

Weak Prepositions in Tortosan Catalan: Alternation of Prepositions, Allomorphy or Phonological Process*

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Abstract

In this paper, starting from a brief analysis of weak prepositions in Tortosan, I try to show that the preposition *a* is the only one appearing in adjunct and indirect object PPs. This forces us to account for the form [an] which this preposition takes in certain contexts: specifically when it is followed by a vowel initial determiner or pronoun. After considering the alternative of accounting for the relation between the preposition *a* and the form [an] either in terms of prepositional allomorphy or in terms of epenthesis of the coronal nasal, I have chosen the latter option, since it allows us to explain similar processes affecting other prepositions (*contra* 'against', *cap a* 'towards' and *per a* 'for') and the privative prefix *a*. Optimal syllabification (CV syllable), which is a preferred but not obligatory condition in Catalan, would be, in its formulation as the Onset Principle, the trigger for this process of consonantic epenthesis, which essentially affects the domain [clitic+word] when the former is a determiner.

Key words: morphophonology, prepositions, Catalan dialects.

Resum. *Les preposicions febles del tortosí: alternança de preposicions, al·lomorfia o procés fonològic*

En aquest article, i a partir d'una anàlisi breu de les preposicions febles del dialecte tortosí, intento demostrar que la preposició *a* és l'única que apareix en els complements circumstancials i en els indirectes. Això implica explicar la forma [an] que realitza l'esmentada preposició en certs contextos: concretament quan va seguida d'un determinant o d'un pronom començats en vocal. Davant la doble possibilitat d'explicar la relació entre la preposició *a* i la forma [an]: al·lomorfia preposicional i epèntesi de la vocal nasal, m'he decantat per aquesta segona via, ja que permet d'explicar processos similars que afecten altres preposicions (*contra*, *cap a* i *per a*) i el prefix privatiu *a*. La sil·labificació òptima (sí·l·laba CV) —preferent, però no obligatòria en

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català—, mitjançant l'*Onset Principle*, seria la causa d'aquest procés d'epèntesi consonàntica, que afecta bàsicament l'àmbit [clíctic+mot] quant el primer és un determinant.

Paraules clau: morfofonologia, preposicions, dialectes Catalans.

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1. Introduction

In the description of the uses of the Catalan weak prepositions *a*, *en* and *amb*,¹ it is often more or less explicitly assumed that phonetic factors should explain their syntactic distribution in different contexts. My linguistic intuition has always lead me to think that very often it was not a case of phonically conditioned alternation of distinct prepositions, but rather one of prepositional allomorphy or phonological process inducing a phonetic change in one preposition (*a*).

In this paper I try to motivate this descriptive option by analyzing the Tortosan prepositional system.² To this end I analyze the main prepositional uses, especially those relevant for singling out and describing the variation shown by the preposition *a*. After describing the phenomenon, I try to provide an explanatory account in terms of general principles constraining the phonology of natural languages. Treating this phenomenon as a phonological process—consonant epenthesis—, triggered by the application of a general principle, allows us to explain the variation observed with other prepositions (*contra* 'against', *per a* 'for', and *cap a* 'toward'); furthermore, it can contribute to a better understanding of the application and validity of these principles.

1. According to prescriptive grammars *a* and *en* are roughly in complementary distribution in their locative (inessive/allative) use, while *in* free distribution in other distinct uses (dative and governed); and *amb* is a completely unrelated comitative preposition. Dialectally and colloquially, however, the facts are quite different, as we will see.
2. Tortosan is a Catalan dialect in the South of Catalonia, belonging to the Western dialectal area, and neighboring the Valencian dialects, with which it shares some features. Western dialects are standardly divided into Northwestern (West of Catalonia) and Valencian. Eastern dialects are divided into Central (East of Catalonia), Northeastern (Roussillon) and Balearic.

Tortosan has only two of these prepositions, *a* and *en*, and the present study will therefore only be concerned with these. All the prepositional uses which are expressed by *amb* in standard Catalan are expressed in Tortosan, like in Valencian, by *en*.

I believe that a descriptive and explanatory account of these facts can contribute to shedding some light into the synchronic description of weak prepositions of the whole Catalan linguistic area.

The existing studies on the Catalan prepositions *a*, *en* and *amb* quite often talk about confusion, interference or alternation. There are some basic reasons that somehow justify this situation.

On the one hand, even if these elements enjoy a significant degree of syntactic and semantic individuality in many cases, this does not seem to be the case in others (locative PPs); furthermore, the fact that all three prepositions are pronominalized with the same clitic, *hi* (roughly equivalent to the French clitic *y*), would point in the same direction. In this vein, Ferrater (1981:32) treats these prepositions as combinatory variants of the same word.

On the other hand, their phonic nature can explain the alternations and confusions in some cases. Firstly, we are dealing with unstressed, monosyllabic clitic words; even monosegmental ones in the case of the preposition *a*. Furthermore, their vowel is always the unmarked vowel: [ə] in Eastern dialects ([ə], [ən] and [əmb]), [a] and [e] in Western dialects ([a], [en] and [amb]);³ which implies that it can be very easily affected by phonological processes such as vowel elision.⁴ And, finally, the consonantal element is, in one of the cases, a coronal nasal, and can therefore be affected by processes of assimilation of point of articulation of nasals.

In most of the work on these prepositions, reference is made to the influence of the phonetic context in the selection of the preposition. In Perera (1986: 88) this view is synthesized as follows:

As a result of this phonetic weakening, nowadays in most of the Catalan linguistic domain the use of these three forms or of their numerous dialectal variants depends more on the phonetic context where they appear --specifically the initial sound of the following word-- than on the syntactic function they take part in, or on their etymological meaning.

Yet, the above-mentioned confusions and interferences can, in my view, very often be explained in terms of general phonological processes or constraints. Provided, of course, that we start from a strictly synchronic point of view of the phenomenon and we make use of the basic tenets in recent phonological theory.

The analysis of these prepositions in the Tortosan dialect can, in my opinion, be relevant and clarifying at least for some aspects that constitute an important source of *confusion* in the study of other dialects. And this is so for three basic reasons. First, in this dialect, like in the rest of Western dialects, the process of unstressed vowel reduction is partial, i.e., it only affects the feature [±ATR] [Advanced Tongue Root], and thus there is vowel distinctness between the prepo-

3. With North-Western dialects it is not as clear as with the Eastern ones that there is one single unmarked vowel segment. In Palmada (1991:91) it is argued that the status of unmarked is shared by the segments [a] and [e].
4. See Mascaró (1984, 1989), Wheeler (1979).

What, in my view, does not seem to be so reasonable is that later studies, intended to be descriptive and synchronic, have started from Fabra's analysis, in view of the fact that this analysis, whose ultimate goal was clearly prescriptive, had made use of diachronic criteria in an important respect.

2.1. *Semantic Differentiation or Phonetically Conditioned Differentiation*

With respect to Fabra's analysis of the prepositions *a* and *en* in locative PPs, which is, directly or indirectly, the starting point of almost all later studies, basically two positions have been adopted.

Most scholars that have taken a stand on the issue accept the view that two prepositions are involved. And they attribute the choice of one or the other only to the following phonic context, with no consideration of any syntactic-semantic distinction between the two.

From a synchronic point of view, if there is no syntactic-semantic difference between *a* and *en*, and the only criteria to choose one preposition or the other are of a phonic kind, perhaps one should contemplate the possibility that we are actually dealing with one single preposition with two (or more) phonetically conditioned allomorphs. We come back to this point later.

Among the studies that would take this view (linking the prepositional variation to the phonic context), we can point out the following: Calveras (1928), Gulsoy (1965), Solà (1977), Cabré (1980), Segarra (1985), Mier (1986), Palet (1987), and Perera (1987).⁵

The other position, rather in the minority, tries to account for the alternation of prepositions in terms of semantic criteria. It is attested in the studies by Camprubí (1984) and Sancho (1994). I think it is in principle a more coherent position than the preceding one, since if there is an alternation between prepositions we would naturally expect to find some kind of syntactic or semantic contrast, at least from a synchronic point of view.

Sancho's study, which is the largest and most important of the two, analyzes the Catalan prepositional system from the viewpoint of cognitive grammar. From my perspective, and for what concerns the present study, it suffers from an important methodological problem: it is a study on «*the Catalan prepositional system as proposed by the normative grammar...*» which starts «*from a corpus based on Eastern Catalan texts of various kinds*».⁶

5. Perhaps it should be pointed out that the studies by Calveras, Gulsoy, Perera and Segarra are diachronic and thus considerably depart from the basic tenets I embrace here. Instead, Cabré's (1980) study, as we will see later, is quite different from the others, as it seriously considers the option I defend here. I.e., while the other studies, following Fabra, view the phenomenon as a phonically conditioned change of prepositions, Cabré points out that it might be a case of *phonetic fluctuation* of the preposition.
6. The author justifies this methodological choice on the grounds that a corpus based on data of other kinds would involve a very high degree of complexity and also because: «*Our interest is to see if a cognitive model can explain how the Catalan prepositional system (or systems) works, with specific attention to the degree of motivation for the various uses of the main Catalan prepositions.*»

Sancho accounts for the alternation between the prepositions *a* and *en* in spatial terms, mainly for inessive uses, on the basis of semantic considerations:

- a) The preposition 'a' expresses pure location, regardless of the size of the LM (landmark), which is conceived punctually. For pure location it is required that the LM be properly present in the presuppositions shared by speaker and hearer; hence 'a' is used with place names, the definite article and nouns associated to linguistic routines (301).

(301) Joan és a València / al jardí / a casa.
Joan is a Valencia / a-the garden / a house
'Joan is in Valencia/in the garden/at home.'

- b) The preposition 'en' expresses location in relation to the structure outer/inner part of the LM, i.e., as it expresses location it establishes a relation container/contained. This conceptualization arises whenever the exact place of the LM is not sufficiently known, namely with indefinite articles and demonstratives (302).

(302) Joan viu en una ciutat / en aquesta ciutat.
Joan lives en a town / en this town

(Sancho 1994:125)

Apart from what I have pointed out above concerning methodological issues, there is a couple of remarks to be made to this study. On the one hand, the contrast concerning [\pm definiteness] between the article and the demonstrative does not seem very clear in contexts such as the ones in (2):⁷

- (3) a. Viu a la casa del seu pare.
live.3.sg a the house of-the his father
'S/he lives in his father's house.'
- b. Viu en aquesta casa del seu pare.
live.3.sg en this house of-the his father
'S/he lives in this house of his father's.'

On the other hand, such an analysis would not account for the facts in Tortosan, since in this dialect there is one single preposition independently of the element following it:

- (4) a. Viu a la casa de dalt.
live.3.sg a the house of above
'S/he lives in the house above.'
- b. Viu a[n] esta casa de dalt
live.3.sg a[n] this house of above
'S/he lives in this house above.'

7. In this sense, the author observes: «In the case of demonstratives, however, one should not discard the possibility that the avoidance of the hiatus has contributed to the usage of 'en'».

The account of these prepositions by Badia i Margarit (1994:200,215) is worth a special mention, since it would not be fully ascribable to either of the preceding options. This linguist in fact adduces phonetic reasons which determine the form of the preposition *a*, but, as we will see, he does not tie the use of the locative prepositions to the phonic context in a direct way. In short, he considers the possibility that the form [ən] in locatives not only may be related to the preposition *en*, as in most grammars, but it also may be a realization variant of the preposition *a*, determined by antihaptic reasons.

2.2 Prepositional Allomorphy

As I briefly mentioned in the preceding section, from a synchronic perspective the view that the alternation between *a* and *en* is linked to the kinds of following phonic context seems to inevitably lead to treating these two prepositions as allomorphic variants of one single preposition. At least in the case of locative PPs.

This is the option taken by Ferrater (1981:32). According to him, the prepositions *a*, *en* and *amb* are combinatory variants of the same word; and the selection of one of the variants is determined by whether the following word begins with a vocalic or consonantal segment.

His proposal, however, goes beyond the field of locatives to cover the various meanings involved in these prepositions. More than a proposal, it is a short (but lucid) outline of the prepositional system. Its shortness is probably the reason why it is only a poorly motivated outline, in the sense that it does not sufficiently explain the phonic conditioning, and it only mentions as counter-examples the case of toponyms that, in spite of being vowel-initial, require the preposition *a*.

Furthermore, in other prepositional uses (the so-called governed PPs, for instance), it is not clear at all that there should be no syntactic-semantic distinction between the three prepositions. Specifically, in these cases we can indistinctly find *a* and *en* before a word beginning with a vowel or a consonant:

- (5) a. Joan no s'ha acostumat a treballar de nit.
Joan not *refl*-has accustomed *a* to-work of night
'Joan hasn't got used to work by night.'
- b. Joan no s'ha acostumat a aguantar el soroll.
Joan not *refl*-has accustomed *a* to-stand the noise
'Joan hasn't got used to stand the noise.'
- c. Joan no s'ha acostumat al ritme de vida de la ciutat.
Joan not *refl*-has accustomed *a*-the rhythm of life of the town
'Joan hasn't got used to the urban way of life.'
- d. Els estudiants només pensen en les notes.
the students only think *en* the grades
'Students only think about their grades.'
- e. Els estudiants només pensen en aquell examen.
the students only think *en* that exam
'The students only think about that exam.'

Yet I think this is an analysis to bear in mind, at least for the case of locatives.

3. The Form [ən] in Indirect Objects

One of the prepositional uses where most authors agree in pointing out some phonic factor for the form of the prepositions (or rather the preposition) is that of indirect objects (IOs):

- (6) a. Ho he donat a ell. [ən]
 it-have. *I.sg* given *a* him
 'I have given it to him.'
- b. Ho he dit a algú. [ən]
 it-have. *I.sg* said *a* someone
 'I have said it to someone.'
- c. Ho he portat a aquest noi. [ən]
 it-have. *I.sg* carried *a* this boy
 'I have carried it to this boy.'
- d. T'ho he donat a tu. [ə]
 you. *dat-it-have. I.sg* given *a* you
 'I have given it to you.'

The account of this *an* form in IOs ([ən] in Eastern dialects and [an] in Western dialects) differs considerably, as we can see, from the prevailing analysis for the identical forms in place PPs.

As I already mentioned, Badia (1994) considers the possibility that the form *an* may be a realization variant of the preposition *a*, in which the nasal segment would play the role of antihhiatic barrier so as to prevent the preposition to be confused with the vowel in the following word, especially if the latter is unstressed too. According to this linguist, while the *an* of place PPs allows for two possible accounts (the preposition *en* from Old Catalan and the antihhiatic variant of the preposition *a*), the sequence *an* in IOs can only be related to the preposition *a*, the only preposition introducing this kind of complement.⁸

The analysis of prepositional uses in IOs reveals a clear asymmetry in the accounts that have been given for these elements, an asymmetry already present in the formulation by Cabré (1980:14-15). In the case of place PPs, since the ancient language seemed to use both the prepositions *a i en*, the form *an* is either related to the latter, or —as in Badia— it is left undecided whether it should be related to *en* or to *a* (if the latter, for antihhiatic reasons). In the case of IOs, instead, it is mainly related to *a*, because it is hard to link it to the evolutive outcome of the Latin preposition *in*:

8. Even if this is not explicitly stated, as it is in the case of locatives, it is the only conclusion that can be drawn. Other references to this antihhiatic element are: Barnils (1921:60), Solà (1977:38), Mier (1986:88), and Recasens (1991:262-263).

- (7) LOCATIVES. a) Estudia **en** aquesta facultat. [ən]
 study.3.sg *en* this faculty
 'S/he studies in this school.'
- b) Va pujar **en** aquella torre. [ən]
 pst.3.sg climb *en* that tower
 'S/he climbed that tower.'
- (8) IOs. a) Li ha enviat flors a ella. [ən]
 dat.3.sg-has sent flowers *a* her
 'S/he has sent her flowers.'

Thus, from a strictly synchronic perspective, and in view of what happens with IOs, we could assume that place PPs, both locative and allative, only involve the preposition *a*, which receives a consonantic support [n] before certain vocalic contexts. I think that this option offers a more comprehensive account of these prepositions and enables us to overcome the above-mentioned contradiction.

4. Locative and IO Prepositions in Tortosan. Preposition Alternation or Phonological Variation

The data from this dialect constitute an important piece of support for the hypothesis I put forth above. As I already pointed out, the fact that this dialect has the unstressed vowel system in (9) makes the phonic differentiation between the prepositions *a* and *en* not exclusively rely in the presence of the consonantic segment, but also in the timbre difference in the vowel segment: *a* [a], *en* [en]:

- (9) [i] [e] [a] [o] [u]

In Massip (1979:162), which, together with Calveras (1928), constitute the only references to these prepositions in Tortosan, it is remarked that *the preposition a before demonstratives and in some other cases (the indefinite algun, etc.) is strengthened with the consonant n in Tortosan*.

As for place PPs, the examples in (10) show us that there are two possibilities, [a] and [an]:

- (10) a. Ha pujat **en** aquell pis. [anakéɫ]
 has climbed *en* that storey
 'S/he has gone up that storey.'
- b. Ha pujat **al** pis de dalt. [a]
 has climbed *a*-the storey of above
 'S/he has gone upstairs.'
- c. Ho trobaràs **a** la caixa. [a]
 it-find.fut.2.sg *a* the box
 'You'll find it in the box.'

- (10) d. Ho trobaràs *en* esta caixa. [an]
 it-find.fut.2.sg *en* this box
 'You'll find it in this box.'
- e. Viuen *a* Amposta. [a]
 live.3.pl *a* Amposta
 'They live in Amposta.'
- f. Viuen *a* Amèrica. [a]
 live.3.pl *a* America
 'They live in America.'
- g. Viuen *en* algun país llunyà. [analyún]
 live.3.pl *en* some country distant
 'They live in some faraway country.'

It seems initially plausible that the alternation between these two forms is phonically driven. Except for the cases (e) and (f), where the NP is a toponym, in all other cases the segment [a] occurs before consonantal segments, while the sequence [an] is found before vocalic segments.

As for which preposition underlies these phonetic realizations, I think that it can only be the preposition *a*. If it was the preposition *en*, what we would find is the form [en], as illustrated in the examples in (11).⁹

- (11) a. Sempre pensa *en* tu. [en]
 always thinks *en* you
 'S/he's always thinking of you.'
- b. Sempre pensa *en* estes coses. [en]
 always thinks *en* these things
 'S/he's always thinking about these things.'
- c. Ho faré *en* tres dies. [en]
 it-do.fut.1.sg *en* three days
 'I'll do it in three days.'
- d. Se'ls menjava de dos *en* dos. [en]
 refl-them-eat.3.sg of two *en* two
 'S/he was eating them two at a time.'
- e. Ho ha escrit *en* guix. [en]
 it-has written *en* chalk
 'S/he wrote it with chalk.'

The preposition in IOs shows the same possibilities of realization, [a] and [an]:

- (12) a. Li ho van donar *a* aquella altra. [anakéla]
 dat.3.sg-it-pst.3.pl give *a* that other
 'They gave it to that other one.'

9. The process of reduction of pre-stressed [c], which changes mid front vowels to [a] in North-Western dialects, does not occur in these contexts in Tortosan, as has sometimes been suggested for these dialects. See Solà (1977).

- (12) b. Ho han donat a Maria. [a]
 it-have.3.pl given a Maria
 'They gave it to Maria.'
- c. Li ho han donat a ell. [anéκ]
 dat.3.sg-it-have.3.pl given a him
 'They gave it to him.'
- d. Li ho han donat a este noi. [anéste]
 dat.3.sg-it-have.3.pl given a this boy
 'They gave it to this boy.'
- f. Li ho han donat a algun xiquet. [an]
 dat.3.sg-it-have.3.pl given a some little boy
 'They gave it to some little boy.'
- g. Ha enviat un regal a la nena. [a]
 has sent a present a the little girl
 'S/he sent a present to the little girl.'

It seems again that it is some phonetic factor that determines the choice of one or the other form. Before a vowel we have [an], while before a consonant we have [a]. For the reasons I mentioned for the case of locatives, we are again led to the conclusion that the preposition is *a*.

If we could extend this analysis to the Central dialect and to all other dialects, we would gather important support for the hypothesis sketched here on the existence of one single preposition for place PPs and IOs. Out of the two alternative accounts of the form [ən], either as a variant of the preposition *a* or as a realization of the preposition *en*, the data from this dialect provide an important argument in favor of the former.

5. The Tortosan Prepositional System

As I have been trying to demonstrate with the Tortosan data, the hypothesis I want to defend is that place PPs and IOs involve one single preposition: *a*.¹⁰ Now this solution has to provide an account for the form [an]. We have already seen that

10. The only cases where the preposition *en* is involved do not actually express the notion of place (proper or figurative), but rather some notion of the kind manner or instrument:
- (i) Dormen en llits separats.
 sleep.3.pl *en* beds separate
 'They sleep in separate beds.'
- (ii) Viuen en grans edificis.
 live.3.pl *en* big buildings
 'They live in big buildings.'
- (iii) Beu el cava en copes altes.
 drink.3.sg the champagne *en* glasses high
 'S/he drinks champagne in long glasses.'

some authors talk about an adventitious consonant which serves the purpose of breaking a situation of hiatus, which occurs if whenever this preposition is followed by a vowel-initial word. We also noticed that this consonant [n] does not appear before vowel-initial toponyms (see (10.e,f)). We have to determine, then, in which contexts the phenomenon takes place.

To this end, I will next present a brief review of the uses of the weak prepositions *a* and *en* in this dialect. I will also consider other prepositions which, because of their phonic make-up, could undergo processes of this kind.

5.1. Indirect Objects

We already saw in (12) that the only preposition occurring in these complements is *a*. This is, for the reasons mentioned above, the exclusive preposition in IOs according to all Catalan grammars. Other examples to take into account are the following:

- (13) a. Vaig donar el paquet **a un** conserge. [awn]/[anún]¹¹
pst.l.sg give the packet *a* a doorman
 'I gave the packet to doorman.'
- b. Vaig donar el paquet **a Esteve**. [astéβe]
pst.l.sg give the packet *a* Esteve
 'I gave the packet to Esteve.'
- c. Vaig enviar el regal **a antics** alumnes. [antíks]
pst.l.sg send the present *a* former students
 'I sent the present to former students of mine.'
- d. Ho he enviat **a alumnes** i professors. [alúmnes]
it-have.l.sg sent *a* students and professors
 'I sent it to students and professors.'
- e. Vam escriure una carta **a aquell** jutge. [anakéʎ]
pst.l.pl write a letter *a* that judge
 'We wrote a letter to that judge.'

As we can see from the cases in (12) and (13), the assumption that the consonantal element [n] appears before vowel-initial words faces some counterexamples. When the postprepositional context consists in an indefinite article (*un/una*), the lack of [n] can be accounted for by the possibility of diphthongization. The examples

11. In this context, there is some degree of intradialectal variation. It seems that speakers in the areas more to the North tend to use the coronal nasal more regularly, while those more to the South generally choose diphthongization. If we consider the fact that the Valencian dialect (the one furthest to the South), shows a stronger tendency to diphthongization of vowels in contact between words, we could assume that, as in other aspects, the northern varieties are closer in general to the North-Western dialect, while the southern varieties are closer to the Valencian dialect. Calveras (1928:21) data from a southern village (La Galera) always gives the diphthong option.

in (13.b,c,d), where the postprepositional element is, respectively, a proper name, an adjective, and a noun, constitute an important stumbling block for the view that strictly phonological factors govern the appearance of [n]. The phonic context in these cases seems, at first glance, identical to that in (13.e); but while in the latter case we find [n], it is missing in (13.b,c,d).

5.2. Place PPs

As in the case of IOs, we can assume that the only preposition in place PPs is *a*. I will next present more examples of these constructions, classified as *real place* (*inessive* and *allative*) and *figurative place*.

Real Place, Inessive

- (14) a. Ha treballat tres anys **a** la fàbrica. [a]
 has worked three years *a* the factory
 'S/he has worked at the factory for three years'
- b. Es van trobar **al** jardí. [al]
refl-pst.3.pl find *a*-the garden
 'They have met in the garden.'
- c. Viu **a** París. [a]
live.3.sg a Paris
 'S/he lives in Paris.'
- d. Viu **a** Alcanar [a]
live.3.sg a Alcanar
 'S/he lives in Alcanar.'
- e. Sempre ha viscut **a una** casa molt gran. [awna]/[anúna]
 always has lived *a a* house very big
 'S/he has always lived in a very big house.'
- f. Es van quedar **a aquella** habitació. [anakéla]
refl-pst.3.pl stay *a* that room
 'They stayed in that room.'
- g. Ho trobaràs **a este** calaix [anéste]
it-find.fut.2.sg a this drawer
 'You'll find it in that drawer.'
- h. Estiuja **a algun** poble de la Terra Alta. [analýun]
summer.3.sg a some village of the Terra Alta
 'S/he spends the summer vacation in some village in Terra Alta.'
- i. El mestre, és com si visqués **a escola!** [askóla]
 the teacher is as if live.*subj.pst.3.sg a* school
 'This teacher practically lives in the school!'
- j. Sempre ens trobem **aquí / allà**. [akí]/[alá]
 always us-find.*1.pl (a-)*here / (*a-*)there
 'We always meet here/there.'

Real Place, Allative

- (15) a. Se n'ha anat de vacances **al** poble. [al]
refl-cl-has gone of vacation *a*-the village
 'S/he has gone on vacation to his home village.'
- b. Ha marxat **a** Tarragona. [a]
 has left *a* Tarragona
 'S/he has left for Tarragona.'
- c. Ha viatjat **a** Amèrica. [a]
 has travelled *a* America
 'S/he has travelled to America.'
- d. Anirem **a un** toll del Matarranya. [awn]/[anún]
go.fut.1.pl a a pool of-the Matarranya
 'We'll go to a pool in the Matarranya river.'
- e. Es va enfilear **a aquella** cadira. [anakéla]
refl-pst.3.sg climb a that chair
 'S/he climbed on top of that chair.'
- f. Pujarem **a esta** olivera. [anésta]
go-up.pst.3.pl a this olive-tree
 'They climbed this olive-tree.'
- g. Van fugir **a algun** lloc desconegut. [anayún]
pst.3.pl escape a some place unknown
 'They escaped to some unknown place.'
- h. Anirem **a ajuntaments** diferents. [a]
go.fut.1.pl a town-councils different
 'We'll go to different town councils.'
- i. Ha anat **amunt / avall**. [anún/aβáκ]
 has gone upwards / downwards
 'S/he went upwards/downwards.'

Figurative Place

- (16) a. Aquesta fórmula la trobareu **al** capítol primer. [al]
 This formula it-find.*fut.2.pl a*-the chapter first
 'This formula, you'll find it in chapter one.'
- b. Consulta-ho **a un** llibre de física. [awn]/[anún]
 Check-up.*imp.sg*-it *a a* book of physics
 'Check it up in a book of physics.'
- c. Això ho va dir **a aquell** discurs. [anakéκ]
 this it-*pst.3.sg* say *a that* speech
 'S/he said this in that speech.'
- d. Flotats ho fa molt bé **a esta** obra. [anésta]
 Flotats it-does very well *a this* play
 'Flotats does a good job in this play.'

- (16) e. Busca-ho **a algun** llibre d'aquests. [anəlyún]
 look-for.*imp.sg-it* a some book of-these
 'Look it up in one of these books.'

Again, we are faced with cases where the epenthetic sound [n] does not appear. The case of the indefinite article *un/una*, which shows two possible realizations, was already mentioned in the preceding section. The cases in (14.d,i)¹² and in (15.c,h) clearly show what we pointed out above: the assumption that the nasal segment [n] appears whenever the postprepositional element begins with a vowel does not hold with proper names (in this case toponyms) or with common nouns; it does not hold with adverbs either.¹³

5.3. Time PPs

In Tortosan, the preposition most widely used in time PPs is again *a*; even in cases where the Central dialect shows a high degree of uncertainty between the use of *a*, *en* or absence of preposition (17.b). As for the preposition *en*, it usually has a durative interpretation (17.f); we also find it, however, with plural bare NPs as in (17.g-i); in these cases the NP has a particular temporal reference:

- (17) a. **A estes** hores del matí sempre fa fred. [anéstes]
a these hours of-the morning always does cold
 'At this time in the morning it is always cold.'
- b. Van casar-se **al** 1987 / **al** segle passat /
pst.3.pl marry *a-the* 1987 / *a-the* century past /
 al maig del 87. [aɪ]
a-the May of-the 87
 'They married in 1987/in the last century/in May 1987.'

12. Phonologically, this case is very different from the others. In principle, considering the process of opening or reduction of initial unstressed *fe/* in the Western dialect (see Gimeno 1990), we can assume that what is at stake here is a process of simplification of two identical adjacent segments ([aa]). However, since the initial vowel in [askóla] is an epenthetic segment, and if we accept Palmada's (1993) proposal that resyllabification precedes epenthesis, we must assume that the segment [a] in *...com si visqués [a]scola*, is the phonetic realization of the preposition *a*. Since the vowel of the preposition allows syllabification of the initial segment [s], there is no reason for epenthesis to take place.
13. The case of so-called place adverbs is a little special. Grammarians usually take it for granted, without mentioning the issue, that before some adverbs the preposition *a* is not used. However, we run across considerations such as the following:

Many place adverbs allow being preceded by the preposition *a*: *a dalt* 'above', *a baix* 'below', *a dins* 'inside', *a fora* 'outside', *a davant* 'in front', *a on* 'where', etc.

(Fabra 1956: 83)

Other authors only mention the issue in order to explain the use of *cap/cap a* 'towards' (Ruaiç 1992: 190-191). Curiously, the cases where the preposition *a* does not appear are the ones beginning with [a], which some grammarians have pointed out they seem to carry the preposition agglutinated to them.

- (17) c. Vivíem molt feliços **a** aquella època. [anakéʎa]
 live.pst.1.pl very happy *a* that period
 'We lived very happily during that time.'
- d. Bé deurà arribar **a** alguna hora. [analýúna]
 Well must.fut.3.sg arrive *a* some hour
 'S/he must arrive some time or other!'
- e. Això sempre ho fan **a** l'hora de sopar. [a]
 this always it-do.3.pl *a* the-hour of dine
 'This, they always do at dinner time.'
- f. Ho acabarà **en** deu dies. [en]
 it-finish.fut.3.sg *en* three days
 'S/he'll finish it in three days.'
- g. **En** dies de festa li pega per treballar. [en]
en days of holiday *dat.e.sg*-strikes for to-work
 'In holidays, s/he will all of a sudden start working.'
- h. Això sempre passa **en** temps de guerra. [en]
 this always happens *en* time of war
 'This always happens in war-time.'
- i. **En** plena època d'exàmens es va fer malalt. [en]
en full period of-exams *refl-pst.3.pl* make ill
 'In the middle of the examination period, he pretended to be ill.'
- j. Això ho farem **a** Pasqua. [a]
 this it-do.fut.1.pl *a* Easter
 'This, we'll do in Easter.'
- k. Ens veurem **a** Advent. [a]
 us-see.fut.1.pl *a* Advent
 'We'll see each other in Advent.'
- l. Li va **a** hores, el mal de cap. [a]
dat.3.sg-goes *a* hours the ache of head
 'His/her headache comes and goes during the day.'

Once again, the alternation [a]/[an] remains similar to the preceding cases. The cases of [a] as a result of merge before vowel are, however, very rare.

5.4. Other PPs: Manner, Company, Instrument, etc.

These cases exclusively take the preposition *en*.¹⁴ I already mentioned that in

14. Except for some specific cases such as:

Vaig a peu / a cavall.
 go.1.sg *a* foot / *a* horse
 'I walk/ride.'

These, however, are lexicalized expressions, the so-called prepositional phrase idioms.

Tortosan, like in Valencian, this preposition is used in cases corresponding to *amb* 'with' in the other Catalan dialects.¹⁵ The examples in (18) further support the need to assign the form [an] to the preposition *a*, and not to *en*, since the latter is always realized as [en]:

- (18) a. Sempre ha treballat **en** ganes. [en]
 always has worked *en* wish
 'S/he has always worked willingly.'
- b. Sortirem **en** aquells amics. [en]
 go-out.fut.1.pl *en* those friends
 'We'll go out with those friends.'
- c. Ho va escriure tot **en** esta ploma. [en]
 it-pst.3.sg write all *en* this pen
 'S/he wrote everything with this pen.'
- d. Sempre ha viatjat **en** cotxe / **en** tren / **en** avió. [en]
 always has travelled *en* car / *en* train / *en* plane
 'S/he has always travelled by car / by train / by plain.'
- e. S'han pansit **en** la calor, les flors. [en]
 refl-have.3.pl withered *en* the heat the flowers
 'They withered from heat, these flowers.'

5.5. Governed PPs

Like in the rest of dialects, Tortosan prepositional governed PPs can be introduced by *a* and by *en* (beside other prepositions):

- (19) a. No crec **en** això. [en]
 not believe.1.sg *en* this
 'I don't believe in this.'
- b. No s'ha acostumat **a** això. [anajʃó]
 not refl-has accustomed *a* this
 'S/he hasn't got used to this.'
- c. Estic d'acord **en** allò. [en]
 am of-agree *en* that
 'I agree with that.'
- d. Hi tenia dret, **a** allò. [anaʎó]
 there-have.pst.3.sg right *a* that
 'S/he had the right to that.'
- e. Té molt d'interès **en** estes coses. [en]
 has a-lot-of-interest *en* these things
 'S/he has a lot of interest in these things.'

15. For a diachronic account of this phenomenon, see Calveras (1928) and Gulsoy (1965).

- (19) f. Sempre pensen **en** aquella història. [en]
 always think.3.pl *en* that story
 'They are always thinking about that story.'
- g. Ves **en** compte **en** l'alcohol. [en]
 go.imp.sg *en* account *en* the-alcohol
 'Be careful with alcohol.'
- h. Sempre t'exposes **a** algun risc. [an|yún]
 always you-expose.2.sg *a* some risk
 'You're always exposed to some risk.'
- i. S'han dedicat **a** apagar focs. [apayá]
 refl-have.3.pl devoted *a* extinguish fires
 'They have devoted themselves to extinguishing fires.'

Examples (19.b,d) show us two further cases where the form [an] appears: the demonstrative pronouns *això* 'this' and *allò* 'that'. If we compare them with (19.a,c), respectively, we can clearly see that they are only related to the preposition *a*. In (19.i) we have another context where the preposition, even if followed by a vowel-initial element —specifically an infinitive—, does not show the form [an].

5.6. The Direct Object

The use of the preposition *a* with these complements in the Tortosan dialect is very similar to its use in Spanish, namely, the preposition appears before [+human] direct objects:

- (20) a. Ja els he buscat, **a** ells. [ané|s]
 already them-have.1.sg [looked-for *a* them
 'I already looked for them.'
- b. He buscat **a** estos amics tot el dia. [ané|stos]
 have.1.sg looked-for *a* these friends all the day
 'I have been looking for these friends the whole day.'
- c. Tota la vida ha buscat amics/pares, i mira
 All the life has looked-for friends/parents and look
 com es troba ara.
 how refl-finds now
 'All his/her life s/he's been looking for friends/parents,
 and look how s/he is now.'
- d. Els policies perseguien **a** aquells lladres. [anaké|s]
 the policemen chased *a* those thieves
 'The policemen chased those thieves.'
- e. Els mossos devien seguir **a** algú. [an|yú]
 the policemen must.pst.3.pl follow *a* someone
 'The policemen must have been following someone.'

- (20) f. Seguien a Agustina pertot arreu. [a]
 follow.3.pl a Agustina all over
 'They were following Agustina all over.'

The only remarkable point in this case is the absence of the preposition with [+human] NPs lacking a determiner (20.c) and the absence of the segment [n] before proper names (20.f).

The data about time and manner PPs, governed PPs and direct objects lead us to the conclusion that the appearance of the nasal segment [n] in certain vocalic contexts after the preposition *a* is not an isolated phenomenon concerning only IOs and locatives, but rather it covers all the possibilities of appearance of this preposition. And this is in fact what one should expect if it were a phonologically conditioned phenomenon.

5.7. Other Prepositions

Let us now see whether the analysis of other prepositions, whose final segment is the same as the single segment in the preposition *a*, can help us understand the phenomenon. The prepositions I will analyze are: *per a* 'for', *cap a* 'toward', *contra* 'against' and *com a* 'as',¹⁶ namely, all those which have a segment [a] in final en position and, therefore, are relevant for the phenomenon under examination. The analysis of these prepositions, in which the segment [n] appears too, leads us to the conclusion that we are dealing with a fact which is not confined to the preposition *a*, and, consequently, seems to require a phonological explanation, rather than a morphological one.

The Preposition per a 'for'. Unlike what happens in dialects such as Central, where the distinction between *per* 'by' and *per a* 'for' has been lost and *per* has taken over both over both of them, in Tortosan the distinction is entirely alive and functional. In (21) I present the realizations of the preposition *per a* in the sort of context I am analyzing:

- (21) a. Fa molts anys que treballa per a ells. [peranéʎs]
 does many years that work.3.sg per a them
 'S/he has been working for them for many years'
- b. Per a estes persones tot és corrupció. [peranéstes]
 per a these people all is corruption
 'According to these people, everything is corruption.'
- c. Treballa per a algú que no coneixem. [peralyú]¹⁷
 work.3.sg per a someone that not know.1.pl
 'S/he works for someone we don't know.'

16. I will not consider the preposition *sota* 'under', because it is not generally used in Tortosan.

17. In these cases, like in Valencian, we also find the realization [palyú]. The liveliness of this form is not, however, as strong as in Valencian and, furthermore, it depends very much on the variable age of the speaker. Older people use it more profusely.

- (21) d. Al final es va desdir. **Per a** això no [perajfó]
 In-the end refl-pst.3.sg unsay per a this not
 calia tant de soroll.
 was-needed so-much of noise
 'In the end s/he went back on his word. It had been
 much ado about nothing.'
- e. Verema **per a** un d'aquells. [peranún]
 pick-grape.3.sg per a one-of-those
 'S/he's working in the grape harvest for one of those.'
- f. Ho ha portat **per a** aquells xiquets. [perakéls]
 it-has carried per a those boys
 'S/he brought it for those boys.'
- g. Ha vingut **per a** anar a escola. [peraná]¹⁸
 has come per a go to school
 'S/he has come to go to school.'

The Preposition cap a 'towards'. This preposition, which is used with verbs of movement to express orientation, has the following uses:

- (22) a. Es dirigia **cap a** el museu. [kapa]
 refl-address.pst.3.sg cap a-the museum
 'S/he was heading for the museum.'
- b. Se'n va **anar cap a** Astúries. [kapa]
 refl-cl-pst.3.sg go cap a Astúries
 'S/he left for Astúries'
- c. Ha marxat **cap a** escola. [kapaskóla]
 has left cap a school
 'S/he has left for school.'
- d. Si vas **cap a** esta vall, en trobaràs. [kapanésta]
 if go.2.sg cap a this valley thereof-find.fut.2.sg
 'If you go towards this valley, you'll find some.'
- e. Anava **cap a** ella amb una cara! [kapanéla]
 go.pst.3.sg cap a her with a face
 'S/he was approaching her with such a sulky look!'
- f. Corrien **cap a** aquella banda d'allà. [kapakéla]
 run.pst.3.pl cap a that side of-there
 'They were running in that direction.'
- g. No sé si anar **cap aquí** o **cap allà**. [kapakí]/[kapalá]
 not know.1.sg if to-go cap a-here or cap a-there
 'I don't know whether to go over here or over there.'

18. On the use of the preposition *per a* in Tortosan, see Massip (1979).

The Preposition *contra* 'against'. The examples of this preposition, like those of the other two above, show a difference in behavior that we had not observed in the other cases:

- (23) a. **Contra això / contra allò**, no hi pots [kontrajfó/kontraló]
contra this / *contra* that not there-can.2.sg
 fer res.
 do nothing
 'Against this/that, you can't do anything.'
- b. La setmana passada van jugar **contra** Alemanya. [kontra]
 The week past *pst.3.pl* play *contra* Germany
 'Last week they played against Germany.'
- c. No es pot anar **contra** animals com estos. [kontra]
 not *refl-can.3.sg* go *contra* animals like these
 'You can't fight animals like these.'
- d. El vent batia **contra** aquells vidres. [kontrakéls]
 the wind strike.*pst.3.sg* *contra* those glasses
 'The wind was blowing against those glasses.'
- e. Es va revoltar **contra** ells. [kontranéls]
refl-pst.3.sg revolt *contra* them
 'S/he revolted against them.'
- f. És un bon remei **contra** esta malaltia. [kontranésta]
 is a good remedy *contra* this illness
 'It's a good remedy against this illness.'

As can be seen by comparison with the preposition *a*, in addition to the cases where the preposition is followed by a vowel-initial [+N] (proper name or a common noun), with these prepositions the segment [n] fails to appear before: *aquell*(inflection) 'that/those', *algú* 'somebody' *algun*(inflection) 'some', *això* 'this' and *allò* 'that'. From a phonic point of view, what these elements share is the fact that they begin by the segment [a], unlike the ones that trigger [n], which begin by [e]. It seems that in these constructions the context required in order for the [n] to appear is [a e] (→[ane]), while the context [a a] would give as a result the simplification of the two identical adjacent segments: [a]. The difference in behavior with respect to the realizations of the preposition *a* is obvious, since in the latter case [n] also appears in the context [a a] with the elements *aquell*(inflection), *això*, *allò*, *algú*, *algun*(inflection).

- (24) a. Vivien **a** aquell castell. [anakéł]
 live.*pst.3.pl* a that castle
 'They lived in that castle.'
- b. Deu haver anat **a** alguna part. [analýúna]
 must.3.sg have gone a some part
 'S/he must have gone somewhere.'

- (24) c. S'exposava **a** això. [anajʃó]
refl-expose.pst.3.sg a this
'S/he was running this risk.'

The Preposition com a 'as'. At first glance, the behavior of this preposition with respect to the phenomenon at issue seems identical to that of the preceding prepositions:

- (25) a. Em va ajudar, **com a amic** que és. [komamík]
me-pst.3.sg help com a friend that is
'He helped me as the friend he is.'
- b. Es va presentar **com a aquell** amic que [komakéʎ]
refl-pst.3.sg introduce com a that friend that
els salvaria.
them save.cond.3.sg
'He introduced himself as that friend that would save them.'

This is, however, a very different case since, as correctly pointed out by Sancho (1994:240-243), this preposition cannot appear with NPs which have a determiner. In these cases the preposition *com* 'like' appears instead. Thus, the realization [komakéʎ] in (30.b) is not the result of the simplification of two identical adjacent segments ([a a]), but rather the simple realization of *com aquell*.¹⁹

6. Description of the Phenomenon

To sum up, we can say that in Tortosan the preposition *a* is the only one appearing in (inessive and allative) place PPs, both in proper place and in figurative place;²⁰ in indirect objects and in direct objects. As for time PPs, this preposition is again the one which is used in most cases; it seems that only time PPs expressing duration are introduced by the preposition *en*. With verbs subcategorizing governed PPs, we can either find *a* or *en*: in these cases verbal subcategorization determines which of these prepositions must be used. And finally, manner, instrument and company PPs generally take the preposition *en*.

When the preposition *a* is followed by a vowel-initial element, the consonantal segment [ɲ] appears between the preposition and the vowel. It blocks the possibility of syllabic simplification or hiatus. As I have demonstrated, in the case of the prepositions *contra*, *per a* and *cap a* the same phenomenon takes place, with some slight changes. We have seen, however, that this phenomenon is not completely

19. In Sancho's (1994:242) words: «The fact that *un* 'a(n)', *el* 'the', *aquest* 'that' cause *a* to "drop" is only apparent: rather it simply happens that *un*, *el*, *aquest* convey an individualization of the target object of comparison which is incompatible with the meaning of *com a*, which is one of total identity.»
20. As I pointed out above, though, we must bear in mind that PPs with a manner or instrumental interpretation, rather than a place interpretation, are generally expressed by the preposition *en*.

systematic: it only takes place when the element following the preposition is a determiner or a vowel-initial pronoun:

- (26) Indefinite article: *un, una, uns, unes* 'a'(fem)(pl) (not systematic)
 Demonstratives: *este, esta, estos, estes* 'this'(fem)(pl)
aquell, aquella, aquells, aquelles 'that'(fem)(pl)
això 'this'
allò 'that'
 Quantifiers: *algun, alguna, alguns, algunes* 'some'(fem)(pl)
un, una, uns, unes 'a'(fem)(pl) (not systematic)
algú 'somebody'²¹
 Personal pronouns: *ell, ella, ells, elles* 'he', 'she', 'they'(fem)

In these cases, the appearance of the segment [n] is systematic. Considering that the elements in (26) are the only ones in their classes beginning in a [+syllabic] segment, I think that the phenomenon can be generalized to the *determiner* category (articles, demonstratives, possessives, numerals and quantifiers) and to the personal, demonstrative and indefinite pronouns.²²

In contrast, we never find the segment [n], even if the following element has a [+syllabic] segment in initial position, in the rest of possible contexts, namely, if this element is:

- (27) A proper name An infinitive
 A common noun An adverb
 An adjective

21. In the group of demonstratives we find elements that can be determiners or pronouns (*això* and *allò* are always pronouns); as for quantifiers, *algun(fem)(pl)* belongs to the *determiner* category, while *algú* is an indefinite pronoun; *un(fem)(pl)* can function as a determiner or a pronoun.
 22. The definite article in this dialect always begins with the lateral segment [l], since, whenever the syllabification requirements cause the appearance of the morphologically conditioned, [feminine], epenthetic vocalic element ([o]), it is always placed to its right.

- (i) Lo xiquet no pensa tornar.
 the boy not thinks come-back
 'The boy is not intending to come back.'
 (ii) Los tarongers s'han gelat.
 the orange-trees refl-have frozen
 'The orange trees have frozen.'

Furthermore, the fact that the vowel segment of the preposition occurs before the article renders it completely unnecessary for an epenthetic process motivated by syllabification requirements to take place, since the [l] of the article can syllabify in the coda position dependent on the vocalic nucleus provided by the preposition.

As for the other elements in these categories I have not mentioned, all of them have a consonantal initial segment. The only case which, despite its initial vowel, does not trigger [n] is the numeral *onze* 'eleven':

- (iii) Ho ha enviat a onze amics.
 it-has sent a eleven friends
 'He sent it to eleven friends.'

With this state of affairs, we can conceive of two possible options to account for this phenomenon. On the one hand, it could be a case of allomorphy of the preposition *a*, similar to the one involved in *per la/pel* 'for the.fem'/ 'for the.msc'; the number of contexts where the phenomenon does not occur and the predictable lack of strictly phonological reasons to account for them lead, in principle, to such an explanation.

On the other hand, we could be dealing with a phonological process of insertion of a coronal nasal in these contexts. In other words, it would be a case of consonantal epenthesis. The fact that this segment may appear in other cases would be a sound argument in favor of this option. We have already seen the cases of the prepositions *per a*, *cap a*, and *contra*. There is still another case which is reminiscent of the same phenomenon: the privative prefix *a*, which is classified as genuinely unstressed (see Fabra (1956:151) and Mascaró (1986:27)):

- (28) a. amoral, atípic, anormal, acrític, apolític, asimètric, aconfessional, etc.
 b. analfabet, anharmònic, analcohòlic, anovulatori, anàdic, analgèsic, etc.

The variation in these forms has been generally treated as a case of allomorphy, but it could be accounted for on similar assumptions similar to the ones I use to account for the preposition *a*. It is true that cases of allomorphy are fairly common among unstressed prefixes:

- (29) *des, de:* *deslligar* 'untie', *desinflar* 'deflate', *deformar* 'deform',
deverbal, etc.
es, e: *escurçar* 'shorten', *esblanqueït* 'discolored', *enumerar*
'enumerate', etc.
trans, tras, ira: *transformar* 'transform', *trasplantar* 'transplant',
trabucar 'overturn', etc.
in, i: *inhumà* 'inhuman', *impossible*, *innoble* 'inoble',
irreperible 'unrepeatable', *inacceptable* 'unacceptable', etc.

And that, this being so, the variation *a/an* is plausibly nothing but allomorphic variation. If, however, we compare the phonetic contexts where the nasal forms appear with this prefix and those of, for instance, the prefix *in/i*, we can see that the distribution is different. In the former case, the form [an] only appears before a vowel; in the case of the prefix *in/i*, instead, the form with a nasal can appear before both a vowel and a consonant. Thus, while the forms of this affix are a clear case of allomorphic variation, the case of the negative prefix *a* seems to be amenable to a phonological account:²³

- (30) *in, i:* *inexacte* 'inaccurate', *illetrat* 'illiterate', *inútil* 'useless',
imparell 'odd', *immoral*

23. In Mascaró (1995), however, it is suggested that this case could be treated in a way similar to the cases of phonologically conditioned external allomorphy.

- (30) *a, an:* *anormal* 'abnormal', *apètal* 'apetalous', *anastigmàtic*,
**ammoral*, *amoral*

7. Explanatory Motivation

Concerning the first option, the allomorphic account, Mascaró (1995) presents a very interesting analysis which would provide an explanation for the alternation [a]/[an] as a case of phonologically conditioned external allomorphy of the preposition *a*. Within *Optimality Theory* (OT), this phonologist analyzes several cases of allomorphic variation in Romance languages, which show a number of similarities with the phenomenon of variation considered here. The phonological factors which determine the choice of an allomorph in these cases would be related to syllabic markedness and the general preference in natural languages for the unmarked syllabic structure: CV.

The second of these options seems, at first glance, the hardest one to justify. It is, however, the most attractive one if we are to attain a higher degree of generalization in the description of the phenomenon. In addition, in the case analyzed here there are further arguments in favor of this account. On the one hand, the phonological context where it takes place is completely uniform:

- (31) /a [V

On the other hand, the phonetic alternations it involves are not idiosyncratic. And finally it does not have a reduced lexical scope (a few lexical units), but it rather comprises the set of clitic elements. For all these reasons, I will try to explain the phenomenon as a phonological process.

Epanthesis phenomena are quite usual and varied in Catalan dialects. Tortosan is not an exception; the examples in (30) are a sample:

- (32) a. [askrívre] 'to write' (Cf.: *transcriure* 'transcribe')
[astóp] 'stop sign' (loan from English)
[askóla] 'school' (Cf. *autoscola* 'driving school')
- b. [kúzes] 'sew.2.sg' (Cf. *surts* 'go-out.2.sg', *sents* 'hear.2.sg')
[patífes] 'suffer.2.sg'
- c. [međíw] 'me-tells' (Cf. *m'agrada* 'me-pleases')
[teđíw] 'you-tells' (Cf. *t'agrada* 'you-pleases')
[seđíw] 'refl-tells' (Cf. *s'agrada* 'refl-pleases')
- d. [fuýases] 'fleeting.fem.pl' (Cf. *fugaç*, *fugaços* 'fleeting.sg/msc.pl')
- e. [kázos] 'cases' (*amiclamics* 'friend(s)')
[péjfos] 'fishes'
[astimarlo] 'love.inf-him' (Cf. *l'estimo* 'him-love.1.sg', *estima'l* 'love.imp-him', *l[o] vull estimar* 'him-want.1.sg love')
- f. [béndre] 'to sell' (Cf. *ven* 'sell.3.sg')

In most of these cases epenthesis seems to apply motivated by phonological reasons; in order to repair ill-formed syllabic structures or to make well-formed syllabification possible. This is the case with (32.a,c,f). In other cases, such as (32.b,d), its application seems to depend on some sort of morphophonological conditioning (otherwise the person or plural morpheme could not be realized). We also find cases of grammatically conditioned epenthesis, as in the case of the [o] appearing in masculine nominals before the plural morph whenever the stem ends in a [-continuant] strident, or with the 3rd person clitic (examples in (32.e)). And finally, despite the fact that epenthesis is as a rule vocalic, we also find examples of consonantal epenthesis: in (32.f) the segment [d] allows the flap *be* adequately syllabified, since it cannot appear as the only element in the onset when the preceding syllable is closed or when it is in word initial position.

The cases in (32.b,d), even if amenable to the above-mentioned morphophonological account, can also be explained by strictly phonological terms. The insertion of the (Western dialect) epenthetic vowel [e] can be explained in terms of wellformedness conditions on syllables, related to the sonority hierarchy in the syllabic coda. We are referring to the SSP (Sonority Sequencing Principle), which requires decreasing sonority for the elements in a syllabic coda starting from the nucleus.²⁴ Since in these cases the required decrease in sonority does not occur between the two sibilants, a vocalic segment would be inserted to permit the appropriate syllabification.²⁵

(33) * $[SS]_{\text{coda}}$

It should be remarked that this outcome ensues whenever the two heteromorphemic sibilants are adjacent in the domain the word. When the boundary between the sibilants is a word boundary, or a clitic-word boundary, the result is usually the merge of the two segments into one:

- (34) a. $[ka.pás+s]_{\text{word}} \rightarrow [ka.pá.ses]$
 b. $[tré.s][sáks] \rightarrow [tré.sáks]$
 c. $[les]_{\text{clitic}} [sís] \rightarrow [lɛ.sís]$

This is not, though, the only explanation that has been given to this phenomenon. In Palmada (1991) the appearance of an epenthetic vocalic segment between two sibilants is not explained in terms of wellformedness conditions on syllables, but rather it is accounted for in terms of cooccurrence constraints on this sort of segments, determined by the *Obligatory Contour Principle* (OCP) (35). According to this author, the OCP is an active principle, in the sense that, besides expressing generalizations concerning an important part of the phonological component, it can block the application of phonological rules which would violate it, and also trigger processes that will override structures not abiding by it.

24. See Kenstowicz (1994:254).

25. For motivation of the rules of insertion or epenthesis in terms of the rules of syllabification see Mascaró (1989:31-61).

- (35) *Obligatory Contour Principle (OCP)* (McCarthy 1986:207-263)
At the melodic level, adjacent identical elements are prohibited.

Following Yip (1988:65-100), Palmada proposes three basic processes to rescue structures that would violate this principle: epenthesis, dissimilation and elision. Elision would be the most general solution; epenthesis would be triggered *when the second element is a morpheme which is uniquely represented by the sibilant*; and finally dissimilation can be found in Balearic dialects, where it plays the role of overcoming the identity of adjacent elements across words.

From this perspective, one could assume that the segment [n] which appears associated to the preposition *a* in some vocalic contexts is an epenthetic element, which would act as a repair strategy, triggered by the OCP (this account could be extended to the nasal in the privative prefix *a*: *atípica*, *anàdic*). Relevant cases are those in (36):

- (36) a. Estudiem a[n]aquella habitació.
study.3.pl *a* that room
'They study in that room.'
- b. Ja s'ha acostumat a[n]això.
already *refl*-has accustomed *a* this
'S/he has got used to this.'
- c. Ho he dit a[n]aquella noia.
it-have.1.sg said *a* that girl
'I told that girl.'
- d. a[n]alfabet
analphabetic
'Illiterate.'

The contexts where a violation of this general principle is avoided through epenthesis are: between morphemes in the same word, or between clitic and small word. Between words, instead, the most usual repair strategy would be simplification of identical segments.²⁶ This would explain the different behavior of the sequences [aa] that we can observe in the examples in (37):²⁷

- (37) a. He dinat a[n]aquella fonda.
have.1.sg lunched *a* that country-pub
'I've had lunch in that country pub.'
- b. Estudiav[a]nimals en captivitat.
study.3.sg animals in captivity
'S/he was studying animals in captivity.'

26. The same happens in Basque between sibilants: s]_{word}+]_{word}s → simplification, but ez+]_{word}s (ez is a negative clitic) → dissimilation (taken from Palmada 1994).

27. On elision of vowels with the same timbre in the Western dialect, see Recasens (1991) and Massip (1979).

As for which contexts one or the other strategy applies to, it is worth pointing out that there seems to be a difference in behavior between the case of sibilants and the case under discussion here. In the former simplification applies both between words and between clitic and word, as shown by the examples in (34.b,c). In the case of the vowel *a*, the context clitic+word seems to always choose the epenthesis option. In this sense, it could be argued, in accordance with Mascaró (1986:125), that in phonological processes, even if clitics generally behave like morphemes, they can be sometimes treated like words. And that some of these processes affect clitics optionally.

I think that the examples of the prepositions *contra*, *per a* and *cap a* can provide interesting clues to understand the different behavior in these cases.²⁸ As can be observed in examples (26.c,d,f), (27.f,g) and (28.a,d), in these cases the solution to adjacency of identical vowel segments is elision. If we treat these elements as clitics, the only difference between these cases and those of the preposition *a* is the fact that, while with the latter the elided segment [a] is the only realization of the morpheme, this is not the case with the other prepositions; just as it is not either in the case of articles that undergo elision of [s] and of [a]:

- (38) a. les sabates [lesaβátes]
 the.fem.pl shoes
- b. l'aspirina [laspirína]
 the.fem-aspirin

We should therefore assume that the choice of repair strategy for the OCP depends not only on the domain where the identical elements occur, but also on whether or not these elements are the only phonic support of a morpheme. In the case of Tortosan, I think that the following distribution can be established:

- (39) Epenthesis: a) [morpheme+morpheme]_{word}
 b) [clitic]+[word]
 ↑
 [monosegmental morpheme]
- Elision: a) [word][word]
 b) [clitic][word]
 ↑
 [polysegmental morpheme]

The examples of the prepositions *contra*, *per a* and *cap a* raise a problem for this distribution: while in some cases they give rise to vowel elision, in others the nasal segment appears:

28. Here we consider the option of treating these prepositions as clitic elements, just like weak prepositions. In Mascaró (1986:126-127) this option is suggested as a possibility.

- (40) a. He jugat contra aquells [akéʎs]
 have.1.sg played *contra* those
 'I've played against those ones.'
- b. He jugat contra estos [anéʎs]
 have.1.sg played *contra* these
 'I've played against these ones.'

Since both are in the same domain, these cases suggest that we are probably dealing with two different processes. On the one hand we have the case of [ana], which would be explained as an effect of the OCP; on the other, we have the case of [ané].

The latter case forces us to address the problem of the degree of identity of the adjacent segments affected by this general principle. While in the former case the identity is self-evident, in the case of the vowels [a] and [e] the situation is rather different. Even if we resort to an underspecified feature matrix, it is far from clear that we can manage to treat these two segments as identical.²⁹

- (41) Underspecified feature matrix for vowels of the Western dialect (Palmada 1994:50).

	i	e	ɛ	a	ɔ	o	u
back	-	-	-	-	-	-	-
high	+						+
labial					+	+	+
ATR			-	-	-	-	-

I therefore believe that we cannot treat these segments as identical. We must consequently look for an account not related to the OCP in order explain the cases of insertion of [n] in the context [ané], since, the segments not being identical, we cannot justify any need to repair their adjacency.

As I pointed out, in the literature on the prepositions *a* and *en* reference is often made to the antihaptic function of the nasal segment (Badia (1962,1994), Solà (1977), Mier (1986), etc.). It can be assumed that the tendency of the language in these cases is not to prevent adjacency between identical segments, but rather to facilitate the preferred syllabic structure, namely CV (*core syllables*, in Steriade's (1982) terms).

The tendency of languages to prefer syllables of the sort CV, i.e., to somehow require a filled onset position (a requirement which does not hold in the case of codas) has been formalized by Itô as the *Onset Principle* (OP). This principle tries

29. Taking into consideration proposals on the hierarchical organization of features of point of articulation of vowels, such as Odden's (1991:261-289), will not, in my view, provide us with any clarifying arguments in this sense either.

to express the tendency in natural languages to build syllables with an onset. In (42) I reproduce the version of the OP in Itó (1989:223).³⁰

- (42) *Onset Principle:*
 Avoid [V
 σ

On the basis of this principle one could account for the insertion of the nasal segment [n] as serving the purpose of obtaining CV syllables in the domain [clitic][word]. Thus, the cases of [a][V [-low]] involving these prepositions could be explained by the tendency to favor syllables with an onset.³¹ In this connection, I think that Tortosan is one of the Catalan dialects where the preference for this sort of syllabic structure is strongest, at least as compared with the Central dialect. One argument in support of this claim is provided by cases of vowel epenthesis with pronominal clitics. As demonstrated by Morales & Prieto (1992), unlike what happens in the domain of the word, where epenthesis can insert to the right or to the left ([ápte] 'apt', [askála], 'scale'), in the case of clitics the vowel is always inserted to the right.³²

- (43) a. **Em** pentino. {me}
 me-comb. *l.sg*
 'I comb myself.'
- b. pentinar-**me** {me}
 comb. *inf-mc*
- c. **Et** rento. {te}
 you-wash. *l.sg*
 'I wash you.'
- d. Rentar-**te** {te}
 wash. *inf-you*
- e. Vull tenir-**lo** {lo}
 want. *l.sg* have. *inf-it*
 'I want to have it.'

30. The fact that there are languages which allow only syllables with an onset, while others, even preferring CV structures, can also have onsetless syllables, has led to the formulation of two versions of this principle. A parameterization of the principle has therefore been proposed, according to the possibility that the requirement of a syllable onset may be relative or absolute. The other version, known as the *Strict Onset Principle*, prohibits the existence of vowel-initial syllables and has the following formulation:

Strict Onset Principle
 *[V
 σ

This second version is evidently not the appropriate one for Catalan.

31. Palmada (1994) chooses to treat this principle as an active principle, just like with OCP. The OP can therefore block or trigger the application of phonological rules.

32. The examples are written in the standard spelling, which conforms to the Central dialect. The same is true for the examples in (44).

- (43) f. El vull tenir [io]
 it-want. 1.sg have.inf
 'I want to have it.'

Even if the insertion of an antihhiatic consonant is not a frequent and systematic phenomenon in Tortosan in the domain of the word (the same is true for Catalan generally), we can find cases such as the following:

- (44) a. cua 'tail' [kóya]
 b. paó 'peacock' [paýó]
 c. llaút 'lute' [layút]

We might, though, expect the phenomenon to be more general in the domain [clitic][word], especially in certain contexts where it would be favored by word stress or the stress of the phonological phrase.³³

7.1. The Coronal Nasal as an Epenthetic Element

One of the stumbling blocks for an explanation in terms of [n] insertion (after the preposition *a* in certain vocalic contexts) as a phonological process is the need to justify the choice of the coronal nasal as the epenthetic element.

In analyses of antihhiatic consonants in other languages, we can see that the choice of the epenthetic element can be explained by spreading of features of the adjacent segments, or otherwise by a rule of redundancy that fills a non specified consonantic position.³⁴ The spreading option allows us to account for the epenthetic segment in [béndre]. In this case the nasal spreads the features [-continuant], [+voiced] onto the consonant position created to properly syllabify the flap segment.³⁵ The other possibility, which explains insertion through redundancy rules giving melodic content to an non-specified (or underspecified) position in the skeletal tier, is the most general one in the case of vowel epenthesis.

In this way, in the epenthesis of [ə] in Central Catalan the rules of syllabification would create a V position in the skeletal tier, which would be filled by redundancy rules with the melodic characteristics of the schwa (the only vocalic segment without any specification). As for the Western dialects, on the basis of an underspecified matrix such as (41), the V position in the skeleton should be specified as [-back], in order to correctly account for the insertion of [e].³⁶

The case of [n] epenthesis in the prepositional contexts we are considering is slightly more complex. This is not the least marked segment in the consonantal

33. For a deeper analysis of the phenomenon under study it would be essential to know more in detail what happens in Tortosan with vowel contacts in different domains: word, clitic+word, and word+word.

34. This would be the case with the glottal stop in Oromo, as analyzed in Lloret (1988).

35. See Mascaró (1987) and (1989).

36. See Mascaró (1989) and Morales & Prieto (1992). According to these authors, we should start from an underspecified matrix where [c] was not specified for any feature.

domain, where we would expect a stop. The fact, however, that it is a coronal ties in with expectations, since it is the least marked point of articulation for nasals.

The only explanation I can think of is based on the idea that the relevant feature in these cases is [\pm continuant]. I.e., in the application of both the OCP and the OP, what matters is to keep an alternation between distinct adjacent segments, or between C/V. If we treat [continuant] as the feature that can set the contrast between these segments, the insertion of a nasal could be justified by the close link there is between [+nasal] and [-continuant]. We could also assume that the vowel segment spreads [+voiced] onto the inserted consonant position (which is specified as [-continuant]); a nasal segment, then, is the only one which can keep [-continuant], given the processes of spirantization of voiced stops after a vowel in Catalan.³⁷

6.2. *The Complexity of such an Analysis. Phonological Processes and Other Factors*

The most serious problem for this analysis is the great number of counterexamples it encounters, which are hard to justify in strictly phonological terms. In (27) I have presented the cases where, despite the preposition *a*'s being followed by a vowel, the coronal nasal does not appear.

It is a fact, though, that some of the elements that do not trigger [n] insertion manifest a peculiar syntactic behavior with respect to the prepositions. We already mentioned that with DO in Tortosan the presence/absence of preposition, as a case marker, is straightforwardly related to +/-referentiality of the DO, which generally corresponds to the presence/absence of a determiner in the NP. We also have alternations between the prepositions *a* and *en*, which coincide with the presence/absence of a determiner in the NP, and seem to be related to a semantic difference between place and manner-instrument:

- (45) a. He posat el vi *a* la bóta.
 have. / .sg put the wine *a* the barrel
 'I've put the wine into the barrel.'
- b. He posat el vi *en* botes.
 have. / .sg put the wine *en* barrels
 'I've put the wine into barrels.'

Nevertheless, I do not see it plausible that syntactic-semantic phenomena of this kind may be argued to block a phonological process triggered by such a general principle of UG as the OCP. I believe, however, that the case of the *Onset Principle* is

37. It seems that in German, in a similar phonic context, a phenomenon of consonant epenthesis with coronal nasal exists too, in the case of derived forms like:

Afrika[n]er, afrika[n]isch	but Afrika, Afrika+s (genitive)
Amerika[n]er, amerika[n]isch, Amerika[n]ismus	but Amerika(+s) (nom., gen.)
Venezola[n]er	but Venezuela(+s) (nom., gen.)

different. Among other things, because the requirement of a syllable onset in Catalan is not absolute, but only relative.

As for the cases which trigger [n] insertion, they can be sorted as follows: NP determiners, and personal, demonstrative and indefinite pronouns. Following the nowadays standard view (stemming from Abney 1987) that treats pronouns as (intransitive) determiners we may conclude that the appearance of the epenthetic nasal takes place, in the case of prepositions, when they are adjacent to a vowel-initial determiner. This could lead us to assume that there is a stronger structural link between the preposition and the determiner, which would require the appearance of the epenthetic segment, than between the preposition and a head of the category noun, adjective or infinitive.³⁸

The application of the OP in the cases discussed here is closely linked to processes stemming from vowel contact: breaking a hiatus, vowel elision, diphthongization, etc. There is rather ample consensus that in the possible outcomes of vowel contact different factors play a role: phonological, prosodic, frequency of use, loss of information, etc.³⁹ Now, one factor that groups together all contexts where [n] insertion takes place to the exclusion of all other cases is the high frequency of use of the former. For they are, in short, grammatical units, whose frequency is higher than that of lexical units.

At least in oral speech and in a non formal register, the higher frequency of the (a) contexts over the (b) contexts in (46) is obvious:

- (46) a. Prep [_{NP} Det [_{N...}]]
 b. Prep [_{NP} [_{N...}]]

The same can be said about proper names. Their frequency of use as compared to that of determiners or personal, demonstrative or indefinite pronouns is rather low. Besides, in the case of personal names, we must take into account the use of the personal article, which breaks the possibility of vowel contact with the preposition.⁴⁰

Following this reasoning, it can be argued that the preference for CV syllables in Catalan, in accordance with the principles of UG, has developed, among other strategies tending to favor *core syllables*, a process of consonant epenthesis blocking vowel contact, in contexts of high frequency of use.

Moreover, the systematic occurrence of the phenomenon in these contexts, and the fact that it is not restricted to the preposition *a* are, in my view, decisive for establishing its phonological status.

38. I owe this comment to Jaume Solà.

39. In this connection, see Oliva (1992:157-166) and Recasens (1993).

40. The personal article, which in part of the Catalan dialects (Tortosan among them) is identical to the definite article, is used before a person name. Valencian and adjacent dialects do not have it.

In Tortosan, like in the case of pronominal clitics, when syllabification of the underlying form or the article ([l]) requires an epenthetic vowel, it is inserted to the right of the lateral segment. We must bear in mind, however, that the use of this article in Tortosan is far lower than in other dialects. And it is subject to local variation. In most districts it is not used, in others it is used only before feminine person names, and in others it is used throughout.

8. Conclusions

Starting from the analysis of the different uses of the prepositions *a* and *en* in the Tortosan dialect, I have tried to show that the preposition appearing in place complements, like the one in IOs, is only the preposition *a*. The vowel system in this dialect enables us to clearly establish this conclusion.

This assumption opens the possibility to treat in a uniform way the realizations [an] occurring in locatives and in IOs, as well as in other PPs introduced by *a*. Furthermore, it characterizes a more coherent prepositional system, since it does not have to link a change of preposition to mere variation of the NP determiner.

Upon denying any link between the form [an] and the preposition *en*, I am forced to try to account for this form in strictly synchronic terms. After considering the alternative of either accounting for this form as a case of allomorphy of the preposition *a*, or as the result of a phonological process, I have chosen the latter, since it allows us to capture relevant linguistic generalizations and is more explanatory.

The case of the prepositions *contra*, *cap a* and *per a*, which show the same segment [n] in some vowel contexts, and possibly the case of privative prefix *a* (ex.: *apolític*), can be explained as involving the same phonological process: insertion of a coronal nasal. This is one of the most important arguments in choosing the phonological account over the prepositional allomorphy account for these phenomena: with the latter option the recurrence of the segment [n] in all these forms would come out as mere coincidence.

I have considered the possibility that this epenthetic process is triggered by the OCP, a solution parallel to the ones proposed by other authors to account for vowel epenthesis between sibilants. The unexceptionality, on the one hand, of the effects of this principle and, on the other hand, the numerous counterexamples of the phenomenon under study, all of them unaccountable in phonological terms, have led me to abandon this hypothesis.

I conclude, then, that consonantal epenthesis with these prepositions can be explained on the basis of the *Onset Principle*. Obviously, this implies accepting the view that this principle is able to trigger phonological processes. This hypothesis, though, is in agreement with the trend that derives epenthesis phenomena from syllabic structure, as an obligatory process. Now, while vowel epenthesis applies because of constraints on well-formed syllabification and is therefore an obligatory process, consonant epenthesis of the sort considered here applies in order to obtain an optimal syllabic structure, which in the case of Catalan is not obligatory, but **preferential**: a syllable with a CV onset.⁴¹ The difference in behavior between these two epenthesis processes would be explained by the following contrast:

41. As I mentioned before, Mascaró (1995) makes a similar argument concerning the choice of allomorph in cases of phonologically conditioned external allomorphy. He establishes the following generalization:

The allomorph chosen is the one which can be best syllabified with adjacent words to yield an output closer to a core syllable (i.e. CV).

With this principle and through the evaluation of different allomorphs according to a ranking of phonological constraints (PARSE-SEG, FILL, ONSET, NO-CODA, etc.), the fittest phonetic variant is chosen, depending on the adjacent context.

- (47) a. well-formed/ill-formed syllabification → obligatory vowel epenthesis
 b. optimal/acceptable syllabification → non-generalized consonant epenthesis

As a consequence, the application of this process is not obligatory, and shows a high degree of optionality. It applies rather regularly in the domain [clitic+word], mainly when the clitic is a monophonemic morpheme and in contexts of high frequency of use: before determiners.

Finally, I believe that this analysis could be applied without much modification to other dialects which show even stronger variation in their weak prepositions than the dialect described here. In these dialects, though, an explanation in terms of allomorphy would probably be more plausible, at least in those cases where variation takes place in less uniform phonological contexts.⁴²

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42. On these cases, see Cabré (1980).

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