architecture such as the one in (4), G&E provide evidence from adverbial modification and left-peripheral phenomena that allows a finer characterization of the structure.

(4) CP > TP > ModP > AspP > vP > VP

The following sets of data, taken from G&E, indicate the (im)possibility of certain adverbs to occur in ARIs. In particular, while aspectual, root modal, subject-oriented, and temporal adverbs are possible to modify RIs, epistemic, consecutive, and factive ones are not:

(5) a. María levantarse habitualmente / otra vez a las seis?!
   Mary rise.INF.REFL usually again at the six
b. Mary (usually) get up at 6am (again)??
(6) a. Pedro comprar eso necesariamente / inevitablemente?!
   Peter buy.INF that necessarily inevitably
b. Peter necessarily / inevitably buy that?!
(7) a. Comprar yo eso a propósito?!
   buy.INF I that on purpose
b. Me willingly buy that?!
(8) a. Juan leer esas cosas en aquellos tiempos?!
   John read.INF those things in old times
b. John read that sort of thing back in those days?!
(9) a. *María probablemente / quizá ir allí?!
   Mary probably perhaps go.INF there
b. *Mary probably / perhaps go there?!
(10) a. *El Athletic afortunadamente ganar la liga?!
    the Athletic luckily win.INF the league
b. *Athletic [Bilbao] luckily win the league ?!
(11) a. *Los aficionados entonces apinarse en la ría?!
    the hooligans then concentrate in the riverside
b. *The hooligans then concentrate at the riverside?!

On this basis, we assume that some positions, such as TP, ModP, and AspP, or the relevant counterparts that license adverbial modification in the structure must be present (disregarding the exact licensing of adverbs, whether vis-à-vis dedicated functional projections such as these or any other way).

The following sets of data show the limited availability of left peripheral phenomena in ARIs. In Spanish, clitic left dislocation is possible, but neither language allows topicalization, left dislocation, focalization, or wh-questions within the RI itself:

(12) a. Las elecciones ganarlas Blair?!
    the elections win.INF.CL Blair
b. *The elections, Blair win?!
(13) a. De Juan, reírse Pedro?!
    at Juan laugh Pedro
b. *John, Peter laugh at?!
(14) a. *Juan, el tío comprarle un Ferrari?!
    John the guy buy.INF a Ferrari
b. *John, the guy buy a Ferrari?!
(15) a. *BROCCOLI comprar él?!
    broccoli.FOC buy.INF he
b. *BROCCOLI him buy?!
Before drawing more exact conclusions from these examples, let us point out that the type of infinitival construction illustrated in (17) should not be confused with our RIs:

(17) a. **Qué comprar en navidades?**
    what buy.INF in Christmas
    ‘What (to) buy for Christmas?’

b. **A quién regalar qué?**
    to whom give.INF what
    ‘Who (to) give what?’

These are evidently control structures, as shown by the fact that they cannot take a subject:

(18) a. **Qué comprar yo en navidades?**
    what buy.INF I in Christmas
    ‘What I/me (to) buy for Christmas?’

b. **A quién regalar qué Pedro?**
    to whom give.INF what Peter
    ‘Who Peter (to) give what?’

As such, they should be assimilated with English to-infinitives and will be ignored in the remainder:

(19) What *(to) buy for Christmas?

The discussion above allows the following internal structure of RIs (i.e. ARI minus the Coda):

(20) [FP topic F0 [TP subject T0 [ModP adverb [Asp1P adverb [Asp2P adverb [v/VP t; verb object ] ] ] ] ] ]

We provide two aspectual projections to host different types of aspect-related adverbs (where we are drawing to some extent on Cinque 1999), but the exact number and nature of the projections up to TP (or IP) not play a role here. What will be important is the relation between the lexical verb, tense (T), and the left-peripheral FP. This position is one that is present in Spanish and able to host clitic-left dislocated elements (cf. (12)-(13)), but absent in English altogether (which does not allow any CP-related position in RIs). We take FP to be related to the projection Uriagereka (1995) proposed for Spanish (and Galician): above TP, below CP proper, thus, in the spirit of Rizzi (1997), a low projection within an articulated CP-layer.

3 The Semantics of ARIs

In this section, we will discuss the semantic underpinnings of ARIs by introducing and motivating a phonetically empty exclamative operator and connecting the RI to the Coda. This discussion will then lead to a slight modification of the structure presented in (20).

3.1 The Exclamative Operator

Akmajian’s (1984) intuition concerning such constructions with an overt infinitive — “mad magazine sentences” (i.e. our ARIs) — was that they represent an hypothetical event. That is, in no case is there a claim to truth or a claim to existence regarding the event expressed by the RI. All the speaker does is raise a consideration towards that event, the assertoric force being conveyed by the next clause. We go one step further and want to claim that RIs are indefinite descriptions of events that function as restrictors of an exclamative operator, whose main predicate is what we will call the Coda.
If we look at the part that is lexically realized in the English RI, we can note that it is formally identical to the bare infinitival complements of verbs of perception and causation:

(21) a. I saw him leave.
    b. Him leave?! 
Bare infinitives show the same absence of overt inflection and the same case properties as RIs, and both constructions share a constraint on perfect forms:

(22) a. *I saw him have left
    b. *Him have left?! 

Higginbotham (1983) provides a semantic analysis of bare infinitives in which those constructions are indefinite descriptions of events:

(23) \( \exists (e) \ [ leave(him,e) ] \), I saw \( t_i \) 
    ‘For some event of him leaving, I saw it.’
We could then provide a similar analysis for ARIs:

(24) \( \exists (e) \ [ leave(him,e) ] \)

The absence of assertoric force in the RI is thus parallel to the absence of assertoric force in indefinites. Indefinites are, furthermore, unsaturated expressions (Higginbotham 1987). If the function of Comp (C) is that of saturating an eventuality variable (Hegarty 1992, Ormazabal 1995), therefore making a clause “definite” in some sense, then the absence of such projections in RIs is pointing to the indefinite status of the construction.

A closer look at RIs reveals that this cannot be the whole story:

(25) John read a book?! I doubt it!

(25) conveys something more than just an implicit negation of an event (John’s reading a book). What (25) says is that any event of that sort, given our knowledge of John, is very unlikely, as far as John is concerned. At some point (Etxepare & Grohmann 2000) we took this exhaustive interpretation of RIs to be contributed by a tacit modal (see also Boser et al. 1992 for similar claims on the child phenomenon of RIs). The postulation of a hidden modal in RIs, however, raises non-trivial syntactic problems. First, the only modal dimension accepted in RIs is root modality. In addition, Spanish has lexical modals expressing root modality and possessing infinitival forms:

(26) Juan poder leer esa?!  
    John can.INF read.INF.CL this  
    ‘John be able to read that?!’

It is strange that they should alternate with a hidden modal. Finally, even if there is a hidden modal, it would not behave as the normal lexical modals. As the following contrast clearly shows, an (A)RI can be modified by a deictic adverb of the past, such as *ayer ‘yesterday’ (ungrammatical in English to begin with, as discussed in section 4 below), only in the absence of a phonetically realized modal:

(27) a. Juan [ModP Mod0 [ leer un libro ] ]?!  
    John read.INF a book  
    ‘John read a book?!’
    b. Juan poder leer un libro?!  
    John can.INF read.INF a book  
    ‘John be able to read a book?!’
We propose here instead that the exhaustive reading of the RI is provided by the exclamatory mood that underlies ARIs. One of the crucial functions of exclamatory mood is what Portner & Zanuttini (2003) call “widening” — which accounts for the property of scalar implicature: the fact that exclamatives introduce a conventional scalar implicature to the effect that the proposition/situation they denote lies at the extreme end of some contextually given scale.

Portner & Zanuttini consider that the widening function is performed by an operator R, which has the semantics of a quantifier. The function of this operator R is to widen the domain of quantification. Consider (29):

(29) He eats everything!

An exclamative operator takes a set of situations that we can consider normal and maps that set of situations into a bigger set, which includes the previous set of situations plus some more which are not normal. In the case of (29) we would include situations where the eating event comprises things that we do not eat normally. In the case of ARIs,

(30) John read a book?!

we widen the domain representing the typical things that John does to a bigger domain, including an abnormal situation where he reads a book. The relevant definition is this:

(31) Widening (Portner & Zanuttini 2003: 52)

For any clause S containing R widenings, widen the initial domain of quantification for RWidenings, D1, to a new domain, D2, such that

(i) $[S]_{w,D2, <}$ $-$ $[S]_{w,D1, <}$ $\neq$ $0$ and

(ii) $\forall x \forall y [(x \in D1 \text{ and } y \in (D2 \text{ - } D1)) \rightarrow x < y$]

Here $[S]_{w,D2, <}$ is the set of situations of the form “John reads x,” where x is drawn from the new domain D2, while $[S]_{w,D1, <}$ is the corresponding set for the old domain D1. That the difference between D1 and D2 must be non-empty just means that new situations are added in the new domain.

In the case of (30), D1 is the set of situations involving reading in which John typically engages: the newspaper, the comic strips, the horoscope… D2 is a domain which includes at least the abnormal situation of John reading a book. Unlike typical exclamatives, however (Grimshaw 1979, Obenauer 1994), ARIs are not factive. There is no presupposed book-reading in these cases. This may be related to the fact that ARIs are not CPs and do not denote propositions, but entities of a lesser complexity, such as situations, to which truth (and therefore presupposed truth) cannot be attributed (Ormazabal 1995).

3.2 The Coda

ARIs are incomplete without what G&E call the Coda. We note that ARIs are necessarily followed by a clause that provides the assertoric force of the sentence:

(32) a. Yo fregar los platos otra vez?! Ni hablar!
    I do.INF the dishes again no say

b. Me do the dishes again?! No way!

For example, connectivity effects hold between these two clauses:
(33)a. ??Comprar yo nada en esa tienda?! Cualquier día de estos!
   buy.INF I anything in that shop no-one day of these
   ‘Me buy anything in that shop?! ??Any day!’
b. Comprar yo nada en esa tienda?! Lo dudo!
   buy.INF I anything in that shop it doubt.1SG
   ‘Me buy anything in that shop?! I doubt it!’

Only a Coda such as (33) is able to license the negative polarity item nada ‘anything’ within the RI — which contains the type of predicate that licenses negative polarity items in other root contexts. We take this fact to show that the two clauses are attached to a single root. It also seems that the Coda has exclamative intonation. There are some asymmetries in the relation between the exclamatory intonation and the two terms of the RI. The RI can “move around” the Coda, and when it moves to the right, the RI does not show exclamative intonation:

(34)a. Juan leer un libro?! Venga hombre!
   John read.INF a book come man
   ‘John read a book?! Come on, man!’
b. Venga, hombre!, Juan leer un libro…
   come man John read.INF a book
   ‘Come on, man!, John read a book…’

The difference in intonation is indicated by comma and triple periods, respectively, and holds for both Spanish and English. One way of interpreting this observation would be to say that the Coda is actually the matrix of the exclamative quantifier, whereas the RI constitutes its restriction. In other words, the exclamative operator is a binary operator, akin to, say, even in English.

Rooth (1985) and Partee (1991) analyze focus particles such as even and only as quantifiers introducing a tripartite structure. This tripartite structure gets affected by the focus assignment of the sentence. For instance, a sentence such as (35) is interpreted as presupposing that John bought something, and as asserting that oranges are the only thing that John bought. Partee (1991) suggests that the focus-presupposition of the sentence is directly encoded in the tripartite quantificational structure: the presupposition makes up the restriction of the quantifier (and therefore sets up the discourse frame for the assertion), whereas the focus of the sentence is mapped as nuclear scope of the quantifier, as presented in (36).

(35) John only bought ORANGES.
(36) Onlyx [Restriction John bought x ] [Restriction x=oranges ]

RIs have a very noticeable topic-focus contour: the RI is clearly the topic and the Coda is the focus. If we try to map an RI into a structure which syntactically marks topic and focus positions, such as double complementizer structures in Spanish (see e.g. Plann 1982, Uriagereka 1988, Suñer 1993), the RI always occupies the topic slot (observe that the order Coda-RI is independently attested; cf. (34b)):

(37)a. Juan dice que [ él fregar los platos que [ ni por el forro ] ].
   John says that he wash.INF the dishes that nor by the lining
   lit. ‘John says that him wash the dishes that no way.’
b. *Juan dice que [ ni por el forro que [ él fregar los platos ] ].
(38)a. Pedro dice que Antonio, que lavó LOS PLATOS.
   Peter says that Anthony that washed the dishes
   ‘Peter says that as for Anthony, he washed the dishes.’
b. *Pedro dice que ANTONIO que lavó los platos.

With an appropriate semantic characterization in place, we can now refine our assumptions about the structure of ARIs, that is, how RI and Coda are (syntactically) connected with each other.
3.3 The Structure of the RI Construction

Let us represent the topic-comment structure of ARIs in the following way:

\[(39) \left[ XP \ [ \ RI \ ] \ X^0 \ [ \ Coda \ ] \right]\]

Connectivity effects suggest a close relation between RI and Coda. Assume this to take place through some functional head \(X^0\) (not yet further identified). It is unlikely that \(X^0\) is the locus of the exclamative operator (be it the semantic operator \(R\) from Portner & Zanuttini 2003 or a syntactically projecting head \(\text{Excl}^0\)): for starters, we have seen in (34) that the Coda can principally appear to either side of the RI.

We follow Kayne (1998) in the idea that the arguments of the tripartite quantification are derivationally constructed (cf. his analysis of only and even) and assume that \(\text{Excl}^0\) is employed at some point in the derivation (presumably directly relating to \(R\)). This then yields the patterns in (40a-e) and allows us to assign them the straightforward analysis indicated:

\[(40) a. \left[ \text{ExclP} \ Excl^0 \left[ XP \ [ \ RI \ ] \ X^0 \ [ \ Coda \ ] \right] \right] \quad \text{Merge Excl}^0\]
\[(40) b. \left[ \text{ExclP} \ [ \ Coda \ ]_i Excl^0 \left[ XP \ [ \ RI \ ] \ X^0 \ t_i \right]\right] \quad \text{Move Coda}\]
\[(40) c. \left[ WP \ W^0 \left[ \text{ExclP} \ [ \ Coda \ ]_i Excl^0 \left[ XP \ [ \ RI \ ] \ X^0 \ t_i \right]\right] \right] \quad \text{Merge W}^0\]
\[(40) d. \left[ WP \ Excl^0+W^0 \left[ \text{ExclP} \ [ \ Coda \ ]_i t_j \left[ XP \ [ \ RI \ ] \ X^0 \ t_i \right]\right] \right] \quad \text{Move Head}\]
\[(40) e. \left[ WP \ [ \ RI \ ]_k Excl^0+W^0 \left[ \text{ExclP} \ [ \ Coda \ ]_i t_j \left[ XP \ t_k \ X^0 \ t_i \right]\right] \right] \quad \text{Move XP}\]

The structures (40b) and (40e) give rise to the sentences (34a) and (34b) above, respectively, where the difference depends on whether \(W\) is part of the numeration or not. The analysis is structurally identical to Moro’s (1997) inverse copular constructions, expanded in recent literature (see den Dikken 2004 and references therein) to cover a wide array of syntactic phenomena. We also want to point out, as observed by Celia Jakubowicz (p.c.), that the Coda need not be expressed overtly. However, if left implicit, the intonation contours stay the same (as tentatively described above) — and, crucially, the interpretation is the same. That is to say, even if the Coda is not phonetically expressed, its meaning is there and the RI is interpreted as an ARI presented above.

A second reason why (39) cannot be the whole story with \(\text{Excl}^0 = X^0\), as pointed out by George Tsoulas (p.c.), is that strictly speaking, the operator \(R\) of Portner & Zanuttini’s is a monoargumental operator that takes the entire ARI (RI plus Coda) as its complement. The easiest way to accomplish that is to say that the complement of \(\text{Excl}^0\) is indeed the entire XP in (39). This also ties in with the tripartite structure mentioned above without losing the semantic bite of our assumptions.

4 Temporal variation in ARIs

With the grammatical properties of ARIs on the table, we would now like to address a particular type of variation that can be observed across languages, namely as to the kind of temporal modification they admit. G&E note the following difference between English and Spanish (explored further in E&G; see also fn. 1 above). As can be observed, a deictically anchored adverb of the past such as yesterday is inadmissible in English (though a vague, non-specific adverb indicating a hypothetical past event is fine), but perfectly acceptable in Spanish.

\[(41) a. \ \text{John read that sort of thing back in the old days?!} \ \text{No way!}\]
\[(41) b. * \ \text{John read that sort of thing yesterday?!} \ \text{No way!}\]
\[(42) a. \ \text{Juan leer eso en aquellos tiempos?!} \ \text{De ninguna manera!}\]
\[(42) b. * \ \text{Juan leer eso ayer?!} \ \text{De ninguna manera!}\]

As noted in G&E (and shown to hold for more languages in E&G), Spanish and English also differ as to how far the infinitival raises. In Spanish, unlike in English, the infinitival raises past the temporal head (see Kayne 1991, Uriagereka 1995, among others) to target the head of a low C-related projection that Uriagereka (1995) calls FP, \(F^0\). Capitalizing on this difference, G&E offer an explanation of this phenomenon that relies on raising of the infinitival to F and on the complex structure of ARIs.
We follow Baker & Travis (1997) in assuming that perfective tenses (which denote in the factual domain) are similar to definite determiners and define a domain which is opaque for quantification. This assumption paves the way for the following hypothesis: in languages where the infinitival remains below (past) T, the eventuality variable carried by the infinitival is not accessible for quantification, and the structure is semantically deviant. In languages where the infinitival raises beyond T, the eventuality variable is free to be bound by the exclamative operator, and the sentence is good.

Putting our structural assumptions from above together, the relevant structures are given in (43), with (43a) as the full (relevant) structure for English and the reduced structure in (43b) representing the relevant part of the Spanish derivation (where the lexical infinitive moves to F, not present in English):

(43) a. 

\[ \text{ExclP} \quad \text{XP} \]
\[ \begin{array}{c}
\text{Excl}^6 \\
\text{TP} \\
\text{… V …} \\
\end{array} \quad \begin{array}{c}
\text{X'} \\
\text{V+F}^6 \\
\end{array} \]
\[ \text{[ Coda ]} \]

b. 

\[ \begin{array}{c}
\text{FP} \\
\text{X'} \\
\text{V+F}^6 \\
\text{TP} \\
\text{…} \\
\end{array} \]

Assume that TP looks roughly as sketched in (20) above. Then the aspectual domain renders the structure below it opaque for quantification if perfective, as implied by a deictic temporal adverb such as *yesterday* (where the operator R in Excl\(^6\) or its Spec must bind the eventuality variable contained on the lexical verb) — but only if the verb is in its v/VP-internal base position (as in English). If V is in F, beyond the Tense-Aspect domain [ TP … AspP … v/VP ], there is no “definiteness effect” (i.e. the eventuality variable can be bound).

In this regard, the opacity constraint imposed by perfective tenses is not very different from the following cases in the nominal domain:

(44) a. Si Juan ve hoy a un tipo / a alguien que pinta un cuadro, lo compra.
    ‘If John sees today a guy who makes a painting, he buys.’

b. ??Si Juan ve hoy al tipo que pinta un cuadro, lo compra.
    ‘If John sees today the / this guy who makes a painting, he buys.’

Recall also that in Spanish, ARIs with a lexical modal do not allow deictic past adverbs (cf. (28b)). The problem is obviously not in the lexical modal itself (which is compatible with deictic past adverbs otherwise), but rather in the ARI. Somehow, ARIs with lexical modals in Spanish behave as English ARIs concerning modification by deictic adverbs. This fact follows again from our analysis in (43b): it is the lexical modal which raises outside the domain of the deictic Tense (to F\(^6\)). The lexical infinitival verb remains in situ, and therefore the eventuality variable it carries cannot be linked to the exclamative operator due to the intervention effect of the Tense-Aspect domain.

5 Concluding Remarks

In this paper, we extended the syntactic and semantic characterization of root-infinitival constructions in adult registers — adult root infinitives (ARIs) — from previous work (Grohmann & Etxepare 2003). The basic tenets still hold:

(i) RIs require a Coda (tripartite structure);
(ii) the structure of RIs is reduced (no full CP); and
(iii) verb-raising makes a difference for temporal modification (V in F).

In particular, the incorporation of widening in exclamatives (Portner & Zanuttini 2003) allows us to pinpoint the properties of the grammar of ARIs further and allow for the intuitive tripartite focus structure between the exclamative operator, the RI itself, and the Coda.
References


Proceedings of the 24th West Coast Conference on Formal Linguistics

edited by John Alderete, Chung-hye Han, and Alexei Kochetov

Cascadilla Proceedings Project Somerville, MA 2005

Copyright information

Proceedings of the 24th West Coast Conference on Formal Linguistics
© 2005 Cascadilla Proceedings Project, Somerville, MA. All rights reserved

ISBN 1-57473-407-5 library binding

A copyright notice for each paper is located at the bottom of the first page of the paper. Reprints for course packs can be authorized by Cascadilla Proceedings Project.

Ordering information

Orders for the library binding edition are handled by Cascadilla Press.
To place an order, go to www.lingref.com or contact:

Cascadilla Press, P.O. Box 440355, Somerville, MA 02144, USA
phone: 1-617-776-2370, fax: 1-617-776-2271, e-mail: sales@cascadilla.com

Web access and citation information

This entire proceedings can also be viewed on the web at www.lingref.com. Each paper has a unique document # which can be added to citations to facilitate access. The document # should not replace the full citation.

This paper can be cited as:


or: