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OBLIGATORY AND OPTIONAL RESUMPTION; CASE STUDIES IN THE SYNTAX OF IRAQI ARABIC AND ROMANIAN

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Declaration

I hereby declare that this thesis is of my own composition and that it contains no material previously submitted for the award of any other degree. The work reported in this thesis has been executed by myself, except where due acknowledgment is made in the text.

Laura Sterian
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Abstract

Resumption has been the object of lively research (Doron 1982; Sells 1984; McCluskey 1990; 2002; Shlonksy 1992; Cann 1999; Sharvit 1999; Alexopoulou 2006; Guillot 2006; Malkawi 2009; Rouveret 2011) and various analyses consider it a form of agreement, a last syntactic resort or a special kind of ellipsis.

On the theoretical side, I survey the issues that are the background of the research, such as the nature of the pronouns that are involved in resumption. I develop a syntactic analysis of resumptive pronouns in which they are clitics (Cardinaletti and Starke 1999; Dechaine and Wiltschko 2002; Roberts 2010) and they form a complex determiner phrase together with the relative pronoun or interrogative pronoun. I argue that when resumption is obligatory, it follows from requirements in the syntax and only when it is optional it is a phenomenon at the syntax-pragmatics interface.

On the empirical side, I contrast and compare the pronominal paradigms of Arabic and Romanian, an Eastern Romance language which strikingly shows a similar pattern of resumption as Arabic: (i) obligatory resumption in relativization, (ii) designated relative pronoun. Though for Romanian nobody has disputed the nature of the clitic pronouns as clitic in the sense that I am adopting (Cardinaletti and Starke 1999), it has not been thoroughly documented either.

I then discuss the pragmatics of resumption in contexts in which it is optional, such as D-linked questions in Arabic. The difference between obligatory resumption and optional resumption is not found in the syntax, because this same syntactic derivation is associated with different interpretive effects depending on whether it occurs in obligatory or in optional contexts. I argue that the presence of the pronoun when it is not required by the syntax triggers a change in interpretation: the module pragmatics assigns it a pragmatic feature.
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1. INTRODUCTION

Modern generative linguistics is built on the hypothesis that children acquire language easily because humans are biologically equipped to do so. This biological system known as Universal Grammar is responsible for language acquisition, in the sense that it provides the universal principles onto which a child maps what they hear. The task of the modern linguist has been to analyze language in an attempt to describe the principles of Universal Grammar starting from the assumption that it is Universal Grammar rather than experience that carries the weight of language acquisition. One area in which the role of Universal Grammar versus experience is relevant is the acquisition of lexicon (Pesetsky 1996). Children acquire the lexicon and Universal Grammar is capable of projecting it via its principles having as output the adult language spoken. It should be the case that Universal Grammar maps the lexicon acquired onto syntactic structures. The Minimalist desideratum follows from this that no “covert” elements should be necessary to explain linguistic phenomena. This dissertation investigates what one specific instance of cross-linguistic variation reveals in this respect about Universal Grammar, namely resumption (1.1-1.2):

ENGLISH
(1.1) The man whom I saw ____ in the library is a famous writer.

ARABIC (MODERN STANDARD)
الرجل الذي شاهدته في المكتبة كاتب مشهور.
(1.2) al=radjuulu al=laδyi fa:hadtu=hu fyi=l=maktabati ka:tibun mafhu:run.
‘The man whom I saw [him] in the library is a famous writer.’

In the English relative clause in (1.1), a gap indicated by “___” occupies the thematic position of the moved direct object whom which is found in a non-argumental position – an A’-position. The relation between whom which is in an A’-position and the gap – its extraction site - is known as an A’-dependency. In other words, whom binds the gap. In English, the gap strategy is the only strategy to form relative clauses. Notice that where the English sentence in (1.1) has “___”, the Arabic sentence in (1.2) has the pronoun hu “him”. In the literature, this kind of pronoun is known as “resumptive” and the syntactic strategy in which it participates is known as “resumption”. Thus, with respect to the lexicon, the Arabic sentence in (1.2) contains one more element, the obligatory resumptive pronoun, while the English sentence in (1.1) does not. Resumption is not limited to relative clauses though, but is found in all structures that involve A’-dependencies.

The contribution of this dissertation is both theoretic and empirical. On the theoretical side, this study contributes to the discussion about principles of Universal Grammar that underlie certain phenomena that have not received a unified analysis so
far, namely resumption and clitic-doubling. Resumption has been an intense topic of debate, because the cross-linguistic variation in gap versus resumption has puzzled linguists, who have proposed various mechanisms that, for example, divide languages into two groups: those, like English, that in constructions such as (1.1) allow A’-movement and languages like Arabic that do not, but rather have a base generated resumptive pronoun. For examples such as (1.2), authors propose some form of “covert” category or “covert” linguistic process to explain it. A central goal of this study is to demonstrate that such a divide is not necessary; resumption also involves A’-movement. This is shown through a detailed analysis of two genetically unrelated languages that both make extensive use of resumption: Iraqi Arabic and Romanian, set out in chapters 4 and 5.

While I was researching resumption, I noticed that Romanian, a Romance language, behaves in a similar way to Arabic in establishing A’-dependencies; in other words it has resumption in the same way that Arabic does (1.3):

ROMANIAN

(1.3) Tipul pe care l-am văzut în bibliotecă este un scriitor celebru.
guy=the pe which him=Aux.1S seen in library is a writer famous
‘The man whom I saw [him] in the library is a famous writer.’

But this phenomenon in Romanian has been so far attributed to the fact that this language also shows the phenomenon known as clitic-doubling (Steriade 1980; Dobrovie-Sorin 1994), as evidenced in (1.4):

ROMANIAN

(1.4) L-am văzut pe tip în bibliotecă.
him=Aux.1S seen pe guy in library
‘I saw [him] the man in the library.’

With respect to clitic-doubling (1.4), Kayne (2002) describes it as a syntactic construction that involves a clitic pronoun and an associated DP in argument position that together correspond to a single θ-role: in this example, the pronoun l- “him” doubles the direct object tip; they share the same θ-role.

Resumption and clitic-doubling are relevant to the discussion about Universal Grammar and language acquisition because the variation between languages seems to be almost absolute with respect to these phenomena. While reading then the literature on clitic-doubling, I noticed that so far the study of clitic-doubling and the study of resumption have taken similar but nonetheless parallel paths. The issues that concerned authors were the same: whether the pronoun is base-generated or whether the construction is the result of movement of some sort. This also touches on the question of whether these pronouns are drawn from the lexicon or not (i.e. they could be the spell-out of features or the phonological realization under special circumstances of a covert element). Authors situate themselves on either side of this barricade which cuts across the two parallel paths. In this thesis I argue that resumptive pronouns/ clitic-doubling
pronouns are entities drawn from the lexicon. This analysis has the advantage of relying on elements that exist in the lexicon, rather than on abstract categories.

Another issue that this study addresses is what orders functional projections in the clausal domain. This is a major research question in the literature, because it is assumed that Universal Grammar makes available a universal hierarchy of projections which orders clause structure across all languages and that the differences between these is given by feature strength and interpretability. I argue that in syntactic ordering the relation between projections is not the only determining factor, but there exist structures where selectional requirements of lexical elementsdictate the ordering. I bring evidence from clitic-doubling and from resumption.

While this study aims to determine what the invariant principles of Universal Grammar are, it is also concerned with the other side of the coin, namely determining what it is that makes one language differ from another. As such, I argue that the differences observed arise because of (i) the different categories of pronouns in a language, for example English has strong pronouns and weak pronouns, while Arabic and Romanian have strong pronouns and clitic pronouns and (ii) the different categories of the elements in C or in SpecCP.

This dissertation also contributes to the discussion of the syntax – pragmatics interface, because in some cases resumption is associated with pragmatic effects. So far I talked about Universal Grammar as the biological system that – in broad terms – maps the acquired lexicon onto syntactic structures. However, the outcome several times has more than one interpretation. How does Universal Grammar accommodate this? Some resumptive constructions show interpretive effects (1.5-1.6):

IRAQI ARABIC
(1.5) POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - GAP
يا مرية كل رجال عزم؟
ya: mraya kull ridʒжаl ِفاِزام___
which woman every man invited.3MS
'Which woman did every man invite ___ ?'

a. *Natural function answer: his sister
b. *Pair-list answer: Samer, Suha; Ahmad, Najwa; etc

(1.6) POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - RESUMPTION
يا مريه كل رجال عزمها؟
ya: mraya kull ridʒجاِل ِفاِزام=هَا
which woman every man invited.3MS=3FS
'Which woman did every man invite [her] ?'

a. Natural function answer: his sister
b. Pair-list answer: Samer, Suha; Ahmad, Najwa; etc
Syntactically, the difference between (1.5) and (1.6) is that the derivation of (1.6) contains the \( \varphi \) pronoun, while the one in (1.5) doesn’t. Semantically, the question with gap in (1.5) can have both a functional and a pair-list interpretation, while the question with resumption in (1.6) can only have a functional interpretation. Authors proposed that this is possible because of an economy principle (Malkawi 2009) or because different underlying structures are associated with different interpretations (Sterian 2011). In this thesis I part with the idea that underlying syntactic structures are associated with a particular interpretation. Rather, I build on earlier proposals that the module syntax and the module pragmatics interact (Epstein 1998; Lopez 2003; 2009). I argue that if syntax allows for more than one syntactic structure in a particular environment, such that the difference between these structures is the presence in one of them of an extra element, then pragmatics intervenes and restricts the possible interpretations of the structure containing the extra element.

On the empirical side, this dissertation gives a detailed description of resumptive structures in Iraqi Arabic (chapter 4) and in Romanian (chapter 5). The Iraqi Arabic data are new. As for Romanian, more of the data are available in the literature, but this is the first time that the parallels between resumption in Arabic and in Romanian have been noted and described in detail. I also draw a parallel between the clitic-doubling construction in Romanian and the one in some varieties of Arabic.

The structure of the dissertation is as follows: chapter 2 compares and contrasts the pronouns involved in resumption in Iraqi Arabic and in Romanian and it shows that they can be considered clitics in the sense of Cardinaletti and Starke (1999). Chapter 3 compares and contrasts the cliticisation process in these two languages. In later chapters the clitic nature of these pronouns, as established in chapter 2, and the way they participate in the cliticisation process, as established in chapter 3, helps explain some of their observed behaviour in resumptive constructions. Chapter 4 deals with resumption in Iraqi Arabic and chapter 5 extends to Romanian the analysis of resumption proposed in chapter 4. Chapter 6 discusses interpretive effects observed with resumption constructions.
2. PRONOUNS IN ARABIC AND ROMANIAN. CLITICS AS PRONOUNS OF CATEGORY φ

The aim of this chapter is (i) to argue that Arabic pronouns which are referred to as “weak” in the literature (Guilliot 2006; Malkawi 2009; Sterian 2011) are true clitic pronouns in the sense of Cardinaletti and Starke (1999), (ii) to draw out the similarities between Romanian and Arabic clitic pronouns, and (iii) to discuss the treatment of clitics as pronouns of category φ. Though for Romanian nobody has disputed the nature of the clitic pronouns as clitic in the sense that I am adopting, it has not been thoroughly documented either. In both Arabic and Romanian it is these clitic pronouns that participate in both clitic-doubling and in resumption and this is why understanding their nature and behaviour is important.

The importance in clarifying for Arabic that these pronouns that participate in resumption are clitic is that the resumptive strategy in Iraqi Arabic content questions, relativization and dislocation is realized via resumptive clitic pronouns. However, the most recent literature on resumption (Guilliot 2006; Guilliot and Malkawi 2009; 2011; Malkawi 2009) distinguishes Arabic pronouns as being either strong or weak and therefore calls the resumption in which the resumptive pronoun cliticizes as weak resumption and the resumption in which the resumptive element is a strong pronoun or a full NP as strong resumption. Clearly identifying resumptive pronouns as clitics solves the puzzle in the literature related to their movement in the derivation.

The parallel between Romanian and Arabic clitic pronouns becomes relevant in the analysis of resumption (chapter 3), in which it is argued that cliticisation is a common denominator for these two languages that plays a central factor in resumption (though not enough on its own, because other factors must also be involved besides cliticisation for resumption to be possible). I also discuss how the clitic pronoun moves from its base position to a derived one and where its final landing site is. Nevertheless, I would like to point out again that I do not equate cliticisation with resumption. Later on I discuss other elements which must be present in a resumptive configuration, such as the relative pronoun (chapter 3).

In the remainder of this chapter I survey the findings in Cardinaletti and Starke (1999) relevant to this thesis (§2.1), I present an overview of Romanian pronouns (§2.2) and of Iraqi Arabic pronouns (§2.3), I argue that Romanian and Iraqi Arabic pronouns are clitic pronouns in the sense of Cardinaletti and Starke (1999) in (§2.4) and I discuss the treatment of clitics in the literature as pronouns of category φ (§2.5).

2.1 Cardinaletti and Starke (1999)

Cardinaletti and Starke (1999) argue that the earlier classification of pronouns into strong and weak does not accurately capture the differences noticed in the syntax, semantics and phonology of pronouns and therefore they propose that pronouns are best
described rather through a tripartition: strong, weak or clitic. These categories of pronouns are structurally different, and it is this structural difference that results in their apparently peculiar behaviour. For example, (i) while weak pronouns may occur in their base position, clitic pronouns never occur in their base position, (ii) in overt syntax, weak pronouns may occur in a derived position, but clitic pronouns must occur in a special derived position and (iii) weak pronouns are phrasal, while clitic pronouns are heads.

Cardinaletti and Starke’s (1999) definitions of clitic pronouns and weak pronouns are given in (2.1):

(2.1) CARDINALETTI AND STARKE’S (1999) DEFINITION OF PRONOUNS

i. clitic pronoun

Clitic elements are deficient underlying phrases which are heads at surface structure.

ii. weak pronoun

Weak elements are deficient underlying phrases occurring as maximal projections at surface structure.

Cardinaletti and Starke (1999) extend Laka’s (1990) analysis that Basque prefixes correspond to a functional category \( \Sigma^0 \) situated between \( C^0 \) and \( I^0 \) which contains polarity as well as focus features, and propose a structure for all support morphemes as in (2.2a); further, Cardinaletti and Starke (1999) argue that strong pronouns display all these layers of structure, but the weak and clitic pronouns lack the superior layers of the strong elements; in this sense, weak and clitic pronouns are deficient, because they lack some layers of functional structure. The representation of pronouns’ structural deficiency is given in (2.2b):

(2.2) CARDINALETTI AND STARKE’S (1999)

\[
a. \ C_L^{\ P} \ \Sigma_L^{\ P} \ \ I_L^{\ P} \ \ LP \quad (\text{with } L = \text{any lexical category})
\]
In (2.2b), CP and IP are projections similar to the sentence projections. ΣP is associated with polarity, focus and agreement. Stripped of its structure, the clitic pronoun is a head. Cardinaletti and Starke (1999) argue that the clitic pronoun must compensate for the missing structure by being in a c-commanding relation with another head. According to their findings, the following are characteristic of clitic pronouns in Romance:

1. the clitic heads an X^0-chain, while the weak pronoun occupies positions of maximal projections
2. doubling: it must involve at least one clitic, there is no combination of weak and strong pronoun possible. The implication of this for the current study is that resumption is with clitic pronouns, not weak pronouns.
3. formation of clitic clusters with characteristic morpho-phonemic processes applying: only heads form clusters.

Cardinaletti and Starke (1999) conducted their research on Western Romance and Germanic pronouns. They argue that Western Romance pronouns have three paradigms: strong, weak and clitic. In this chapter I present data from Romanian to
illustrate that pronouns in this language have only two paradigms: strong and clitic. Interestingly, Arabic has the same paradigms, as well: strong and clitic.

In the remainder of this section, I present and discuss the distribution of Romanian third person pronouns (§2.2) and Iraqi Arabic third person pronouns (§2.3).

### 2.2 Romanian pronouns: strong and clitic

This section aims to provide an overview of pronouns in Romanian, an Eastern Romance language. I start the comparative syntax of pronouns in Romanian and in Arabic with Romanian, because it being a Romance language, I expect it to show quite similar characteristics to the Western Romance languages discussed by Cardinaletti and Starke (1999): Italian and French, though some differences will emerge, too, as I will show in the following.

Since clitic-doubling and resumption are phenomena characteristic of third person pronouns, in the following I am presenting a detailed overview of third person pronouns only. However, before I proceed, I note that while the first and second person pronouns in Romance originate from first and second person pronouns in Latin, the third person pronouns originate from the demonstrative pronoun in Latin (Uriagereka 1995). This is why authors group third person personal pronouns with the definite article, following a line of thought which started with Postal (1969).

Romanian pronouns have two paradigms: strong and clitic, unlike Italian – for example - in which pronouns can be strong, weak and clitic (Cardinaletti and Starke 1999). The strong form is also known as the “accentuated” form and the clitic one as the “un-accentuated” form (Gramatica Academiei Române 2008).

The strong form is used when the pronoun is the subject (i.e. Nominative) or object of preposition (i.e. Accusative); Romanian is a pro-drop language, so the strong form of the pronoun used as subject is rather associated with information structure. The clitic forms are used elsewhere. Note that in Romanian, Nominative and Accusative have the same morphology on nouns and third person pronouns (personal, demonstrative, etc); but first and second person pronouns have a different morphology for each case: Nominative, Accusative, Dative and Genitive are all different. Though morphologically there is no difference between Nominative and Accusative forms of the

---

1 Functionally Romanian grammarians consider objects of prepositions to be Accusative, but their morphology is always Nominative. Similarly, English doesn’t have morphology on nouns, still grammarians refer to some constituents being in Accusative, for example when they refer to direct objects, etc. In Romanian prepositions are followed by nouns with Nominative morphology. But traditionally only the subject of the sentence and the noun following the copula are considered to be functionally Nominative. What follows prepositions are various kinds of “complements”: circumstantial of time, circumstantial of manner, etc; their morphology is Nominative, however functionally the case is Accusative simply because complements sit in Accusative. (no “adjunct” terminology in Romanian grammars).
strong third person pronoun or of the noun in Romanian, functionally the Nominative is the case of the subject and the Accusative is the case of the direct object and of the prepositional object (instrumental, associative, temporal, locative, manner, etc). These characteristics of the third person pronouns are summarised in Table 1:

<table>
<thead>
<tr>
<th>Case</th>
<th>Strong</th>
<th>Clitic</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Masculine</td>
<td>Feminine</td>
</tr>
<tr>
<td></td>
<td>sg pl</td>
<td>sg pl</td>
</tr>
<tr>
<td>Nominative</td>
<td>el ei</td>
<td>ea ele</td>
</tr>
<tr>
<td>Accusative</td>
<td>pe el pe ei</td>
<td>pe ea pe ele</td>
</tr>
<tr>
<td>Dative</td>
<td>lui lor ei lor</td>
<td>îi i- le i-</td>
</tr>
<tr>
<td>Genitive</td>
<td>lui lor ei lor</td>
<td>- - - -</td>
</tr>
</tbody>
</table>

Table 1. The distribution of the third person pronoun according to case

As observed in Table 1, the masculine accusative and dative clitic pronouns as well as the feminine dative clitic pronouns have two allomorphs; these are phonologically conditioned: l- appears when the following words starts with a vowel (2.4):

ROMANIAN

(2.3) CLITIC BEFORE VOWEL

a. l-

*Mi se pare că l-am văzut mai demult, la București.*

It seems to me that I saw him some time ago, in Bucharest.’

(Radu Tudoran, The Prodigal Son)

b. îl

*Mi se pare că îl am văzut mai demult, la București.*

It seems to me that I saw him some time ago, in Bucharest.’

There are exceptions regarding the distribution of the allomorphs in the sense that in some contexts they can freely alternate, as the pair of sentences in (2.4) shows:
(2.4) CLITICS BEFORE VOWELS AND CONSONANTS

a. l-
Le-am spus să-l aducă mâine.
them=Aux.1S told Conj=him bring.3S tomorrow
‘I told them to bring him tomorrow.’

b. îl
Le-am spus să îl aducă mâine.
them=Aux.1S told Conj=him bring.3S tomorrow
‘I told them to bring him tomorrow.’

There is no difference in the syntax of l- and îl: the example in (2.4a) shows the short allomorph l- cliticised to the conjunction, while the example in (2.4b) shows the long allomorph îl cliticised to the conjunction.

2.3 Arabic pronouns: strong and clitic

In the following I present a detailed overview of pronouns in Iraqi Arabic. Later (§2.4) I show that what is traditionally classified as the weak form in Arabic is actually a clitic pronoun in the sense of Cardinaletti and Starke (1999).

Recall from (§2.1) that according to Cardinaletti and Starke’s (1999) findings, clitic pronouns in Romance are heads, they are involved in doubling and they form clusters. As for Arabic, the last two of these characteristics of clitic pronouns, namely that they participate in doubling and that they form clusters, cannot be tested for Iraqi Arabic. With respect to characteristic 2 regarding doubling, this cannot be tested for Iraqi Arabic because this variety of Arabic – as well as Classical/ Modern Standard and most of the vernaculars - does not have clitic-doubling, namely the binding of a pronoun from an argumental position. However Lebanese Arabic is attested to have clitic-doubling (Aoun 1981) and will be used for exemplification instead. Those varieties of Arabic (Lebanese, Northern Mesopotamian, Palestinian) for which clitic-doubling is attested form the clitic-doubling strategy only with doubling of nouns, not of pronouns. With respect to characteristic 3 - namely that clitics form clusters - in Arabic clitics do not form clusters, and should clitic pronouns be co-arguments of a predicate, then one of them must be introduced by a preposition. These aspects of clitic pronouns in Arabic will be illustrated and discussed in the following.

In Classical and Modern Standard Arabic there is case morphology for nouns. In Arabic vernaculars this case morphology is lost, but pronouns still keep the case distinction (a situation quite similar to Modern English. The strong personal pronouns are the forms used with the Nominative case, namely the subject and the predicate nominal. The clitic pronominal forms are used for all the other grammatical functions not covered by the Nominative: there is no morphological distinction between cases,
though functionally they are referred to in the usual way as Accusative, etc. The special particulars of the Dative construction will be illustrated and discussed when they become relevant later in this section. Just like Romanian, Arabic allows subject pro-drop and the overt presence of a subject pronoun is marked.

A complete paradigm of the personal pronouns with their strong and clitic forms in Iraqi Arabic is given in Table 2; of these, the Accusative forms are used in resumption in Iraqi Arabic content questions.

<table>
<thead>
<tr>
<th>Person and number</th>
<th>Nominative (strong pronouns)</th>
<th>Accusative (weak pronouns)</th>
<th>Genitive (weak pronouns)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1S</td>
<td>أيني</td>
<td>ني-ny</td>
<td>ي-ني</td>
</tr>
<tr>
<td>2MS</td>
<td>إنت</td>
<td>-أك</td>
<td>-أك</td>
</tr>
<tr>
<td>2FS</td>
<td>إنت</td>
<td>-أك</td>
<td>-أك</td>
</tr>
<tr>
<td>3MS</td>
<td>هو</td>
<td>-(V')ح</td>
<td>-ح</td>
</tr>
<tr>
<td>3FS</td>
<td>هي</td>
<td>-ها</td>
<td>-ها</td>
</tr>
<tr>
<td>1Pl</td>
<td>إنا</td>
<td>-نا:</td>
<td>-نا:</td>
</tr>
<tr>
<td>2Pl</td>
<td>إنتو</td>
<td>-توم</td>
<td>-توم</td>
</tr>
<tr>
<td>3MPl</td>
<td>هم</td>
<td>-هم</td>
<td>-هم</td>
</tr>
<tr>
<td>3FPl</td>
<td>من</td>
<td>-هن</td>
<td>-هن</td>
</tr>
</tbody>
</table>

Table 2. The paradigm of personal pronouns in Iraqi Arabic

There are a few aspects that stand out when looking at Table 2:

1. Accusative and Genitive pronouns never occur in isolation. Shlonsky (1997) notes that Semitic clitic pronouns are enclitic without exception.

2. There is no weak paradigm, unlike Western Romance where there are two paradigms for deficient pronouns: one weak and one clitic.

---

2 There are some diachronic changes in the phonology of Iraqi Arabic, one being metathesis; in my opinion, the case of the masculine third person clitic pronoun is one such case: in Classical/Modern Standard Arabic and some vernaculars, the masculine third person clitic pronoun is -hu, in many dialects the glottal voiceless fricative (i.e. h) is silent and the vowel u becomes longer, for example Modern Standard kita:bu=hu “his book”. Nom” becomes in some vernaculars kita:bu:. The Arabic k has undergone metathesis; it has become VC, with the vowel changing depending on preceding phonemes. For example, Modern Standard has a vowel on the last consonant of the verb: katabtu “I wrote”; this vowel u is lost in modern vernaculars, which would create the undesirable *katabt=hu. So some vernaculars silence the glottal voiceless fricative (i.e. h): katabt= أ “I wrote”, but Iraqi Arabic has done metathesis again and obtained kitabit “I wrote”, and kitabit=آه “I wrote it.Masc”. Therefore in this thesis for the sake of clarity, I will abstract away from intricacies of phonology and will refer to the Iraqi Arabic masculine third person pronoun as h; this will not let it be confused with something else. The gloss, nevertheless, is loyal to the Iraqi pronunciation.
3. The Accusative and the Genitive forms are identical, except for the 1st person singular which is slightly different: Acc –ny versus Gen –y, but this difference could be easily argued to be phonological in nature. Shlonsky (1997) also notes that pronoun paradigms in Semitic are stable and that this [n] in both Hebrew and Arabic is a minor detail which does not invalidate his statement about the stability of the paradigm. In other words, non-subject pronouns in [Iraqi] Arabic (i) have the same form for Accusative and Genitive, (ii) this form is always clitic and (iii) this form attaches to verbs, nouns and prepositions.

2.4 Romanian and Iraqi Arabic clitic pronouns

Arabic pronouns which participate in resumption have been referred to in the literature as “weak” (Guilliot 2006; Malkawi 2009; Sterian 2011). In this section I argue that the “weak” pronouns in Arabic are in fact clitic pronouns in the sense of Cardinaletti and Starke (1999) and I compare and contrast them with clitic pronouns in Romanian. This will become relevant when I discuss resumption (chapter 4), because it is these clitic pronouns that participate in the resumptive construction. This is also important because, if Arabic as well as Romanian resumptive pronouns are actually clitic pronouns in the sense of Cardinaletti and Starke (1999), their behaviour in resumption can be better understood for example, in relation to their movement (§4.3).

2.4.1 Strong pronouns in Romanian and Iraqi Arabic

Before proceeding with the clitic pronouns, I review strong pronouns in Romanian and Arabic, so that it could be seen that there is a significant difference in the behaviour of strong pronouns as compared to clitic pronouns. In the following I show that strong pronouns in both Romanian and Arabic display the behaviour expected of them, namely that (i) they can be coordinated and (ii) they only take human referents.

Firstly, let us look at the coordination of strong and clitic pronouns in Romanian (2.5) and in Iraqi Arabic (2.6):

**ROMANIAN**

(2.5) COORDINATION  

a. strong pronouns
Andrei o consideră pe ea şi pe cea de acolo frumoase.  
Andrei her considers *she and that of there beautiful.FPl  
‘Andrei considers her and the one over there beautiful.’

b. clitic pronouns
*Andrei o şi îl consideră prieteni.  
Andrei her and *him considers *friends  
‘Andrei considers her and his friends.’
IRAQI ARABIC

(2.6) COORDINATION

a. strong pronouns

هي واللي هناك كثش طويل.
hiya wu-illyi  ḥnā:k kulish t‘wa:l
she and=which there very tall.Pl
‘She and that over there are very tall.’

b. clitic pronouns – coordination

ِشفتِه وِهَا.
*jeft=ah   w=ha:
saw.1S=him and=her
‘I saw him and her’.

c. clitic pronouns – coordination

ِشتِهم وِهَا.
jeft=hum  hu:wwa w=hiya
go=him and=her
‘I saw them, him and her’.

The Romanian sentence in (2.5a) shows that the strong pronoun ea “she” can be coordinated. The same can be observed for the Arabic sentence in (2.6a): the strong pronoun hiya “she” can be coordinated. However, when we move to clitic pronouns, we notice that they cannot be coordinated (2.5b) and (2.6b). The Romanian example (2.5b) is ungrammatical because the clitic pronoun l “him” is coordinated with the clitic pronoun o “her”. The same can be observed for Arabic, where the sentence (2.6b) is ungrammatical because the clitic pronoun h “him” is coordinated with the clitic pronoun ha “her”. The example in (2.6c) is the grammatical counterpart of (2.6b): in order to render “him and her”, the clitic –hum “them” is resumed by the apposition hu:wwa w=hiya “she and he”; the apposition in Arabic is always in the Nominative, hence the strong pronouns. From examples (2.5) and (2.6) we see that strong pronouns in both Romanian and Arabic can be coordinated, while clitic pronouns cannot.

Moving on to human reference, consider the sentences with strong pronouns in (2.7) and with clitic pronouns in (2.8). The Romanian sentence in (2.7a) and the Iraqi Arabic sentence in (2.7b) show that strong pronouns can only take a human referent. As long as the context refers to a human, both sentences in (2.7a) and (2.7b) are possible (notice ✓ under context 1). Then observe examples (2.8a) and (2.8b), which show that clitic pronouns can take both human and non-human referents (notice ✓ with both context 1 and context 2).
(2.7) HUMAN REFERENCE – STRONG PRONOUNS
context 1: Somebody talks about some girls.
context 2: Somebody talks about some buildings.

a. strong pronoun - ROMANIAN
context 2
Ea și aceea de acolo sînt foarte înalte. √ *
‘She and that over there are very tall.’

b. strong pronoun – IRAQI ARABIC
هي والي هناك كل ش طوال.
hiya wu-illyi hna:k kulish t’wa:l √ *
‘She and that over there are very tall.’

(2.8) HUMAN REFERENCE – CLITIC PRONOUNS
context 1: Somebody talks about some man.
context 2: Somebody talks about some bus.

a. clitic pronoun – ROMANIAN
context 2
L-am văzut.
him=Aux.1S seen √ √
‘I’ve seen him/ it.’

b. clitic pronoun - IRAQI ARABIC
شفته.
ʃeft=ah.
saw.1S=him √ √
‘I saw him/ it’.

The results observed in this section are summarised in Table 3:

<table>
<thead>
<tr>
<th>Coordination</th>
<th>Reference</th>
<th>Stress</th>
</tr>
</thead>
<tbody>
<tr>
<td>Romanian</td>
<td>Arabic</td>
<td>Human</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Non-human</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Strong</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Clitic</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 3. Strong versus clitic pronouns in Romanian and Iraqi Arabic
The data in Table 3 shows that strong pronouns in Romanian and Arabic behave in a similar manner with respect to coordination, reference and stress. In the next section I focus on clitic pronouns in these two languages.

### 2.4.2 Clitic pronouns in Romanian and Iraqi Arabic

The particular aim of this section is to show (i) that Romanian clitics are in line with Western Romance clitics as described by Cardinaletti and Starke (1999) and (ii) that Iraqi Arabic pronouns referred to in the literature as “weak” are in fact clitic in the sense of Cardinaletti and Starke (1999). As I said in (§2.2) and (§2.3), Romanian has two paradigms for pronouns: strong and clitic. Arabic also has only two paradigms: strong and clitic.

Cardinaletti and Starke (1999) argue that clitic pronouns have certain characteristics that distinguish them from strong and from weak pronouns:

(i) only clitic pronouns can double a constituent  
(ii) clitic pronouns form clitic clusters  
(iii) clitic pronouns never occur in their θ-position, but always appear in a derived position  
(iv) clitic pronouns are deficient phrases which are heads at surface structure  
(v) clitic pronouns cannot appear in peripheral positions

Let us look at these characteristics in more detail.

**(i) Doubling: always by clitics only.** Cardinaletti and Starke (1999) argue that doubling is always clitic-doubling: it must always involve at least one clitic, no combination of weak and strong pronouns is possible. They illustrate this with the Italian example in (2.9), where the combination \{gli; loro\}, \{gli, a loro\} is possible, but \{loro, a loro\} is not:

**ITALIAN (Cardinaletti and Starke 1999)**

(2.9) CLITIC DOUBLING

a. *clitic doubles weak pronoun*

<table>
<thead>
<tr>
<th>Gliel’</th>
<th>ho</th>
<th>dato</th>
<th>loro.</th>
</tr>
</thead>
<tbody>
<tr>
<td>them.Dat=it</td>
<td>Aux.3S</td>
<td>given</td>
<td>them.Dat</td>
</tr>
</tbody>
</table>

‘He gave it to them.’

b. *clitic pronoun doubles weak pronoun inside PP*

<table>
<thead>
<tr>
<th>Gliel’</th>
<th>ho</th>
<th>dato</th>
<th>a loro.</th>
</tr>
</thead>
<tbody>
<tr>
<td>them.Dat=it</td>
<td>Aux.</td>
<td>given</td>
<td>to them</td>
</tr>
</tbody>
</table>

‘He gave it to them.’
c. clitic pronoun doubles full NP
Gli el’ ho dato ai bambini.
them.Dat=it Aux given to=the children
‘He gave it to the children.’

d. weak pronoun cannot double weak pronoun
*L’ho dato loro a loro
it=Aux given them.Dat to them

e. weak pronoun cannot double full NP
*L’ho dato loro ai bambini
it=Aux given them.Dat to=the children

In (2.9a) the clitic pronoun gli “them” doubles the indirect object weak pronoun loro “them”\(^3\). Also, the clitic pronoun gli “them” can double the indirect object weak pronoun loro “them” when loro “them” is inside a PP, for example a loro “to them” (2.9b). Clitic pronouns can also double full NPs, as can be seen from (2.9c), where gli “them” doubles the full NP indirect object ai bambini “to the children”. Examples (2.9d) and (2.9e) reveal that in Italian a weak pronoun, in this case loro “them” cannot double a weak pronoun or a full NP.

This property observed by Cardinaletti and Starke (1999) for Western Romance that doubling is always clitic-doubling can be observed in Romanian, as well (2.10):

---
\(^3\) gli in Italian is glossed by Cardinaletti and Starke (1999) as “him”. Whether in Italian gli is invariable in singular and plural is irrelevant for the issues discussed in this thesis, therefore to make it easier on the reader I glossed it as “them”, because it anyway agrees and doubles a plural pronoun or NP in these examples.
The Romanian sentence in (2.10) is an example of clitic-doubling of indirect object, similar to the Italian sentence in (2.9). The clitic pronoun li “them” doubles the indirect object strong pronoun lor “them” (2.10a) or the full NP indirect object copiilor “the children” (2.10b). (Note in passing that the indirect object strong pronoun remains in its base position, while the clitic appears higher up in the structure, in a derived position. This characteristic of clitic pronouns is detailed in section (§2.4.2), under subsections (iii) and (iv)). The Italian sentence (2.9b) does not have a correspondent in Romanian, because of three reasons. First, the famous preposition a of Spanish and Italian which introduces some direct and indirect objects has no equivalent in Romanian with the Dative; in Romanian indirect objects are declined for case, they are not prepositional. Second, Romanian has pe in introducing definite human direct objects. Third, Cardinaletti and Starke (1999) seem to consider a loro (2.9b) as strong and loro (2.9a) as weak, but there is no weak paradigm in Romanian. In Romanian a strong pronoun cannot double a strong pronoun (2.10c) or a full NP (2.10d).

Moving on to Arabic, clitic-doubling is not a characteristic of Arabic in general. Classical/ Modern Standard Arabic do not have clitic-doubling, neither does Iraqi Arabic and most of the other Arabic dialects. Under the influence of substrate languages, some Northern Mesopotamian dialects of Arabic and some Arabic dialects from Turkey have a clitic-doubling construction similar to the Romance one (see §2.6). Nevertheless, since Arabic does not have weak pronouns, then doubling – in the dialects where it exists – is indeed clitic-doubling. What is doubled in those dialects is a full DP, at the moment I am not aware of strong pronouns being doubled; this may be because strong pronouns are only Nominative and there are no Nominative clitics. To illustrate how this doubling occurs in an Arabic variety, observe (2.11) in Lebanese Arabic:
LEBANESE ARABIC (Aoun 1981)

(2.11) CLITIC-DOUBLING

 Shayfeteh ‘a karim.

Ja:fit=u l=Karim
saw.3FS=3MS for=Karim

‘She saw [him] Karim.’

Observe that the sentence in (2.11) is an example of clitic-doubling of direct object. The clitic pronoun ‘him’ doubles the direct object Karim.

In brief for this section: in cases of doubling, the pronoun which exercises the doubling can only be a clitic pronoun, while the constituent which is doubled can be a strong pronoun or a noun. I illustrated with examples from Romanian and Lebanese Arabic that, as in Western Romance, it is the clitic pronoun which exercises the doubling.

(ii) Clitic pronouns form clitic clusters. While working with Western Romance, Cardinaletti and Starke (1999) identify clustering as a property of clitics. However, this does not seem to be a necessary property of clitics cross-linguistically. In Romanian, a Romance language, clitic clustering does appear. But in Arabic it does not; here, when two clitic pronouns are co-arguments of a predicate, at least one of them has to be introduced by a preposition.

For exemplification, consider example (2.12) which is a Romanian sentence with a clitic cluster and (2.13) which is its Iraqi Arabic counterpart showing that the clitic pronouns are separated by a preposition.

ROMANIAN

(2.12) CLITIC CLUSTERING

I le-am aratat ieri.

him.Dat them=Aux.1S shown yesterday

‘I showed them to him yesterday.’
indirect object is introduced by a preposition. Observe now how the dative construction requirement in the language for all verbs with two objects (Blanc 1964).

In the ditransitive Romanian sentence (2.12) there are two pronouns: the indirect object clitic pronoun i “him” is adjacent to the direct object clitic pronoun le “them”, in other words they form a clitic cluster. The Iraqi Arabic sentence in (2.13a) also contains two clitic pronouns, namely the direct object h “him” and the indirect object ha “her”, does not allow them to form a cluster (2.13a), rather the indirect object is introduced by a preposition; clustering the clitic pronouns is ungrammatical (2.13b). This requirement that one of the objects be introduced by a preposition is not specific to the ʕarraf “to introduce”, it is also a requirement of the verb ʔint’a: “to give” and a general requirement in the language for all verbs with two objects (Blanc 1964).

The sentence in (2.13a) is a dative construction in which the direct object is a pronoun; the pronominal direct object is cliticised to the verb, while the pronominal indirect object is introduced by a preposition. Observe now how the dative construction in Iraqi Arabic in which the indirect object is a pronoun and the direct object is a full NP can follow either of two patterns as observed in (2.14): the indirect object pronoun follows the verb (2.14a) or the direct object follows the verb (2.14b):

IRAQI ARABIC

(2.13) CLITIC - NO CLUSTERING

a. grammatical

ʿarraf=ah ʕale:=ha ʿil=barHa
introduced=him to=her yesterday
‘I introduced him to her yesterday.’

b. ungrammatical

*ʿarraf=ah ʿil=barHa
inta: him her yesterday
*I introduced him her yesterday.’

IRAQI ARABIC

(2.14) DATIVE CONSTRUCTIONS – ONE PRONOUN

a. ditransitive

ʔint’a:=ha: ʿil-kita:b ʿil-ba:riHa
gave.3MS=her the=book yesterday
‘He gave her the book yesterday.’

b. prepositional

ʔint’a: ʿil-kita:b ʿil=ha: ʿil-ba:riHa
gave.3MS the=book to=her yesterday
‘He gave the book to her yesterday.’

27
The example in (2.14a) is a ditransitive construction in Iraqi Arabic, where the direct object is a noun and the indirect object is pronominal. The indirect object pronoun is closer to the verb than the direct object and is enclitic on the verb. In the example in (2.14b), the direct object is still a noun, but it immediately follows the verb, while the pronominal indirect object is introduced by a preposition. The difference observed in (2.14) is that, while the full DP is not introduced by a preposition in either example, the clitic pronoun must be introduced by a preposition when it does not cliticise to the verb. In other words, while the full DP does not need support, the clitic always does.

Observe now the example in (2.15) which is a dative construction with the same verb ئَيْتَأ: “to give” seen in (2.14) in which both direct and indirect objects are pronominal: the direct object is enclitic on the verb and the indirect object is prepositional; the same effect was observed in (2.13) with the verb ئَارِف “to introduce”. The two pronouns do not cluster.

(2.15) DATIVE CONSTRUCTION – TWO PRONOUNS

a. no clitic pronoun cluster

getline.3MS=her to=him yesterday
‘He gave it to him yesterday.’

b. clitic pronoun cluster

getline.3MS=her =him yesterday
‘He gave it to him yesterday.’

The pattern observed in (2.15) is not limited to third person pronouns; observe (2.16) which is a ditransitive construction in Iraqi Arabic in which the direct object is a first person pronoun:

---

4 In Arabic there is no equivalent of the pronoun “it”. Nouns have gender, either feminine or masculine regardless of the human/ non-human or animate/ non-animate features. The object given can either be a “she” or a “he”. The gloss is faithful to the grammar of Arabic, but the translation is faithful to that of English.
IRAQI ARABIC

(2.16) DATIVE CONSTRUCTION

a. prepositional indirect object

أحمد عرفني عليهم.
Ahmad ʕarraf=nyi ʕaley=him.
Ahmad introduced.3SM=me on=them
‘Ahmad introduced me to them.’

b. clitic pronoun cluster not possible

أحمد عرفني هم.
*Ahmad ʕarrafnyi him.
Ahmad introduced.3SM=me them
‘Ahmad introduced me to them.’

The example in (2.16a) is a ditransitive construction in which the direct object is the first person pronoun nyi ‘me’. The direct object cliticises to the verb and the indirect object hyim ‘them’ is introduced by a preposition which basically makes sure that the clitic pronouns do not cluster. The lack of this preposition renders the sentence ungrammatical (2.16b).

The Iraqi Arabic dative constructions in (2.14) and (2.15) are consistent with the dative constructions in Classical/Modern Standard Arabic. By contrast with Classical/Modern Standard Arabic, Iraqi Arabic has one more way of realizing Dative constructions in which both direct and indirect objects are pronominal. In Classical/Modern Standard Arabic the Dative construction in which both direct and indirect object are pronouns follows only one pattern: the direct object follows the verb and the indirect object is introduced by a designated preposition (2.17):

CLASSICAL/ MODERN STANDARD ARABIC

(2.17) ditransitive pronominal

أعطاه إياها.
ʔaʕatʔa=hu ʔiya=ha
gave.3MS=it to=her
‘He gave it to her.’

In Iraqi Arabic (Blanc 1964), besides the construction which follows the pattern seen in Classical/Modern Standard Arabic (2.17), there is a Dative construction in which both direct and indirect object are introduced by prepositions (2.18).
The ditransitive construction in (2.18) is particular to Iraqi Arabic: both direct and indirect objects are introduced by a preposition, a different preposition nevertheless. The direct object *ha* “her” is introduced by the preposition *li*; the PP formed by the direct object and its preposition *li* “for” follow immediately after the verb. The indirect object *h* “him” is also introduced by a preposition and the PP formed by the indirect object and its preposition follow the PP which contains the direct object. Besides documenting this construction, my point here is that when both direct and indirect objects are pronouns, they may be both introduced by a preposition, they do not cluster. To summarize, when the ditransitive construction in Iraqi Arabic involves two pronouns, then at least one of them is introduced by a preposition, there is no clitic cluster.

With respect to clitic clustering, authors who worked on Romance languages have observed that there is a Person-Case constraint, namely that in Romance first person or second person Accusative clitic pronouns cannot appear next to third person Dative pronouns (Perlmutter 1971; Cardinaletti & Starke 1999; Adger & Harbour 2007). Observe this constraint in (2.19):

**ITALIAN** (Cardinaletti and Starke 1999)

(2.19)  

a. Gianni *mi* ha presentato *loro*  
b. Gianni *mi* ha presentato a *loro*  
c. *Giani mi gli ha presentato*  

‘Gianni introduced me to them.’

The distinction in (2.19) has been the topic of much research; note how in Italian first person Accusative clitic pronouns cannot be adjacent to third person Dative pronouns (2.19c), but once the Dative is expressed not through a clitic pronoun, but through a weak pronoun – which can remain in its base position and thus not be adjacent to the first person clitic pronoun that raised to I – the sentence becomes grammatical (2.19a, b). The relevance of this constraint here is that in Romance it is quite easy to tease apart weak forms from clitic forms because of exactly such peculiar behaviour as observed in (2.19). This constraint noticed in Western Romance holds for Romanian as well (2.20):
(2.20) a. Andrei m-a prezentat lor.
Andrei me.Acc=Aux.3S introduced them.Dat
‘Andrei introduced me to them.’

b. *Andrei mă li a prezentat.
Andrei me.Acc them.Dat Aux.3S introduced

Nevertheless, the other way around is fine: when the direct object is a third person clitic and the indirect object is a first person, then the clitics can cluster (2.21-22):

(2.21) On me le montrerera.
they me.Dat him.Acc show.FUT
‘They will show him to me.’

(2.22) Ei mi-l vor arăta.
they me.Dat=him.Acc will show
‘They will show him to me.’

Again, this particular constraint on clitic clustering cannot be tested in Arabic, because, as we have just seen, clitic pronouns never cluster, one of them is introduced by a preposition.

(iii) **clitic pronouns never occur in their θ-position, but always appear in a derived position.**

Authors have argued that in Romance cliticisation, pronouns must invariably move from their base position (Cardinaletti and Starke 1999; Kayne 2002; Roberts 2010).

In Romance it is relatively easy to show that clitic pronouns no longer occur in their θ-position but raise to a derived position (§2.5), because some Romance clitic pronouns being proclitic, they appear to the left of the verb (2.23), which is also the case for Romanian (2.24), but in Arabic clitic pronouns are always enclitic (2.25):

ITALIAN (Cardinaletti and Starke 1999)

(2.23) clitic pronouns do not occur in their θ-position
Gianni li stima.
Gianni them esteems
‘Gianni esteems them’.
In both the Italian (2.23) and the Romanian (2.14) sentences, the direct object clitic pronoun is pro-clitic, namely it precedes the verb. Direct objects in Romance – when they are full DPs - appear in their base or θ-position on the right side of the verb. But in (2.23) and (2.24) the direct object appears on the left side of the verb, indicating that it has moved from its base position. Cardinaletti and Starke (1999) argue that clitic pronouns never appear in their base or θ-position, but always in a derived position. However, in the Arabic sentence in (2.25) the direct object pronoun appears to the right of the verb, because clitic pronouns are always enclitic in Arabic. Therefore, extra steps have to be taken to show that even in Arabic this position is a derived one, in other words just like in Romance, the clitic pronoun cannot appear in its θ-position. I attempt to show this in the following.

Arabic is a verb raising language. The verb raises to I, where it appears in overt syntax. It must be the case that the clitic pronoun also is found in a derived position, since it surfaces next to the verb. This could be tested in cases where both arguments follow the verb by showing that the surface evidence is such that a full NP object would follow obligatorily a full NP subject, but a clitic object would obligatorily precede the subject. Consider (2.26) which is a VSO sentence in Iraqi Arabic⁵ in which the direct object is a full NP and (2.27) which is a VOS sentence in Iraqi Arabic in which the direct object is a clitic pronoun:

---

⁵ Iraqi Arabic can have both SVO and VSO word orders; modern vernaculars display both VSO and SVO (Shlonsky 1997; Aoun 1999; Brustad 2000; Owens et al 2009). This alternation in word order between VSO and SVO in Arabic vernaculars is the object of lively research, but it is not discussed here as it is not relevant to the current discussion and analysis. It is relevant that Iraqi Arabic can have VSO.
IRAQI ARABIC

(2.26) FULL NP DIRECT OBJECT

a. direct object follows subject

شاف سامر البنية بالمكتبة.

\[ \text{fa:f Samer il=bneyya bi=l=maktaba} \]

\[ \text{saw.3MS Samer the=girl in=the=library} \]

‘Samer saw the girl in the library.’

b. direct object cannot precede subject

شاف سامر البنية بالمكتبة*

\[ *\text{fa:f il-bneyya Samer bi=l=maktaba} \]

\[ \text{saw.3MS the=girl Samer in=the=library} \]

‘Samer saw the girl in the library.’

(2.27) CLITIC PRONOUN DIRECT OBJECT

a. direct object precedes subject

شافها سامر بالمكتبة.

\[ \text{fa:f=ha Samer bi=l=maktaba} \]

\[ \text{saw.3MS=her Samer in=the=library} \]

‘Samer saw her in the library.’

b. direct object follows subject

شافها سامر بالمكتبة*

\[ *\text{fa:f Samer ha bi=l=maktaba} \]

\[ \text{saw.3MS Samer her in=the=library} \]

‘Samer saw her in the library.’

The sentence in (2.26a) contains a full NP direct object, *il-bneyya “the girl”*; this direct object obligatorily follows the subject Samer. If *il-bneyya “the girl”* precedes the subject Samer (2.26b), then the sentence becomes ungrammatical. This indicates that a full NP direct object must remain in its base position. The sentence in (2.27a) contains the direct object *ha: “her”* which is a clitic pronoun; it precedes the subject Samer and is criticised to the verb. This indicates the clitic is no longer in its base position (i.e. following the subject), but has raised to a derived position. The sentence becomes ungrammatical if the direct object *ha: “her”* follows the subject Samer (2.27b). In brief, direct object clitic pronouns in Arabic raise from their base position and are found in overt syntax in a derived position. This behavior is similar to the Romance clitic pronouns which are not found in their base position, but in a derived one.
(iv) **heads.** Cardinaletti and Starke (1999) argue that clitic pronouns cannot occupy XP-positions and they illustrate this with the Italian example in (2.28) in which the clitic pronoun moves together with the verb over the subject in conditional inversions:

**ITALIAN** (Cardinaletti and Starke 1999)

(2.28) CLITIC MOVES TOGETHER WITH VERB

Gli avesse Gianni parlato in anticipio, niente sarebbe successo

*him.Dat* had Gianni spoken in advance nothing have.CND happened

‘Had Gianni spoken to him in advance, nothing would have happened.’

In Romanian, also the clitic pronoun moves, but in contrast to Italian it does not appear to move together with the verb, but rather independently, as shown in (2.29):

**ROMANIAN**

(2.29) CLITIC PRONOUN DOES NOT MOVE TOGETHER WITH VERB

Să-l fi avertizat Andrei din timp,

*Conj=him* be warned Andrei from time

nimic nu s-ar fi întâmplat

nothing Neg *se=Aux.3S* be happened

‘Had Andrei spoken to him in advance, nothing would have happened.’

In the Romanian example (2.29), the clitic pronoun *l* “him” has not moved together with the verb, because we find it cliticised to the subjunctive conjunction *să*. It has moved indeed – observe its position with respect to the subject, but not as a *verb+clitic* cluster (§2.5). This supports my claim that the clitic moves by itself from its base position to the derived position. I still maintain that the clitic pronoun is a head, though: more on this in (§2.5).

(v) **clitic pronouns cannot appear in peripheral positions.**

Another similarity between Romance and Arabic clitic pronouns is that they cannot appear in peripheral positions (“peripheral” in Cardinaletti and Starke’s (1999) terminology refers to clefts, left dislocation and isolation): this is illustrated for Italian clitic pronouns in (2.30), for Romanian clitic pronouns in (2.31) and for Arabic clitic pronouns in (2.32):
(2.30) PERIPHERAL POSITIONS

a. cleft
E’ {*essa; lei; Maria} che è bella.
‘It is her/Maria that’s pretty’.

b. left dislocation
{*Essa; Lei; Maria}, lei è bella.
‘Maria/she/ *her, she is pretty.’

c. isolation
- Chi è bella ?
‘Who is pretty ?’

- {*Essa; Lei/ Maria}
*her she Maria
‘*Her. She. Maria.’

(2.31) PERIPHERAL POSITIONS

a. cleft
Este {*o; ea; Maria} cea care e frumoasă.
‘It is her/Maria that’s pretty’.

b. left dislocation
{*o; ea; Maria}, ea e frumoasă.
‘*o/ She/ Maria, she is pretty.’

c. isolation
- Cine e frumoasă ?
‘Who is pretty ?’

- *o. Ea. Maria.
*her. She. Maria
IRAQI ARABIC

(2.32) PERIPHERAL POSITIONS

a. cleft

{*ha/ hiya/ Suha} ylli Helwa mu Amira
*her/ she who pretty.F Neg Amira
‘It is her that’s pretty’.

b. left dislocation

{*ha/ hiya/ Suha} hiya Helwa
*her/ she Suha she pretty.F
‘Suha/ she/ *her, she is pretty.’

c. isolation

- منو حلوة؟
- minnu: Helwa?
‘Who is pretty?’

- *ها/ هي/ سهی.
- *ha/ hiya/ Suha
‘*Her. She. Suha.’

The Italian sentence in (2.30a) is a cleft construction: the weak pronoun essa “she” is illicit in this cleft, but the strong pronoun lei “she” and the full DP Maria are licit in that same position. The same fact can be observed in Romanian (2.31a) which is also a cleft construction: the clitic pronoun o “her” is illicit in this cleft, but the strong pronoun ea “she” and the full DP Maria are licit in that same position. Moving on to Iraqi Arabic, (2.32a) is a cleft construction in which the clitic pronoun ha “her” is illicit, but the strong pronoun hiya “she” and the full DP Suha are licit. Another peripheral position which can be observed is in left dislocated constructions as in the (b) examples above. In Italian (2.30b), the clitic pronoun essa “she” is illicit in a left dislocated position, but the strong pronoun lei “she” and the full DP Maria are licit in that same position. In Romanian (2.31b), the clitic pronoun o “her” is illicit in a left dislocated position, but the strong pronoun ea “she” and the full DP Maria are licit in that same position. In Iraqi Arabic (2.32b), the clitic pronoun ha “her” is illicit in a left dislocated position, but the strong pronoun hiya “she” and the full DP Suha are licit in that same position. The (c) examples represent a dialogue in which the answer is an isolated constituent. This isolated constituent cannot be a clitic, but only a strong pronoun or a full DP: in Italian (2.30c), the clitic pronoun essa “she” is illicit in isolation, but the strong pronoun lei “she” and the full DP Maria are licit. Similar as in Italian, in Romanian (2.31c), the clitic pronoun o “her” is illicit in isolation, but the strong pronoun ea “she” and the full
DP *Maria* are licit in isolation. In Iraqi Arabic (2.32c), the clitic pronoun *ha* “her” is illicit in isolation, but the strong pronoun *hiya* “she” and the full DP *Suha* are licit.

In this section I presented data from Western Romance (i.e. Italian and French), Romanian and Iraqi Arabic and argued that Romanian clitics are in line with Western Romance clitics as described by Cardinaletti and Starke (1999) and that Iraqi Arabic pronouns referred to in the literature as “weak” are also in fact clitic in the sense of Cardinaletti and Starke (1999). The results are summarised in Table 4 (which also contains the information about clitic hosts, discussed in the next section):

<table>
<thead>
<tr>
<th>Host</th>
<th>WESTERN ROMANCE</th>
<th>ROMANIAN</th>
<th>ARABIC</th>
</tr>
</thead>
<tbody>
<tr>
<td>case morphology</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>verbs</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>auxiliaries</td>
<td>√</td>
<td>√</td>
<td>*</td>
</tr>
<tr>
<td>nouns</td>
<td>*</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>prepositions</td>
<td>*</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>complementizers</td>
<td>*</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>position</td>
<td>proclitic</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td></td>
<td>enclitic</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>left periphery</td>
<td>*</td>
<td>*</td>
<td>*</td>
</tr>
</tbody>
</table>

Table 4. Similarities and differences between Western Romance clitic pronouns and Iraqi Arabic weak/clitic pronouns

2.4.3 Comparison and contrast: Western Romance clitic pronouns versus Arabic and Romanian clitic pronouns

In this section I elaborate on the differences between Western Romance clitic pronouns on the one hand and Arabic and Romanian clitic pronouns on the other hand. I focus on the type of host these clitic pronouns attach to, because it seems that Romanian and Arabic pattern together with respect to this characteristic, in opposition to Western Romance clitic pronouns. Shlonsky (1997) notes that one of the differences between Romance clitic pronouns and Semitic clitic pronouns is that while Romance clitic pronouns attach to verbs and auxiliaries, the Semitic ones attach to all lexical categories as well as some functional categories. This is illustrated in (2.33) with examples from Palestinian Arabic:
PALESTINIAN ARABIC (Shlonsky 1997)

(2.33) clitic pronouns attach to lexical and functional categories

a. Verb + Object:  fhmit=ha
understood.1S=her

b. Noun + possessor  be:t=ha
house=her

c. Preposition + Object  min=ha
from=her

d. Complementizer + Subject ʔin=ha
that=she

e. Quantifier + DP:  kull=hin
all=them.F

Shlonsky’s list in (2.33) does not include auxiliaries. In Arabic constructions which involve auxiliaries, both the auxiliary and the main verb are finite and agree in gender with the subject (and in number in SVO constructions) and the clitic pronouns cliticise to the main verb, never to the auxiliary, as in (2.34):

CLASSICAL ARABIC

(2.34) AUXILIARY CONSTRUCTION

`ka:na yuhibbu=ha  kaθi:ran`
was.3MS love.3MS=her much
‘He loved her much.’

Nevertheless, Romanian clitic pronouns, unlike the Romance ones mentioned by Shlonsky (1997), attach to other lexical categories than just verbs and auxiliaries (Gramatica Academiei Române 2008), such as: nouns, prepositions, complementizers, various conjunctions, and adjectives. This ability of Romanian clitics to cliticise to other categories than verbs and auxiliaries is illustrated in (2.35) (note that these are not examples taken from the Grammar of the Academy, but searched in modern Romanian literature sources⁶):

⁶ Romanian does not know the phenomenon otherwise common to other languages such as Arabic, Italian or German, where the literary language is quite different from the spoken one. Modern Standard Arabic, the language of press and mass-media, is certainly not a spoken language in any of the Arabic countries; at the same time the Arabic vernaculars are not standardized with respect to writing. Romanian, on the other hand, is a language in which this distinction does not exist. This may be because of prescriptive grammar being taught in schools every year from the first year of elementary to the last of high school, and also because the territory of Romania is quite small as compared to other countries and does not have territorial
ROMANIAN
(2.35) CLITIC PRONOUNS ATTACH TO LEXICAL AND FUNCTIONAL CATEGORIES

a. Verb + Object:
Îl văd.
him see.1S
‘I see him.’

b. Noun + possessor (dative clitic pronoun as possessive)
Cu degetele-i vântul lovește în ferești,
with fingers=him.Dat wind=the.M hits in windows
‘With his fingers the wind hits in the windows…’
(Mihai Eminescu, Far I am from you…)

E un lup ce se alungă după prada-i spăimântată!
is a wolf which se oust after prey.F=him.Dat frightened
‘It’s a wolf that chases after his frightened prey !
(Vasile Alecsandri, The middle of winter)

Inima-i crește de dorul/ Al străinului frumos.
heart=her.Dat grows of longing/ Art.Gen stranger.M handsome.M
‘Her heart is growing with longing/ for the handsome stranger.’
(Mihai Eminescu, Prince Charming from the lime tree)

Un suflet numai plânge, în doru-i se avântă
a soul.M only cries in longing=him.Dat se launch
‘A soul only cries, in its longing it launches…’
(Mihai Eminescu, From abroad)

Nilul mișc-a lui legendă și oglinda-i galben-clară
Nile.M=the moves=his legend and mirror=him.Dat yellow clear
‘The Nile moves his legend and his yellow clear mirror.’
(Mihai Eminescu, Egypt)

Viața-i fu o primăvară, moartea - o părere de râu;
life.F=him.Dat was a spring death a impression of evil
‘His life was a spring, his death – a regret.’
(Mihai Eminescu, The epigones)

segregation of any kind. All these to say that the examples from literary sources are not samples of non-spoken language, rather they reflect spoken Romanian at the time they were written.
Şi bogat în săracia-i ca un astru el apune,
and rich in poverty=him.Dat like a star he sets
‘And rich in his poverty like a star he sets.’
(Mihai Eminescu, *The epigones*)

Ici şi colo a ei haină s-a desprins din sponci ș-arată
here and there Art.Gen.FS coat se=Aux.3S come off from holes and=reveals

Trupul alb în goliuineea-i, curăția ei de fată.
body.M white in nakedness=his.Dat innocence her of girl

‘Here and there her coat came undone revealing her white body in its nakedness, her girlish innocence…’
(Mihai Eminescu, *Calin*)

Ea se uită… Păru-i galben./ Fața ei lucesc în lună,
she se looks hair=her.Dat yellow face her shine in moon
‘She is looking… her blond hair, her face – are shining in the moonlight’
(Mihai Eminescu, *The princess of fairy-tales*)

Când cu lampa-i zboară lumea luminând,
when with lamp=him.Dat flies world=the blazing
‘When with its lamp it flies over the world blazing…’
(Mihai Eminescu, *What I wish for you, sweet Romania*)

c. *Preposition + Object*
Nu se uită înainte-i, / Nu privește îndărâpt.
Neg se looks before=him.Dat, Neg gazes back
‘He doesn’t look before him, he doesn’t gaze back.’
(Mihai Eminescu, *Prince Charming from the lime tree*)

d. *Complementizer (subordinative conjunction)+Indirect object*
Se bucură că-i adusese trandafiri.
se gladdens that=her.Dat brought roses
‘She was happy that he had brought her roses.’
(Radu Tudoran, *The Prodigal Son*)
e. *Coordinative conjunction + direct object*

Lăsă pachetul jos ș-i apucă umerii

*He puts the package down and holds her shoulders.*

(Radu Tudoran, *The Prodigal Son*)

f. *Subjunctive conjunction + indirect object*

Atunci, ce să-i spun maicăti?

*Then, what should I say to your mother?*

(Radu Tudoran, *The Prodigal Son*)

The sentences in (2.35) illustrate how clitics attach in Romanian to verbs, nouns, prepositions, complementizers and adjectives. In the example in (2.35a), the clitic pronoun îl “him” attaches to the verb văd “I see”; this is not mysterious, in the sense that it is known that clitic pronouns cliticise to verbs and auxiliaries in Romance. However, (2.35b-e) are the interesting examples, because clitic pronouns cliticise to other categories than the usual verbs and auxiliaries. For example, in (2.35b) the third person dative clitic pronoun i “him” attaches to a noun to form a possessive construction known in Romanian as the *ethic dative*. The example in (2.35c) shows how the third person dative clitic pronoun i “him” attaches to a preposition. In (2.35d), the third person dative clitic pronoun i “him” attaches to a complementizer (subordinative conjunction). In (2.35e) the third person dative clitic pronoun i “him” attaches to the coordinative conjunction ș i “and”, while in (2.35f) the third person dative clitic pronoun i “him” attaches to the conjunction să used in the formation of the subjunctive mode in Romanian.

The clitic pronoun also attaches to adjectives, however there is a bit of intricacy to this attachment: in Romanian, both N-Adj and Adj-N order are possible. The definite article is enclitic and always attaches to the first constituent of the two: thus, in N-Adj phrases, the definite article attaches to the noun and in Adj-N phrases the article attaches to the adjective. When the clitic attaches to Adj-N phrases, it is enclitic on the adjective+article: Adj=Det=clitic pronoun as in (2.36):
Consider also how the clitic pronoun attaches to an identity pronoun (2.37):

ROMANIAN

(2.37) CLITIC PRONOUN ATTACHES TO OTHER TYPES OF PRONOUNS

O cuprinse o dragoste mare pentru prpria-i fâptur…
her enclose a love great for own=her.Dat being
‘A great love for her own being took hold of her.’

(Radu Tudoran, The Prodigal Son)

While so far in this section I emphasized the similarity between the Romanian clitic pronouns and Arabic clitic pronouns with respect to their nature and behaviour in attaching to a host, in the next chapter I discuss where in the IP domain these clitic pronouns surface. Again, I will draw on the parallel between Romanian clitic pronouns and Iraqi Arabic clitic pronouns. This is relevant because the need of the clitic pronoun to raise and surface in a derived position is part of the head movement of the clitic out of the complex DP which contains it at the base of the derivation (i.e. at First Merge) in resumptive structures (§4.3).

To conclude this chapter, Arabic pronouns which are referred to as “weak” in the literature (Guilliot 2006; Malkawi 2009; Sterian 2011) are true clitic pronouns in the sense of Cardinaletti and Starke (1999). This becomes all the more relevant in the next chapters, where the fact the resumptive pronoun in Arabic is a clitic, i.e. it must move from its base position to a derived one, straightforwardly fits with the movement analysis of resumption.
2.5 Clitics as φ-pronouns

So far I have argued the case that non-strong pronouns in Romanian and in Arabic are clitic in the sense of Cardinaletti and Starke (1999). As mentioned earlier, this is relevant because these clitic pronouns are the ones participating in resumption in these two languages. In the following I discuss the proposals in the literature that treat pronominal clitics as pronouns of category φ, rather than D.

Postal (1969) advanced the claim that pronouns are definite articles. Since then, various authors have treated pronouns as DPs (i.e. determiner phrases) and worked on their internal structure (Evans 1980; Reinhart 1983; Cardinaletti & Stark 1999).

Recall from example (2.2) Cardinaletti and Starke’s (1999) representation of the structure of the different pronominal types; they argue that strong pronouns have a complete functional structure, while weak pronouns lack some functional structure, and clitics lack the functional structure and thus are “deficient”. They argue that there is a correlation between how much functional structure a pronominal element contains and at least some aspects of its interpretation: for example, strong pronouns are limited to human referents, while non-strong pronouns can refer to both human and non-human entities. Also, deficient pronouns do not need to be referential, but when they are referential, they must have an antecedent. These notions will be expanded on more in chapter 6. Whereas Cardinaletti and Starke (1999) propose that the special syntactic behaviour of pronouns is caused by their internal structure, Déchaine & Wiltchko’s (2002) take this further and propose that cross-linguistically there are at least three pronoun types: pro-DPs, pro-φPs and pro-NPs, each one associated with a distinct syntactic projection, and that their categorical status determines their external syntax and inherent semantics. Déchaine & Wiltchko (2002) propose that pronouns are not primitives and that they are decomposable. They argue that there are at least three pronoun types: pro-DP, pro-φP and pro-NP, each one associated with a distinct syntactic projection as in (2.38):
The DP-structure in (2.38a) functions as an R-expression. The \( \phi P \)-structure in (2.38b) functions as bound variable, while the NP-structure in (2.38c) has the status of a semantic constant.

Syntactically, the difference between DPs and \( \phi P \)s is that – as shown above – DPs have more layers of structure. Also, \( \phi P \)s can act as bound variables, whereas DPs cannot (Déchaine & Wiltschko 2002; Sterian 2011), while NPs function as semantic constants. Roberts (2010) builds on the ideas proposed in Cardinaletti and Starke (1999) and in Déchaine & Wiltschko (2002) and adopts this approach to pronouns in his discussion and analysis of head-movement and cliticisation and assumes that clitics in Romance are pro-\( \phi \)s. In this thesis I treat resumptive pronouns as pronouns of category \( \phi \). Syntactically, this explains their movement behaviour as detailed in the next chapter.

Another characteristic of these \( \phi \) pronouns that is relevant to the current research is that they are definite descriptions. This follows from a line of research in the literature that started with Elbourne (2002) who proposes that pronouns are definite determiners whose NP-complement has undergone deletion in the phonology (i.e. The NP-deletion Theory) as in (2.39):

(2.39) Elbourne's (2002) internal structure of a pronoun

\[
[D \text{ pronoun} \ [NP \text{ noun}]]
\]

Elbourne's NP-deletion theory is central, for example, to Guilliot & Malkawi's (2006) and Malkawi's (2009) analysis of resumptive pronouns in Jordanian Arabic; they argue that resumption is a special kind of ellipsis in which the resumptive pronouns has as complement the antecedent NP which is elided. Building on earlier analyses about pronouns as definite descriptions (Elbourne 2002; Guilliot 2006; Guilliot & Malkawi 2006; Malkawi 2009) as well as on Déchaine & Wiltschko’s (2002) intuition about pronouns being decomposable, in Sterian (2011) I argue that resumptive pronouns in Iraqi Arabic D-linked questions are of category \( \phi \) and at the beginning of the derivation they are part of a D-\( \phi \)-N constituent, in which D is the D-linked interrogative pronoun and N is the antecedent.
3. CLITICISATION IN ROMANIAN AND IRAQI ARABIC

In this chapter I present an analysis of the cliticisation process in Romanian and Iraqi Arabic (§3.1) and I discuss the particulars of the clitic-doubling construction and the languages in which it is attested; I then propose an analysis of this phenomenon (§3.2).

3.1 The cliticisation process: movement of clitic pronoun

In this section I focus on (i) the movement of the clitic pronoun from its base position to its derived position and (ii) the landing site where the clitic surfaces. I argue that the clitic pronoun raises from its base position for independent reasons (i.e. its deficient nature discussed in chapter 2), it does not move together with the verb (as proposed in Sterian 2011) and that its final landing site is in IP. I firstly present the discussion in the literature about verb raising in Romance; this is relevant because I argue that the verb and the clitic each have independent reasons for raising – as an argument that they do not have to move together.

It has been observed that the clitic pronoun appears in the vicinity of the verb both in Romance (Cardinaletti and Starke 1999; Belletti 1990; Roberts 2010) and in Arabic (Shlonsky 1997). In all these languages it has also been observed that the verb raises out of VP (Emonds 1980; Pollock 1989; Shlonsky 1997). Since the position of the verb may give away the position of the clitic pronoun, I will discuss verb raising in Romanian and in Iraqi Arabic: since the verb ends up in I and the clitic pronoun surfaces in the vicinity of the verb, it follows that its final landing site is in I, as well.

In the remainder of this section I present the findings in the literature about verb raising (§3.1.1), then I present the cliticisation process (§3.1.2). In (§3.2) I discuss clitic-doubling.

3.1.1 Verb raising in Romanian and Arabic

In this section I present the analyses in the literature regarding the position of the verb in Romanian and in Arabic. The common denominator in these two languages is the fact that the verb raises to I, as opposed to English, where the verb remains in its base position in V. As I mentioned earlier, this is relevant because it has been observed that the final landing site of the clitic pronoun is in the vicinity of the verb and this is why it has been argued that the pronoun acts as a clitic on the verb. Therefore, the final landing site of the verb acts as a beacon for the landing site of the clitic pronoun, namely I. Moreover, the clitic pronoun in Romanian attaches to auxiliaries when these are present: a further clue that the clitic pronoun’s landing site is in IP. It is also relevant to see arguments for verb raising in these languages, because I argue that the verb and the
clitic each have independent reasons for movement and therefore the movement of the clitic is not parasitic on that of the verb.

That the verb raises to I in Romance is a well-established fact in the literature (Emonds 1980; Koopman 1984; Pollock 1989; Carnie & Guilfoyle 2000; Carnie 2007), nevertheless let us take a closer look at evidence for this, because Romanian should pattern with Romance in this respect. For French, authors (Emonds 1978; Pollock 1989) have shown that there are three grammatical processes which give away that the verb raises rom V to I: (i) adverb placement, (ii) alternation in position between auxiliary and main verb and (iii) negation placement.

Firstly, let us look at adverb placement in French, a language in which it has been observed that the verb raises to I, as opposed to English, a language in which the lexical verb remains in V. Pollock (1989) assumes that both English and French have the same deep structure (3.1), where Adv is an optional adverbial position that can be occupied by VP adverbs such as *often/souvent, seldom/rarement, hardly/à peine*. In the meantime the hypothesis that there is a fixed hierarchy of projections has now been accepted as the appropriate hypothesis (Belletti 1990; Shlonsky 1997):

(3.1) POLLOCK’S (1989) DEEP STRUCTURE FOR ENGLISH AND FRENCH

\[
\text{IP} \ \text{NP} \ \text{I} \ \text{NegP} \ \text{Neg} \not\text{not/pas} \ \text{AgrP} \ \text{Agr} \ \text{VP (Adv) [V…. ]}]]]]]]
\]

In French, VP adverbs can intervene between the verb and its complement (3.2a), but cannot intervene between the subject and the VP (3.2b), unlike English in which the adverb cannot split up the verb and its complement (3.3a), but is grammatical in between the subject and the VP (3.3b):

(3.2) VP ADVERB PLACEMENT

a. \(V – \text{Adv} – \text{DO}\)

Je mange souvent des pommes.
I eat often Art.indef apples
‘I often eat apples.’

b. \(\text{Adv} – V – \text{DO}\)

*Je souvent mange des pommes.
I often eat Art.indef apples
‘I often eat apples.’

---

7 Pollock (1989) proposes that Inflection is not a functional head hosting both Tense and Agreement features, but rather Tense and Agreement are two separate heads. In the literature that followed, the head hosting Tense features became written either as T or I, with the latest prevailing. Since this does not bear on the current study, the functional head that bears tense will be written as I.
ENGLISH (Carnie 2007)

(3.3b) VP ADVERB PLACEMENT
   a. $V - Adv - DO$
      *I eat often apples.

   b. $Adv - V - DO$
      ‘I often eat apples.’

In the French sentence in (3.2a) the adverb $souvent$ intervenes between the verb $mange$ “I eat” and its complement $des$ $pommes$ “apples”. The sentence in (3.2b) in which the verb and the complement remain together below the adverb is ungrammatical. Considering the assumed structure in (3.1), the verb $mange$ “I eat” must move higher up in the structure. On the other hand, in the English sentence in (3.3a), the verb $eat$ cannot be separated from its complement $apples$ by the VP-adverb $often$. The sentence in (3.3b) in which the verb and its complement remain together below the adverb is grammatical: the verb in English does not raise from $V$ to a derived position.

Turning to Romanian, it is known that it has a relatively free word order (Farkas 1978; Steriade 1980; Gramatica Academiei 2008), which makes it difficult to use adverb placement as a test for the position of the verb. In actual fact, Dobrovie-Sorin (1994) states that “the current tests [Emonds 1978; Pollock 1989] are unavailable in Romanian”. Observe how the adverb can occur between the verb and its complement, like in French (3.4a) or it can occur sentence finally (3.4b):

ROMANIAN

(3.4) ADVERB PLACEMENT
   a. $V - Adv - DO$
      Eu manînc deseori mere.
      I eat often apples
      ‘I eat apples often.’

   b. $V - DO - Adv$
      Eu manînc mere deseori.
      I eat apples often
      ‘I eat apples often.’

The sentence in (3.4a) in which the adverb intervenes between the verb and its direct object looks similar to the French one in (3.2a). As for the alternation in position between auxiliary and main verb, consider now what happens in French (3.5) and in English (3.6) in sentences with auxiliaries:
FRENCH

(3.5) J’ai souvent mangé des pommes.
I=have often eaten Art.indef apples
‘I hav often eaten apples.’

ENGLISH

(3.6) I have often eaten apples.

Both French (3.5) and English (3.6) have the auxiliary position following the subject and preceding the adverb. Contrast this with the French (3.2) in which the main verb is the one following the subject and preceding the adverb. Interestingly, in French the main verb occupies the same position as the auxiliary, namely I. It follows that the main verb in French moves out of the VP to I in sentences without auxiliaries. On the other hand, for Romanian (Dobrovie-Sorin 1994) claims that the lexical verb always raises to I, even in sentences with auxiliaries. Observe the relevant adverb placement data with or without auxiliary in (3.7):

ROMANIAN

(3.7) ADVERB PLACEMENT – LEXICAL VERB RAISING

a. Verb - adverb
Andrei vede des filme bune.
Andrei watches often movies good.Pl
‘Andrei often watches good movies.’

b. adverb - Verb
*Andrei vede des filme bune.
Andrei often watches movies good.Pl
‘Andrei often watches good movies.’

c. Aux – verb – adverb (Future Tense)
Andrei va vedea des filme bune.
Andrei will watch often movies good.Pl
‘Andrei will watch often good movies.’

d. Aux – adverb – verb (Future Tense)
*Andrei va des vedea filme bune.
Andrei will often watch movies good.Pl
‘Andrei will often watches good movies.’

e. Aux – verb – adverb (Present Perfect)
Andrei a vazut des filme bune.
Andrei Aux watched often movies good.Pl
‘Andrei watched often good movies.’
f. **Aux – adverb – verb (Present Perfect)**

*Andrei a des vazut filme bune.*

Andrei Aux often watch movies good Pl

‘Andrei will often watches good movies.’

What the pairs of sentences in (3.7) show is that the lexical verb in Romanian raises to I. The pair of sentences in (3.7a) – (3.7b) shows that the VP adverb *des* “often” follows the lexical verb. In (3.7c) - (3.7d), the adverb *des* “often” follows the lexical verb even in a sentence with auxiliary. The auxiliary choice does not matter, the result is the same, as can be seen from (3.7e) – (3.7f), which uses a different auxiliary than (3.7c) - (3.7d). Relevant for the current thesis is that in Romanian an adverb cannot intervene between the subject and the lexical verb, which is indicative of the fact that the verb raises from its base position.

Let’s turn now to the third test for verb movement in Romance which is negation placement. Recall Pollock’s (1989) hierarchy of projection in (3.1): the negation appears above the VP, between the head hosting tense (i.e. I) and the head hosting agreement (i.e. Agr). Taking negation as beacon, it can be observed where the verb is: whether in V or in I. Consider the French sentence with negation in (3.8):

**FRENCH (Dobrovie-Sorin 1994)**

(3.8) NEGATION PLACEMENT

Je ne pars pas demain.

I *ne* leave.1S Neg tomorrow

‘I am not leaving tomorrow.’

In the French sentence in (3.8), the negation *pas* follows the verb, which indicates that the verb has raised to I. Observe now the Romanian pair of sentences with negation in (3.9):

**ROMANIAN (Dobrovie-Sorin 1994)**

(3.9) NEGATION PLACEMENT

a. **negation precedes the verb**

Nu plec mîine.

Neg leave.1S tomorrow

b. **negation follows the verb (as in French)**

*Plec nu mîine.

leave.1S Neg tomorrow

‘I don’t leave tomorrow.’

This test is not conclusive for Romanian, as Dobrovie-Sorin (1994) points out. Returning to Dobrovie-Sorin’s (1994) argumentation that some of the tests for V-raising suggested by Emonds (1978) and Pollock (1989) are not available for Romanian, notice
that the sentence in (3.9b) follows the French pattern in (3.8), with the negation following the verb; this word order is ungrammatical in Romanian. The grammatical order is when the negation precedes the verb (3.9a). Nevertheless, Dobrovie-Sorin’s (1994) stresses that the sentences in (3.9) “do not show that V-raising does not apply in Romanian, they simply indicate that the negation is in front of I, not in between I and VP.” That is, Dobrovie-Sorin (1994) argues that in (3.9) the data does not show that there is no verb raising in Romanian, rather, if negation is allowed to be in a higher positions, the data is compatible with the proposal that the verb raised from its base position.

Consider now the Romanian sentence with auxiliary and negation (3.10):

**ROMANIAN**

(3.10) Eu nu am mâncat deloc cireșe anul acesta.
    ‘I have not eaten cherries at all this year.’

In the Romanian sentence in (3.10) the negation appears before the auxiliary and the verb; the lexical verb has raised to I, as it appears above the VP-adverb deloc “at all”.

Turning to Iraqi Arabic, the verb also raises to I. Classical Arabic is a VSO language and the modern vernaculars have both VSO and SVO. For VSO in Classical Arabic authors proposed that the verb raises to I, while the subject remains in its base position, namely in SpecVP assuming a VP-internal subject hypothesis. This was also proposed for modern vernaculars, such as Palestinian Arabic (Shlonsky 1997).

Shlonsky (1997) brings data with adverb placement and floating quantifiers in Hebrew and Palestinian Arabic to argue for verb movement in these languages (3.11):

**HEBREW (Shlonsky 1997)**

(3.11) VERB RAISING
    a. adverb placement
       ha=yladim katvu ?etmol mixtav
       the=children wrote.3Pl yesterday letter
       ‘The children wrote a letter yesterday’.

    b. quantifier float
       ha=yladim katvu kullam mixtav
       the=children wrote.3Pl all letter
       ‘The children all wrote a letter’.

---

8 It is not relevant here to talk about vP and the subject actually originating in SpecvP. It doesn’t affect what is being discussed either way. Later on in this thesis when vP becomes relevant for other reasons than the ones discussed just now, vP will be included in the derivation.

9 Shlonsky does not give the data from Palestinian Arabic, but he notes that “the facts are the same” as in Hebrew.
Shlonsky’s (1997) conclusion is that Hebrew and Palestinian Arabic “are SVO-verb raising languages. In this respect they are similar to the Romance languages as opposed to English”.

Consider now the Iraqi Arabic the sentence in (2.26) given below as (3.12) and its derivation in (3.13):

IRAQI ARABIC

(3.12) VSO word order

للبنية تام سامر

saw.3MS Samer l=ibneyya

‘Samer saw the girl.’

(3.13) derivation of (2.49)

\[
[\text{IP} [\text{f}a:f [\text{VP} \text{Samer} [\text{V} f\rightarrow f] [\text{NP} l=ibneyya]]]]
\]

The sentence in (3.12) has VSO word order. The accepted analysis for VSO languages in the literature is that after the VP is formed, with the direct object as complement of the verb and the subject in its specifier, the verb raises to a position higher than the subject, to I; the subject remains in situ (McCloskey 1983; Lightfoot & Hornstein 1994; Carnie & Guilfoyle 2000). As I mentioned in (§2.4.2 subsection iii), in Arabic vernaculars both VSO and SVO are possible word orders. That Arabic vernaculars display SVO besides VSO is the topic of lively research and I will not detail it here. I will only mention that one salient proposal is that the subject in an SVO Arabic sentence is actually situated in a TopP above IP; note that for Romance languages such as Romanian, Italian, Spanish and Catalan it was also proposed that the overt subject is in an A’-position (Contreras 1991; Dobrovie-Sorin 1994; Barbosa 1997; Lopez 2003). These being said, whatever the surface word order in Arabic, whether it is VSO or SVO, still the verb raises from V to I; the subject either remains in-situ resulting in a VSO word order or the subject takes an extra step and raises past the verb to an A’-position, resulting in the SVO order. And as seen from (§2.4.2), the clitic pronoun is always enclitic on the verb, which indicates it surfaces in the IP domain, as well. Observe the verb raising in sentences with SVO order in Iraqi Arabic (3.14):
IRAQI ARABIC

(3.14) VERB RAISING

a. adverb placement

الطلاَب كُتَبوا البارحة لِرسالة.

the=students wrote.3S yesterday letter

‘The students wrote a letter yesterday.’

b. quantifier float

الطلاَب كُتَبوا كُلهم رسالة.

the=students wrote.3S all=them letter

‘The students all wrote a letter.’

Assuming that adverb placement and floating quantifiers appear in front of VP, the sentences in (3.14) show that the verb has raised out of VP, since it appears to the left of the adverb (3.14a) and to the left of the floating quantifier (3.14b). So far, I discussed the fact that both in Romanian and in Iraqi Arabic the verb raises to I. In the next section I discuss the movement of the clitic pronoun in proclisis and in enclisis.

3.1.2 The movement of the clitic pronoun

Having established that in both Romanian and Arabic the lexical verb moves to I, now I will turn to the movement of the clitic pronoun. That clitics in Romance surface in a derived position was discussed in (§2.4.2, subsection iii). Among proposals in the literature with respect to the clitic pronoun’s position in IP there are two that are the most discussed: one proposal is that the clitic pronouns is base generated in IP, the other proposal is that it starts out in the derivation as complement of the verb and then it raises to its final position (Kayne 1994; Uriagereka 1995; Roberts 2010). With respect to Romanian clitic pronouns, Dobrovie-Sorin (1994) states that the data that she is aware of “cannot help us decide whether adjunction to IP is base- or movement adjunction.” She places these clitic pronouns in a Specless-IP projection, without discussing further whether they are base-generated there or have arrived there by movement.

For the reasons discussed in chapter 2, namely that the clitic pronouns are deficient elements in that they lack some layers of functional structure (§2.1.) and have to raise to a functional projection so as to compensate for this lack, in this thesis I assume that the clitic pronoun is not base generated in IP, but that it raises from its base position to its final landing site and that this landing site is in the IP realm. I will not discuss the base generation option further.

With respect to movement, at first it may seem that two derivations are possible: one in which the clitic raises to cliticise to the lexical verb and then moves along with it (i.e. early incorporation – which appears in Sterian 2011) and one in which the clitic
moves independently of the verb. I will talk about why the first type of derivation is not desirable and then focus on the second type. The derivation in which the clitic raises to cliticise to the verb and then moves along with it was proposed as early as Kayne (1975) who argues that clitics move and adjoin to V. However, this proposal was abandoned because authors observed that verbs that have not raised to I cannot host clitics, and therefore proposed that clitics adjoin to I, not V (Belletti 1982; Koopman 1984; Rochette 1988). Also, authors argue that clitics and verbs cannot and do not combine in the syntax (Kayne 1994; Poletto and Pollock 2004; Pollock 2006; Roberts 2010). I therefore abandon here the possibility that the clitic pronoun cliticises to V and the moves up along with it.

Since the clitic pronoun is observed to appear in the vicinity of the verb in IP, but also in the vicinity of the auxiliary, it follows that it is not obligated to move together with the verb. Therefore, in the following I adopt Roberts’ (2010) analysis of clitic movement, because it explains how the clitic pronoun is so flexible in its movement. Expanding on Cardinaletti and Starke’s (1999) intuition that clitics are structurally deficient because they lack some layers of functional structure, Roberts (2010) proposes that in fact the clitic pronoun lacks any kind of functional projection of its own and that it consists only of φ-features; he adopts Dechaine and Wiltschko’s (2002) approach to pronouns and treats Romance clitic pronouns as pronouns of category φ. Roberts (2010) further proposes that clitic movement is a type of head-movement in which the clitic pronoun must move because its features represent a subset of the features of a probe and it raises to value them. More precisely, φ raises first from its position as complement of V to v, with which it shares the same set of features (3.15):

\[
\text{(3.15) ROBERT’S (2010) CLITICICATION AS HEAD-MOVEMENT}
\]

When little v is merged taking VP as its complement, the lexical verb raises from its base position in V to v (Marantz 1997; Chomsky 2000, 2001, Roberts 2010) and the clitic also raises to v to value its unvalued φ-features (Kayne 1975; Roberts 2010). Thus, cliticisation is the movement of φ from its position as complement of V to v; φ checks its interpretable φ-features against the uninterpretable φ-features of v. After φ checked its
features against $\nu$, it is free to move up to check remaining unchecked features against another probe – if any such probe exists in the derivation. In the remainder of this thesis I work with this analysis of cliticisation.

Since the verb surfaces in IP in Romanian (§2.5.1), let’s see how the derivation with a clitic pronoun unfolds in this language. Consider (3.16), which is a Romanian sentence that contains a clitic pronoun:

**ROMANIAN**

(3.16) SENTENCE WITH CLITIC PRONOUN
Laura îl STRIGĂ.
Laura him calls
‘Laura calls him.’

The derivation of the sentence in (3.16) which tracks the movement of the clitic pronoun is given in (3.17):
In (3.17), at First Merge, the verb striga “calls” takes as complement the clitic pronoun il “him”, of category φ. In (§3.1.1) I presented the arguments in the literature for verb raising in Romance and in Arabic, and earlier in the current section I presented Roberts (2010)\(^\text{10}\) analysis of clitic movement. There are thus two instances of movement: verb raising and clitic pronoun movement. After \(v\) is merged taking VP as its complement, the lexical verb raises from its base position in \(V\) to \(v\) and the clitic also raises to \(v\) to value its unvalued \(φ\)-features. Once I is merged, it probes for uninterpretable \(V\)-features and the \(v\) complex moves to I.

Roberts (2010) also notes that “the clitic and the verb can move as a unit, but the clitic can also move independently”. This becomes relevant in cases in which the clitic is observed to have moved higher, such as in clitic climbing instances in Western Romance. Romanian does not have clitic climbing, but the clitic is observed to have moved higher than the verb, next to the auxiliary, in constructions with auxiliaries as

\(^{10}\) For a very detailed analysis of cliticisation as head-movement, see Roberts (2010).
seen in (3.18), which confirms the observation that the clitic can also move independently:

**ROMANIAN**

**(3.18)** CLITIC PRONOUN DOES NOT MOVE TOGETHER WITH VERB

\[ Să-l fi avertizat Andrei din timp, nimic nu s-ar fi întîmplat \]
\[ Conj=\textbf{him} be warned Andrei from time nothing Neg se=Aux.3S be happened \]

‘Had Andrei spoken to him in advance, nothing would have happened.’

In the Romanian example (3.18), the clitic pronoun *l* “him” has not moved together with the verb, because we find it cliticised to the subjunctive conjunction *să*. It has moved though: observe its position with respect to the subject, but it has not moved as a *verb+clitic* cluster. Other revealing examples that the clitic pronoun does not have to move together with the verb are the ones in which we find the pronoun cliticised to an auxiliary, as in Western Romance (3.19):

**ROMANIAN**

**(3.19)** CLITIC PRONOUN + AUXILIARY

\[ L-am chemat la masă. \]
\[ him=Aux.1S called at table \]

‘I called him to eat.’

In (3.19) the clitic pronoun *l* “him” is found as proclitic on the auxiliary *am*, not on the lexical verb.

As for the position of the clitic pronoun with respect to the verb, it is always enclitic in Arabic and it can be both proclitic and enclitic in Romanian. Enclisis versus proclisis in Romance is a topic of lively discussion, because clitic pronouns may surface either as proclitic or as enclitic in the same language (Kayne 1991; Belletti 1999; Roberts 2010).

To obtain the proclitic word order, Roberts (2010) extensively argues that V movement to *v* precedes clitic movement to *v* in (3.15). Because he argues that V movement must precede the clitic pronoun movement, Roberts obtains a pro-clitic word order. Nevertheless, if this were the case, then in cases of enclisis a further movement of the verb past the clitic would be necessary. Starting from a pro-clitic word order, for enclisis in Romance authors propose a further movement of the verb over the clitic pronoun (Kayne 1991; 2000; Dobrovie-Sorin 1994; Roberts 2010). Roberts (2010) proposes that the verb raises past the clitic pronoun for Western Romance enclisis on infinitives; in this analysis the clitic does not remain incorporated to the verb in I (3.20):
ITALIAN Roberts (2010)

(3.20) WESTERN ROMANCE ENCLISIS

\[ V+\text{Inf} \ [v_p \ [\varphi + v \ [V_P \ [\varphi]]]\]

In (3.20) the verb raises to an Asp projection. Roberts is not focusing on what this position is exactly; he does stipulate several \( v \) head positions which could be relabelled as various AspP projections, for example. He does not discuss Western Romance enclisis in cases where the verb is finite, such as in imperatives.

Like other Romance languages, Romanian has both proclitics and enclitics, but the difference is that in Romanian the distribution of proclisis versus enclisis seems to be a random morpho-syntactic fact, in that the feminine clitic appears as enclitic with some tenses; with these tenses, the feminine is always enclitic. Consider the pair of (3.21) which shows that feminine clitics are always enclitic and masculine ones are always proclitic with the past indicative:

**ROMANIAN**

(3.21) a. *masculine clitic*

L-a văzut*1 Ion.

him=Aux.3S seen=*him Ion

*Ion saw him.*

b. *feminine clitic*

*o=A văzut=o Ion.

*her=Aux.3S seen=her Ion

*Ion saw her.*

In (3.21b) the feminine accusative clitic *o* “her” is enclitic, while in (3.21a) the masculine clitic *l- “him” is proclitic. The feminine clitic *o* “her” is always enclitic and the masculine clitic *l- “him” is always proclitic. Also, they do not cliticise to the same element: the masculine is proclitic on the auxiliary and the feminine is enclitic on the verb. At the moment in the literature the reason for the peculiar behaviour of the Romanian feminine clitic pronoun has not been thoroughly investigated. There is no empirical evidence in Romanian which suggests that the placement of feminine clitics versus masculine clitics is related to some other property of the language. Syntactically, there is no obvious syntactic difference between the two cases – masculine versus feminine clitic – either. With respected to interpretation, I note that there are no interpretive consequences associated with the use of enclitics instead of proclitics. It is not clear how to treat Romanian given that it would be odd to think that the verb moves higher or not, depending on the gender of the clitic. A solution for the peculiar phenomenon of the feminine enclitics in Romanian should be proposed first. However, since as far as I know feminine versus masculine clitic placement in Romanian does not bear on the phenomenon of clitic-doubling or of resumption in this language, I will not discuss it further in here.
Recall that I said earlier that Roberts (2010) argues that V moment to v precedes \( \varphi \) movement to V; this has as result the pro-clitic word order and for enclisis a further movement of the verb is necessary in order to obtain V+\( \varphi \). Nevertheless, as Roberts also observes, v is null and “strictly speaking, we do not actually know that the order is as indicated in” (3.15). I think that indeed the order in which the verb and the \( \varphi \) pronoun move to v is not strictly imposed by requirements of syntax and this could actually be an arbitrary morphological fact, just as the one which results in the feminine clitic to be enclitic in Romanian with some tenses. Nevertheless, whether V movement must precede the clitic pronoun movement as proposed by Roberts (2010) or not does not affect my analysis of clitic-doubling and of resumption.

Moving on to Arabic, I will adopt here the same strategy for enclisis as proposed for Romance. Consider (3.22) which is an Iraqi Arabic sentence containing a clitic pronoun:

\[
\text{IRAQI ARABIC} \\
(3.22) \text{SENTENCE WITH CLITIC PRONOUN} \\
\text{شاءفا سامر.} \\
f:\text{a}:f=\text{ha} \quad \text{Samer} \\
\text{ساع.3MS=هر} \quad \text{Samer} \\
\text{‘Samer saw her.’}
\]

In the sentence in (3.22), the clitic pronoun \( \text{ha} \) “her” follows the verb \( f:\text{a}:f \) “he saw”, which we have already established raises to I. It would follow that the pronoun also surfaces in the IP domain. I propose that, just like in Romance enclisis, the verb in (3.22) moves further over the clitic.

In Arabic the pronoun never cliticises to the auxiliary, but always to the verb. Constructions with auxiliaries are unlike Romance ones in that in Arabic both the auxiliary and the lexical verb are tensed and agree with the subject. The clitic is always enclitic on the verb regardless of whether there is an auxiliary present or not. This may simply have to do with the fact that in Arabic the auxiliary takes as complement a tensed clause; in other words there are two IP shells as in (3.23):
3.2 Clitic-doubling

In this section I discuss the strategy known in the literature as clitic-doubling – A-binding of pronouns with a shared θ-role. I argue that (i) clitic-doubling is found in other languages than Romance, Greek and some Slavic and the area in which it is attested spreads to contain some varieties of Arabic and (ii) in the languages in which it is found, it has identical characteristics: doubling of human direct objects and presence of designated preposition.

Since clitic-doubling in Romance is claimed to be associated with “specificity” effects (Suñer 1988; Uriagereka 1988; 1995; Dobrovie-Sorin 1990; Torrego 1995; 1998), I survey the data from Spanish in order to track down the basis for this claim and compare it with the data from Romanian. This section aims to set the foundation for my claim that in cases in which the clitic-doubling strategy is obligatory (i.e. Romanian), it is a grammaticalized phenomenon, not a semantic one – and hence does not give rise to “specificity” effects –, while in languages in which it is optional (i.e. Greek), it has a pragmatic effect. The pragmatic effects will be discussed in detail in chapter 5.
3.2.1 Clitic-doubling: definition and analyses

Clitic-doubling has been much researched in Romance, both with respect to its syntax and to its semantics. Historically, the studies on clitic-doubling and of resumption (A’-bound pronouns with a shared θ-role), though discussed separately in the literature, follow the same path: in the beginning, they were at the core of the question of whether they are the result of movement or whether they are base-generated (Jaeggli 1981, 1986; Borer 1984; Sells 1984; McCloskey 1990), then later the pursuit moved to a stage where authors started looking at these pronouns’ interpretive effects, as well: the semantics of clitic-doubling (Suñer 1988; Dobrovie-Sorin 1990; 1994) and the semantics of resumption (Doron 1982; Sharvit 1999; Guilliot 2006; 2008; Guilliot and Malkawi 2006; 2009; Malkawi 2009). Both of these groups of linguists attest specificity effects with these strategies. Syntactically, clitic-doubling pronouns are argued by some authors to form part of a complex DP at First Merge (Uriagereka 1988, 1995; Boeckx 2003). Uriagereka (1988; 1995) treats clitics as determiners; as such, Ds may select for null NP-complements; the doubled DPs are located in the specifier of these complex DPs. Boeckx (2003) in his extensive study of resumption suggests that the syntax of clitic-doubling should be no different than the one of resumption, because both are complex-DP constituents at First Merge.

Consider first a definition of clitic-doubling. According to Kayne (2002), clitic doubling involves a clitic pronoun and an associated DP in argument position that together correspond to a single θ-role as in (3.24):

SPANISH (Kayne 2002)

\[(3.24)\] CLITIC-DOUBLING CONSTRUCTION

Le doy un libro a Juan.

him.Dat give.1S a book to Juan

‘I give [him] a book to Juan.’

In (3.24), the dative clitic pronoun le “him” doubles the indirect object Juan; they share the same θ-role. As seen earlier in this chapter about Romance clitic pronouns and full DPs, the indirect object full-DP Juan appears in its base position, while the clitic pronoun appears in a derived position, preceding the verb doy “I give”.

The clitic-doubling strategy is also observed with direct objects and objects of preposition in other varieties of Spanish as well as in other languages, such as Catalan and Romanian in Romance, and Greek, Albanian and Slavic outside Romance, in the greater Indo-European family. Romance languages in which clitic-doubling is attested...
are: Spanish (Suñer 1988; Torrego 1995; 1998; Uriagereka 1988; 1995), Catalan (Lopez 2003; 2009) and Romanian (Steriade 1980; Dobrovie-Sorin 1990). Outside of Romance it is attested in Greek (Anagnostopoulou 2005), Albanian, some Slavic languages (Anagnostopoulou 2005) and Semitic: in Lebanonese Arabic (Aoun 1981; Torrego 1995) and Palestinian Arabic (Shlonsky 1997). In this section, though I present data from some of these languages, I focus on Spanish because, of the Romance languages, Spanish has been the object of much research on clitic-doubling, on the one hand, and the clitic-doubling strategy with direct and indirect objects shows many common traits with Romanian, on the other.

Authors argued for different syntactic and/ or semantic analyses for the clitic-doubling strategy depending on whether it targets direct objects or indirect object (Suñer 1988; Uriagereka 1995; Torrego 1998). This is because the clitic pronouns involved in direct object doubling and in indirect object doubling display different morphology and different grammatical functions, giving rise to different syntactic effects (Torrego 1998).

In this chapter, though I survey the clitic-doubling strategy with all complements, I focus on the one with direct objects. This is because clitic-doubling of direct objects spreads over an area covering not just Romance and some other Indo-European families of languages such as Slavic, but is also attested in some varieties of Arabic. I aim to argue that (i) the clitic-doubling strategy with direct objects has certain common characteristics in the languages in which it is attested, and (ii) in languages in which it is obligatory, it does not give rise to “specificity” effects.

3.2.2 Clitic-doubling in Spanish and Romanian

A preliminary observation about Romanian and Spanish on the one hand versus other Romance languages on the other is that Spanish does not have adjunct clitics (Torrego 1998) and neither does Romanian. Of the Romance family, Catalan has clitic-doubling with adjuncts (Lopez 2009). This is relevant to note, because in clitic-doubling constructions, which are attested for Spanish and for Romanian, the clitic never doubles adjuncts. Also, in resumption, which I claim occurs in Romanian (§5), the clitic pronoun appears together only with arguments and never with adjuncts.

In the following I take a closer look at where and how clitic-doubling occurs in Spanish. The example from Kayne (2000) which was already seen in (3.24) is a clitic-doubling construction with indirect object in Peninsular Spanish, a language in which clitic-doubling of direct objects takes a morphologically dative clitic pronoun and not an accusative one (3.25):
PENINSULAR SPANISH (Torrego 1998)

(3.25) CLITIC-DOUBLING
a. dative clitic-pronoun
Juan le visitó al chico.
Juan him.Dat visited.3S a=the guy
‘Juan visited the guy.’

b. accusative clitic-pronoun
*Juan lo visitó al chico.
Juan him.Acc visited.3S a=the guy
‘Juan visited the guy.’

In the clitic-doubling sentence from Peninsular Spanish in (3.25a) the full-DP direct object el chico “the guy” is found in its base position, is introduced by the preposition a and it shares its θ-role with the clitic pronoun le “him” that appears in a higher position preceding the verb visitó “visited”. Note from the sentence in (3.25b) that in Peninsular Spanish the use of the morphologically accusative clitic pronoun lo “him” instead of the morphologically dative one le “him” is ungrammatical.

Nevertheless, in other varieties of Spanish, the doubling clitic pronoun is accusative. Observe the clitic-doubling strategy with direct objects in River Plates Spanish (3.26):

RIVER PLATES SPANISH

(3.26) CLITIC-DOUBLING OF DIRECT OBJECT
Laura la vi a.
3FS saw.1S a Laura
‘I saw [her] Laura.’

In (3.26) the full-DP direct object Laura is found in its base position, is introduced by the preposition a and it shares its θ-role with the accusative clitic pronoun la “her” that appears in a higher position preceding the verb vi “I saw” and agrees with it in gender and number.

So far, from (3.24), (3.25) and (3.26) it can be seen that in Spanish clitic-doubling (i) is possible with direct objects and indirect objects and (ii) the doubled direct/ indirect object is introduced by a preposition. Some questions arise at this point about clitic-doubling in Spanish: (i) does clitic-doubling target only human objects or is it possible with non-human objects ?, (ii) is clitic-doubling obligatory or optional ? and (iii) does the designated preposition appear always or is it optional ? These questions will be answered in the following.

Firstly, consider some details about the preposition a in Spanish: it is not used only in clitic-doubling constructions. Torrego (1998) presents data from Spanish that reveal the use of a in a variety of contexts and she connects it with specificity (among other things).
In Spanish, indefinite human direct objects may optionally be introduced by the preposition \textit{a}. Note that this is not a clitic-doubling context (3.27):

\begin{equation}
\text{SPANISH (Torrego 1998)}
\end{equation}

\textbf{(3.27) PREPOSITION WITH INDEFINITE HUMAN DIRECT OBJECT} \hfill \textit{a. with preposition}

Laura escondió \textit{a} un prisionero durante dos años
Laura hid.3S \textit{a} a prisoner during two years
‘Laura hid a prisoner for two years.’

\textit{b. without preposition}
Laura escondió un prisionero durante dos años
Laura hid.3S a prisoner during two years
‘Laura hid a prisoner for two years.’

Though this example does not involve the clitic-doubling strategy – which is the object of the current chapter – it is worth mentioning because of the optionality of the preposition which gives rise to pragmatic effects (Torrego 1998): in (3.27a) Laura hid a certain individual, while in (3.27b) Laura hid an unspecified prisoner. The syntax does not require the presence of the preposition \textit{a}; its presence creates a change of interpretation.

The pragmatic effect of the preposition is worth keeping in mind because, as mentioned before, the preposition \textit{a} participates in clitic-doubling constructions in Spanish, and I am investigating whether in Spanish clitic-doubling constructions are associated with pragmatic effects. Relevant for me is whether the preposition targets human objects and whether it is optional or obligatory in clitic-doubling constructions. From the data so far it can be seen that in Spanish the preposition \textit{a} appears in non-clitic-doubling constructions in which it is optional and gives rise to a change in interpretation in that the direct object refers to a certain individual known to the speaker.

Next, it must be elucidated whether the preposition targets human objects. As Torrego (1998) points out, the preposition only occurs with animates (Torrego uses the term “animate”, but all her examples actually have human direct objects) as in (3.28):

\begin{equation}
\text{SPANISH (Torrego 1998)}
\end{equation}

\textbf{(3.28) PREPOSITION VERSUS ANIMACY} \hfill \textit{a. human direct object}

Compraron a un testigo.
bought.3Pl \textit{a} a witness
‘They bought a witness.’

\textit{b. non-human direct objects}
Compraron *a/___ una casa.
bought.3Pl \textit{a} a casa
‘They bought a house.’
More than that, observe how the preposition _a_ disambiguates the use of a proper name indicating with certainty that it refers to a human (3.29):

SPANISH (Torrego 1998)

(3.29) **PREPOSITION TARGETS HUMAN**

a. _no preposition_

Buscan el pueblo de Numancia.
llok for.3Pl the town of Numancia

‘They are looking for the people of Numancia/ the town of Numancia.’

b. _preposition_

Buscan al pueblo de Numancia.
look for.3Pl _a_=the town of Numancia

‘They are looking for the people of Numancia/ *the town of Numancia.

While (3.29a) is ambiguous between a reading in which they are looking for the people of Numancia or they are looking for the town of Numancia, in (3.29b) the presence of the preposition _a_ disambiguates the reading and indicates that they are looking for the people of Numancia.

So far, it was established that in non-clitic-doubling constructions the preposition _a_ (i) only precedes human objects - it is ungrammatical with non-human objects-, (ii) it is optional with indefinite objects. It remains to be seen whether the preposition _a_ can be used with definite direct objects and what its characteristics in clitic-doubling constructions are.

Consider (3.30) which contains a definite human direct object:

SPANISH (Torrego 1998)

(3.30) **DEFINITE HUMAN DIRECT OBJECT**

a. Detuvieron a los emigrantes

arrested.3PL _a_=the.MPI immigrants.MPI

‘They arrested the immigrants.’

b. *Detuvieron los emigrantes

arrested.3PL the.MPI immigrants.MPI

‘They arrested the immigrants.’

The examples in (3.30) show that the preposition _a_ is obligatory with definite human direct objects.

Consider now (3.31) which shows clitic-doubling of a definite human direct object:
SPANISH (Torrego 1998)

(3.31) CLITIC-DOUBLING OF DEFINITE HUMAN DIRECT OBJECT

a. Los visitamos a los amigos
them visited.1PL a the.MPl friends.MPl
‘We visited our friends.’

b. *Los visitamos los amigos
them visited.1PL the.MPl friends.MPl
‘We visited our friends.’

In (3.31a) the direct object *los amigos* “the friends” is definite and human; notice that it is clitic-doubled by *los* which precedes the lexical verb and which agrees with *los amigos* in gender and number. Notice also that the direct object *los amigos* is preceded by the preposition *a*. Once the preposition *a* is not present, the sentence becomes ungrammatical (3.31b). On the other hand, by comparing the pair of sentences in (3.30) with the ones in (3.31), if the preposition *a* is present, but the doubling-clitic is not, the sentence can still be grammatical (3.30a). Clitic doubling of a definite is not obligatory, but the use of *a* is, and this is independent of clitic-doubling. Torrego (1998) does not say what the difference in pragmatics is between (3.30a) and (3.31a). The examples in (2.67)-(3.31) show that the preposition *a* is obligatory with definite human direct objects. This distribution of the preposition *a* and of the clitic-doubling is quite different from Romanian, as we will see in (§4.2.1).

Clitic-doubling is ungrammatical with indefinite human nouns (3.32):

SPANISH (Luisa Marti and Ricardo Machado Rocha p.c.)

(3.32) CLITIC-DOUBLING VERSUS INDEFINITE HUMAN DIRECT OBJECT

Vi a un hombre.
saw.1S a a man
‘I saw a man.’

*Lo vi a un hombre.
him saw.1S a a man
‘*I saw [him] a man.’

Next, observe how clitic-doubling of non-human direct objects is illicit in Spanish (3.33):

---

11 The literature on clitic-doubling in Spanish does not actually cite this type of examples where there is clitic-doubling of indefinite human nouns.
SPANISH (Torrego 1998)
(3.33) CLITIC-DOUBLING VERSUS NON-HUMAN DEFINITE OBJECTS
a. Visitamos la biblioteca.
   visited.1Pl the.F biblioteca.F
   ‘We visited the library.’

b. *La visitamos a la biblioteca.
   visited.1Pl a the.F biblioteca.F
   ‘We visited the library.’

The Spanish sentences in (3.32)-(3.33) reveal that clitic-doubling is illicit with indefinite human direct objects and with non-human direct objects. The examples in (3.32)-(3.33) contain full-DP direct objects. Observe the following contrast which is revealing of the obligatoriness of the preposition in clitic-doubling constructions with pronouns; considering that pronouns are definite, this is expected (3.34):

SPANISH (Torrego 1998)
(3.34) OBLIGATORY REQUIREMENTS IN CLITIC-DOUBLING
a. preposition
   La visitaron a ella.
   her visited.3Pl a she
   ‘They visited her.’

b. no preposition
   *La visitaron ella.
   her visited.3Pl she
   ‘They visited her.’

c. no doubling
   *Visitaron a ella.
   visited.3Pl a she
   ‘They visited her.’

The contrastive pair of sentences in (3.34a) – (3.34b) shows that in clitic-doubling constructions with pronominal direct objects, the preposition introducing the doubled direct object is obligatory. The sentence in (3.34c) shows that the clitic pronoun is also obligatory. Note that the direct object a ella can only refer to an animate Torrego (1998). Recall that that regarding (3.27) in which the direct object is a non-pronominal indefinite, Torrego (1998) commented that the preposition is obligatory with some verbs and not with others and the obligatoriness of the preposition had to do with the semantics of the lexical verb. However, Torrego (1998) notes that the strict requirements in (3.34) in which the direct object is pronominal hold with all verbs, regardless of their semantics.
This data from Spanish is relevant, because authors indiscriminately connect the clitic-doubling strategy of direct objects with “specificity”, whether it’s Spanish or Romanian (Uriagereka 1995; Torrego 1998; Dobrovie-Sorin 1994). Nevertheless, though this “specificity” claim may hold for Spanish for the reasons that were just detailed, they do not hold for Romanian: in Spanish the preposition a (i) appears in non-clitic doubling contexts as well as in clitic-doubling contexts, (ii) is optional in these non-clitic-doubling contexts and (iii) in these optional non-clitic-doubling contexts it is associated with specific readings. However, in Romanian the preposition pe used in clitic-doubling contexts (i) is not used in non-clitic-doubling contexts and (ii) the clitic-doubling construction in Romanian is obligatory. To conclude about Spanish, clitic-doubling of human direct objects has the following characteristics: (i) it occurs only with definite human direct objects and (ii) the direct object is introduced by a preposition. As I illustrate in the following, clitic-doubling in Romanian is more restrictive.

For the sake of thoroughness, since Romanian was one of the main sources of empirical data in this chapter, observe the data in (3.35):

(3.35) CLITIC-DOUBLING

a. obligatory pronoun, obligatory preposition
Laura l-a văzut pe Andrei la bibliotecă.
Laura him=Aux.3S seen pe Andrei at library
‘Laura saw [him] Andrei in the library.’

b. obligatory clitic pronoun
*Laura ___-a văzut pe Andrei la bibliotecă.
Laura ___Aux.3S seen pe Andrei at library
‘Laura saw [him] Andrei in the library.’

c. obligatory preposition
*Laura l-a văzut ___Andrei la bibliotecă.
Laura him=Aux.3S seen ___Andrei at library
‘Laura saw [him] Andrei in the library.’

The sentence in (3.35) illustrates the clitic-doubling strategy with direct objects in Romanian. In (3.35a) the full-DP direct object Andrei is found in its base position, is introduced by the preposition pe and it shares its θ-role with the clitic pronoun l “him” that appears in a higher position preceding the auxiliary+verb a văzut “has seen”. In (3.35b) the sentence is ungrammatical because the doubling clitic pronoun is absent and in (3.35c) the sentence is ungrammatical because the preposition pe is absent.

Clitic-doubling of non-human nouns is ungrammatical (3.36):
ROMANIAN

(3.36) CLITIC-DOUBLING VERSUS NON-HUMAN NOUNS

a. clitic-doubling

*L-a mîngîiat pe cîine.

him=Aux caressed pe dog

‘*He caressed [him] the dog’.

b. no clitic-doubling

A mîngîiat cîinele.

Aux caressed dog=the

‘He caressed the dog’.

The examples in (3.35) and (3.36) show that clitic-doubling strategy in Romanian is (i) obligatory, (ii) found only with definite human direct objects and (iii) it has a designated preposition: the grammaticalized preposition pe. Clitic-doubling in Romanian is also observed with indirect objects (chapter 4).

Torrego (1998) argues for Spanish that all objects introduced by the preposition a are specific: non-clitic-doubling as well as clitic-doubling contexts. Observe that in the non-clitic-doubling contexts in which the preposition is optional (3.27 and 3.29), it gives rise to interpretive effects. However, in clitic-doubling contexts, the preposition is obligatory. Torrego’s (1998) specificity claim is grounded in a theory of definiteness according to which definiteness is inherently specific (Enç 1991). I think that there is a difference between the “specificity” effect observed in contexts in which there is an option (i.e. to have or not to have the preposition a, to have or not to have a clitic pronoun, etc) and the specificity which is inherent in definite descriptions (in case we adhered to that particular theory of specificity for definites). The specificity effect observed in Spanish is not related to clitic-doubling, but rather to the use of the preposition a in certain contexts, because the preposition a appears in non-clitic doubling contexts and where it appears, it is associated with a change in interpretation.

Roberts (2010) states that Romanian pe and Spanish a are associated with specificity; I argue that while this claim may be true for Spanish, it is not true for Romanian, because Romanian does not have a corresponding preposition for contexts such as the ones observed for Spanish in (3.27). The preposition pe which participates in clitic-doubling of direct objects in Romanian does not appear in non-clitic-doubling contexts as the preposition a in Spanish, therefore no such pragmatic effects with pe. Rather, pe is restricted to the clitic-doubling construction which is itself restricted to definite human nouns and is not associated to any change of interpretation.

Lopez (2009) argues that clitic-doubling constructions in Spanish are not associated with a pragmatic feature. He follows Torrego (1998) and considers that the clitic-doubling construction is inherently specific. Recall that I argued that clitic-doubling occurs with definite human direct objects and is obligatory in Romanian and optional in Spanish. Recall also that for these obligatory contexts I argued that there is no particular pragmatic effect associated with the clitic pronoun. Regarding the
“specificity” of these constructions which authors argue for (Torrego 1998; Lopez 2009), I think that a distinction has to be made between two different notions generically referred to as “specificity”: one is grounded in the theory that all definites are inherently specific, while the other refers to the reading of a particular noun phrase as “specific” as opposed to a similar noun phrase that is not associated with a particular interpretation – this second notion is the case presented in this thesis as being associated with the presence of a pronoun in an context in which it is optional and in which it gives rise to a pragmatic effect. As such, the obligatory clitic-doubling construction in Spanish and Romanian which occurs with definite human direct objects is specific in the sense that all definite nouns are inherently specific, but is not specific in the sense of having a particular pragmatic interpretation. But in contexts in which clitic-doubling or resumption freely alternate with the gap: clitic-doubling/resumption are associated with a particular reading, while the structure with gap allows all possible readings.

In the following, I aim to illustrate that clitic-doubling of direct objects in some varieties of Arabic patterns with Romanian and Spanish in that it occurs with definite human direct objects and the direct object is introduced by a preposition.

3.2.3 Clitic-doubling in Arabic

In this section I present clitic-doubling data from various Arabic dialects and show that this phenomenon is not limited to Romance, Greek and Slavic, but the area in which it is found extends to these varieties of Arabic, as well. In all these languages, the clitic-doubling strategy has identical characteristics: (i) it targets human objects and (ii) it has a designated preposition.

Clitic-doubling is not a phenomenon known to Arabic at large. Classical/Standard Arabic do not exhibit this phenomenon: (3.37a) is the grammatical construction with direct object in root sentences; the presence of the doubling clitic and/or of the preposition preceding the doubled object are ungrammatical (3.37b):
CLASSICAL/ MODERN STANDARD ARABIC

(3.37) DOUBLING

a. no doubling

\[ \text{She saw Karim.} \]
\[
\text{She saw Karim.}
\]

*Ja:fit Kariman
saw.3FS Karim.Acc
‘She saw Karim.’

b. clitic-doubling

\[ \text{She saw Karim.} \]
\[
*Ja:fit=hu l^{12}=Karim
saw.3FS=him for=Karim
‘She saw [him] Karim.’

The pair of sentences in (3.37) illustrate that clitic-doubling is not possible in Classical/Modern Standard Arabic. (Though it could be argued that these languages are not spoken at the moment by native speakers who could offer grammaticality judgments, nevertheless the grammar of Classical Arabic has been thoroughly documented and worked on since the VIIIth century AD; had clitic-doubling existed, the grammarians would have documented it). The sentence in (3.37a) contains a human direct object which is not doubled by a pronoun with shared \(\theta\)-role; this sentence is grammatical. Adding the pronoun (3.37b) is ungrammatical in Modern Standard Arabic (and not attested in Classical).

The Iraqi Arabic of Baghdad (the standard Arabic variety of Iraq) does not have this clitic-doubling construction either (3.38):

IRAQI ARABIC

(3.38) CLITIC-DOUBLING

a. no doubling

\[ \text{She saw Karim.} \]
\[
*Je:fet Karim
saw.3FS Karim
‘She saw Karim.’

b. doubling

\[ \text{She saw Karim.} \]
\[
*Je:fit=ah l=Karim
saw.3FS=3MS for=Karim
‘She saw [him] Karim.’

---

\[ 12 \text{ This preposition is the } li \text{ from Classical/ Modern Standard Arabic. Since the contemporary Arabic vernaculars are not normed, nor is there consensus regarding their transliterations, authors gloss it either as } l, \text{ or } la, \text{ etc.} \]
Having established that Classical/Modern Standard Arabic does not have clitic-doubling, let us move onto varieties of Arabic that have this strategy and observe its particulars: (i) the doubled object is human and (ii) the grammaticalized preposition introducing the human object.

Lebanese Arabic is attested to have clitic-doubling similar as in Romance (Aoun 1981; Aoun 1999; Torrego 1995), with direct objects (3.39a) and indirect objects (3.39b):

**LEBANESE ARABIC (Aoun 1999)**

(3.39) CLITIC-DOUBLING

a. *direct object*

Kari:m ḫi:f=ɔ  la=Sa:mi  Karim  saw.3S=him  to=Sami  ‘Karim saw Sami.’

b. *indirect object*


In (3.39a), the clitic pronoun *o* “him” doubles the direct object *Sami* with whom it shares the θ-role. The full DP is in the regular argument position (Aoun 1999; Torrego 1995). Also, notice that the direct object, which is human, is preceded by a preposition. In Lebanese Arabic, clitic-doubling occurs with direct object constructions in a similar fashion that it does in Romanian: it occurs with human objects and the double is introduced by a grammaticalized preposition. In (3.39b), there is doubling of indirect objects: the indirect object *Sami* is introduced by a preposition. The doubling clitic is *o* “him”; note that it does not cliticise to the verb, but to a preposition. This is because the verb *Hakaa* “to say a story, to talk” in Arabic requires the preposition *lyi* after it. Nevertheless, *o* “him” and *Sami* share the same θ-role in (3.39b).

The doubling-clitic in (3.39) is optional (Aoun 1999). Note the counterparts of the sentences in (3.39) without clitic-doubling (3.40):
LEBANESE ARABIC (Aoun 1999)

(3.40) NON-DOUBLED COUNTERPART OF (3.39)

a. direct object
Kari:m ʃi:f Sa:mi
Karim saw.3S Sami
‘Karim saw Sami.’

b. indirect object
Kari:m  H ə ki la=Sa:mi  Hki:ye
Karim told  to=Sami story
‘Karim told Sami a story.’

(Aoun 1999) notes that when there is no clitic-doubling (3.40), then the preposition is absent from the full-DP direct objects (3.40a), its presence would render the sentence ungrammatical. The preposition is required in (3.40b) because Hakaa “to say a story, to talk” is intransitive. Aoun (1999) does not discuss the difference in pragmatics between (3.39) and (3.40); but he notes differences in scope in constructions with quantifiers (more about this in chapter 6). Also, Aoun (1999) does not mention whether there is clitic-doubling with indefinite human nouns or with non-human nouns in Lebanese Arabic; I will assume that it does not occur with these or else he would have mentioned them. In conclusion, with respect to the syntax, Lebanese Arabic (i) has clitic-doubling with both direct and indirect objects, (ii) clitic-doubling is optional and (ii) in the clitic-doubling strategy with direct objects, it patterns with Romanian and River Plates Spanish in that the doubled DP is human, it is a definite description and it is introduced by a designated preposition.

Shlonsky (1997) attests the clitic-doubling strategy in Palestinian Arabic (3.41):

PALESTINIAN ARABIC (Shlonsky 1997)

(3.41) CLITIC-DOUBLING

fhimt=ha  la  l-mʕalme
understood.1S=her for  the=teacher.F
‘I understood the teacher.’

As with the example in (3.39a) from Lebanese Arabic, the Palestinian Arabic clitic pronoun ha “her” in (3.41) doubles the human direct object l-mʕalme “the teacher”. The full DP is in the regular argument position and the direct object is preceded by a preposition. Shlonsky (1997), as Aoun (1999) does not mention whether clitic-doubling occurs with indefinite human nouns or with non-human nouns; his examples have clitic-doubling of human nouns. Again, we observe the same pattern: human direct object and grammaticalized preposition. Also, note that the grammaticalized preposition is the same in both Lebanese Arabic and Palestinian Arabic: the preposition l(a).
The clitic-doubling construction in (3.39a) and (3.41) appears also in Northern Mesopotamian dialects of Arabic, in Northern Iraq and Turkey. Consider the example in (3.42) which shows this construction in the Iraqi Arabic spoken in Northern Iraq:

NORTHERN IRAQI ARABIC

(3.42) clitic-doubling

شفته لأحمد

šift=u  le=Ahmad

saw.1S=him  for=Ahmad

‘I saw [him] Ahmad.’

Significantly, in (3.42) again we see a human direct object and a grammaticalized preposition.

Another variety of Arabic with clitic-doubling is the Arabic variety in Çukurova, Turkey (George Grigore, p.c.); notice the different preposition (3.43):

ÇUKUROVA ARABIC

(3.43) CLITIC-DOUBLING OF HUMAN DIRECT OBJECT

أحمد يحبه على أبوه

Ahmad yhibb=u  ❖ala abu=hu.

Ahmad loves=him  on  father=his

‘Ahmad loves [him] his father.’

The sentence in (3.43) from Çukurova Arabic also has the human direct object and the grammaticalized preposition. Interesting about this example is that the preposition is not the usual l(i) we observed in Lebanese Arabic, Palestinian Arabic and Northern Mesopotamian Arabic, but the preposition ❖ala “on”. This is strikingly similar to the Romanian clitic-doubling strategy, where the preposition is pe “on”.

Wherever the clitic-doubling strategy occurs in varieties of Arabic, it follows the same pattern known as the clitic-doubling construction in Romanian and River Plates Spanish in that the doubled object is human and preceded by a preposition.

In this section I presented known as well as novel clitic-doubling data from some varieties of Arabic and argued that, similar as in Romanian or River Plates Spanish, the strategy always targets human objects and it has a designated grammaticalized preposition. In the next section I present an analysis of the clitic-doubling strategy as φP.

3.2.4 Clitic-doubling: an analysis

Previously in the literature authors proposed a complex-DP for clitic-doubling constructions (Kayne 1972; 2002; Uriagereka 1988; 1995; Torrego 1992; Zubizarreta 1998; Cechetto 2000; Boeckx 2003; Roberts 2010). Uriagereka (1995) treats clitics as determiners; as such, Ds may select for null NP-complements; doubled DPs are
specifiers in complex-DPs consisting of D and a null complement, where clitics are determiners (3.44):

(3.44) URIAGEREKA'S (1995) STRUCTURE OF DP IN CLITIC-DOUBLING

\[\text{Weak clitics} \]
\[
\begin{array}{c}
\text{DP} \\
\text{(double) D'} \\
\text{D} \\
\text{clitic} \\
\text{NP} \\
\text{pro}
\end{array}
\]

Boeckx (2003) suggests that pronouns with antecedents in A-positions should also be treated as a complex DP in which the pronoun has an NP complement and thus be no different in their underlying syntax than the pronouns with antecedents in A’-positions, but he does not explore this idea in depth.

I also propose that the clitic pronoun and its double start as a complex constituent at First Merge, but I part with previous analyses in that I take the pronoun not to be of category D, but of category \(\phi\) and its double is the NP-complement of \(\phi\). Assuming that the doubled nominal is a complement rather than a specifier is better from a minimalist perspective, because this analysis does not have to stipulate an empty category of some sort – \(\text{pro}\) – as complement of the clitic pronoun. Assuming that the clitic pronoun is of category \(\phi\) instead of D is better because it explains straightforwardly why the doubling-pronoun moves.

In the previous chapter, in section (§2.4), I showed that after movement from a complement of V position, the clitic pronoun raises to IP. This becomes relevant when we look at the derivation of the clitic-doubling strategy.

Consider the Romanian sentence in (3.45), where a pronoun obligatorily doubles a human direct object.
(3.45) **CLITIC-DOUBLING WITH DIRECT OBJECT**

**a. obligatory clitic-doubling**

Laura 1-a văzut pe băiat la bibliotecă.
Laura **him**=Aux.3S seen pe boy at library
‘Laura saw [him] the boy in the library.’

**b. gap is illicit**

*Laura ____a văzut pe băiat la bibliotecă.
Laura ____Aux.3S seen pe boy at library
‘Laura saw the boy in the library.’

The example in (3.45a) is a declarative main clause in which the pronoun 1-“him” doubles the direct object băiat “boy”. The lack of the pronoun in (3.45b) renders the sentence ungrammatical. I propose that the obligatoriness of the pronoun with human direct objects should be accounted for formally by a strong feature on human nouns in Romanian which requires they merge as complement of a φ-pronoun. Human nouns in Romanian have a feature, let’s call it [*human] which needs to be valued by a pronoun; this makes the human nouns in Romanian become complements of a φ-pronoun. In the example (3.45a), băiat enters the derivation bearing the feature [*human] and merges with the pronoun, which has a [*human] feature as in (3.46, Step 1):

(3.46) **Step 1: structure of DP in clitic-doubling**

```tree
dp
  |   
  pe   d'
  |   
  d   φp
  |   
  φ'  
  |   
  φ[*human]   n[*human]
  |   
  il-   băiat
```
There is a peculiarity about Romanian definite nouns preceded by prepositions: they do not have an overt definite article, but they are understood as definite. As far as I know, though this peculiarity has been mentioned in the literature (Dobrovie-Sorin 1990), it has not been fully addressed. A solution that the definite article is part of an extended head with the preposition has been proposed in a squib (Dobrovie-Sorin 2007). This peculiarity of Romanian does not bear on the current analysis. I will assume that the article exists in D, but is not phonologically realized. I will later show the derivation in Palestinian Arabic, a language in which the article is phonologically realized.

After the First Merge of the pro-φ l “him” with the noun bāiat “boy”, and then the external merge of D, pe is merged in the specifier of DP (see §4.5 for an analysis of pe). The new merger will create (3.46, Step 2):

(3.46) **Step 2**: merge pe in the specifier of [DP [φ P [φ l] [N bāiat]]

Then the lexical verb is merged in V, taking the complex-DP as complement. Then v is merged, taking the VP as complement. After little v is merged, the verb raises from its base position to v and φ also raises to value the φ-features of v, as detailed in (§3.1.2). The representation of the derivation is given in (3.46, Step 3):
(3.46) **Step 3**: movement of the clitic

Then, the entire v complex in (3.46, Step 3) raises to I.

This analysis proposes that Merge does not only imply that heads have categorial selectional features which make them select for a particular kind of complement, but that the complements also can have strong features which require them to be selected by a certain type of head. Considering a system which assumes that there is a Hierarchy of Projections (Adger 2004), then whenever there is a human noun in Romanian, it always has a φP above it, as in (3.47):

(3.47) **HIERARCHY OF PROJECTIONS**

\[ \varphi > N[*\text{human}] \]

The topic of how categories get selected and what orders the hierarchy of projections is currently lively debated in the literature. Though the hierarchy universally orders clause
structre as mentioned earlier (§3.1.1), there is variability across languages with respect to feature strength and feature interpretability.

Returning to the observation that in (3.46) the definite article is not phonologically realized, in [Palestinian] Arabic, on the other hand, the definite article is phonologically realized with definite nouns preceded by a preposition. Consider (3.41), given below as (3.48):

PALESTINIAN ARABIC (Shlonsky 1997; 194)

(3.48) CLITIC-DOUBLING

\[ \text{fhimt=ha la l-m\text{\text}alme} \]
understood.1S=her for the=teacher.F
‘I understood [her] the teacher.’

The sentence in (3.48) is a declarative main clause in which the pronoun ha-“her” doubles the direct object l-m\text{\text}alme “the teacher”. The derivation of the complex-DP in (3.48) is given in (3.49):

(3.49) THE DP-STRUCTURE IN PALESTINIAN ARABIC CLITIC-DOUBLING CONSTRUCTION

\[
\begin{array}{c}
\text{DP} \\
\text{la} \\
\text{D'} \\
\text{D} \\
\text{il} \\
\varphi P \\
\varphi' \\
\varphi \\
\text{ha} \\
\text{N[*human]} \\
\text{m\text{\text}alme}
\end{array}
\]

However, the difference between Romanian and Palestinian Arabic is that in Romanian the clitic-doubling construction is obligatory, but in Palestinian Arabic it is not. For Romanian, I proposed that the obligatoriness of the clitic-doubling construction arises because human nouns are endowed with the feature [*human] that has to be valued by
the φ pronoun. This cannot in its entirety be extended to Palestinian Arabic, because it could not explain sentences like (3.50):

**PALESTINIAN ARABIC** *(Shlonsky 1997; 179)*

(3.50) NO CLITIC-DOUBLING

a. *full-DP direct object*

فهمت المعلمة

fhimt l-mʕalme

‘I understood the teacher.’

b. *pronominal direct object*

فهمتها

fhimt=ha

‘I understood her.’

Considering that clitic-doubling is not obligatory in Palestinian Arabic, then it must be that φ does not obligatorily select human definite nouns. In Palestinian Arabic φ can either select for an overt complement or it simply does not select for one. When however φ selects a complement, then the complement must be a human noun. Unlike in Romanian, where there is a bottom-up selectional requirement with definite human nouns, in Palestinian Arabic, the selection occurs in the usual top-down way.

This analysis of clitic-doubling also opens up the question regarding the subject position, because there is no clitic-doubling with subjects in any of the languages for which I showed in this chapter evidence of clitic-doubling with objects: Romanian, Arabic, Spanish.

A relevant observation is that all these languages are pro-drop and at the same time, they do not have subject clitics; this observation must be correlated to the one that there is no clitic-doubling with subjects. In fact, it has been observed that no Romance language can be both pro-drop and have subject clitics at the same time *(Roberts 2010)*. When a pronoun does appear in subject position it is the strong pronoun, not the clitic and, besides this, it is correlated with an emphatic interpretation which has given rise to analyses where this overtly expressed subject is in an A’-position *(Contreras 1991; Dobrovie-Sorin 1994; Barbosa 1997; Lopez 2003)*, not in the canonical one.

The last issue to be discussed concerning clitic-doubling is the absence of clitic-doubling with subjects. My proposal for clitic-doubling was that there is a complex-DP which is formed when a φ pronoun and a human definite noun merge at First Merge. Recall also that in *(§2.2)* I showed that with respect to the morphological form, strong pronouns in Romanian appear in positions where Nominative case is licensed: subject

---

13 with the exception of some Northern Italian and Tuscan dialects which are the subject of lively research *(Roberts 2010).*
and object of preposition (though from a traditional grammar perspective, the object of preposition is functionally Accusative), while clitics appear in positions where Accusative, Dative or Genitive are licensed. When the complex-DP is selected as complement by a verb, a position which is generally associated with the Accusative case, the clitic pronoun receives Accusative case and is realized phonologically. With regard to subjects, when the complex-DP is probed by I and raises to SpecIP\textsuperscript{14} – the position of the subject -, φ with Nominative case cannot be phonologically realized. In other words, the essence of pro-drop is a phonologically unrealized φ pronoun.

3.3 Conclusion

In this chapter I presented an analysis of the cliticisation process in Romanian and Iraqi Arabic in which the clitic pronoun raises from its base position to a derived position to check its features against a probe. I used this analysis as part of the analysis for clitic-doubling in that I parted with previous analyses of clitic-doubling by taking the pronoun to be of category φ, rather than D, which helps explain why it raises to a derived position. I showed that in clitic-doubling contexts, the clitic pronoun and its double start as a complex constituent at First Merge, and in parting with previous analyses, the double is the NP-complement of φ, rather than an NP that raises to a SpecD position. For Romanian I proposed that the obligatory of the clitic pronoun with human direct objects is accounted for formally by a strong feature on human nouns that requires they merge as complement of a φ-pronoun.

\textsuperscript{14} whether the subject is externally merged in SpecIP or it has raised to this position from SpecvP is irrelevant to the discussion.
4. RESUMPTION: DEFINITION AND ANALYSIS

With respect to resumption, in this thesis I aim to (i) use the distinction between two different syntactic strategies called “resumptive” - true resumption and intrusive resumption - to account for the distribution of resumption in Arabic and Romanian and to clarify this distinction at least for Arabic and Romanian and (ii) focus on true resumption as syntactic phenomenon and as interface phenomenon. In this chapter I discuss the distinction between true resumption and intrusive resumption (§4.1), I present the resumptive data in Iraqi Arabic (§4.2), I propose an analysis of resumption (§4.3) and I discuss the head movement of the resumptive pronoun (§4.4).

4.1 Resumption: the foundation

Before embarking on yet another journey into the realm of resumption, it is essential to clearly present what a resumptive pronoun really is, because the term “resumption” is used in connection with many languages and diverse phenomena such as: the A’-binding of pronouns observed in Celtic, Semitic and other languages, the phenomenon of rescuing island violations (i.e. gaps in syntactic domains from which movement is deemed impossible) by inserting a pronoun at the extraction site or that of inserting a pronoun in deeply embedded structures. Nevertheless, a clear distinction has to be made between all these “resumptive” contexts in order to obtain an accurate description of the empirical facts observed in various languages and also in order to aim for an appropriate analysis. Resumption does not appear in each and every language. It is not possible to thoroughly discuss all of these contexts in connection with all languages for which they have been observed, because of space constraints. For example, there is a long standing discussion of syntactic islands in English; in this discussion, pronouns that appear in islands and make it “better” are called “resumptive pronouns”. Independently of this, there is another discussion about pronouns that in other languages appear freely in contexts where a gap is otherwise expected, such as relativization or questions; in this discussion such pronouns are also called “resumptive”. In this thesis I focus on resumptive pronouns that appear freely in contexts where a gap would be expected.

The syntactic strategy of avoiding island violations by inserting a pronoun at the extraction site is widely spread across languages, but the syntactic strategy of A’-binding of pronouns is productive only in some languages. The set of languages in which pronouns appear in islands only partially coincides with the set of languages in which pronouns can act as operator bound variables. Even the distribution of pronouns across types of island varies among languages that allow for this strategy.

In this section I aim to establish the foundation for resumption on which I will build the argument of the thesis: true resumption – free A’-binding of pronouns - and intrusive resumption – island rescue - are two distinct syntactic phenomena. I present
true resumption (§4.1.1) and then I present intrusive resumption, focusing on island data in various languages (§4.1.2). This distinction is of fundamental importance in understanding the syntax of certain constructions, for example the construction with A’-bound pronouns in Romanian, which is detailed and analysed in chapter 5, but not only this - as will be detailed in the remainder of the thesis.

### 4.1.1 Eligibility for being a resumptive pronoun (Sells 1984)

Various authors have observed that in some languages pronouns appear in contexts in which in other languages they are ungrammatical. Consider the English relative clause in (4.1):

**ENGLISH**

(4.1) RELATIVE CLAUSE

a. The man whom I saw ____ in the library is a famous writer.

b. *The man whom I saw him in the library is a famous writer.

In the English relative clause in (4.1), a gap indicated by “___” occupies the thematic position of the moved direct object *whom* which is found in a non-argumental position – an A’-position. The relation between *whom* which is in an A’-position and the gap – its extraction site - is known as an A’-dependency. In other words, *whom* binds the gap. In English, the gap strategy is the only strategy to form relative clauses.

Consider the a Hebrew relative clause in (4.2):

**HEBREW** (Sells 1984)

(4.2) RESUMPTIVE PRONOUN – OPERATOR BOUND VARIABLE

ze ha’iʃ je oto ra’iti etmol

this the=man that him saw.1S yesterday

‘This is the man that I saw [him] yesterday.’

In (4.2) there is a pronoun – *oto* “him” – at the extraction site, not a gap. In light of what we have seen about the English relative clause in (4.1), sentences like the Hebrew (4.2) have been puzzling to syntacticians.

Since Sells (1984), authors have expanded the research on resumption and have uncovered many interesting empirical facts in other languages; at the same time, with the development of the theory, authors were able to propose novel analyses. On the empirical side, resumption is the way of life in Celtic (Irish, Welsh) and Semitic (Arabic, Hebrew). It occurs either as an option (Hebrew) or obligatorily (Arabic). In these languages, resumption may occur with direct objects, indirect objects and objects of preposition, and not with subjects or adjuncts. Other languages for which resumption has been attested, such as Swedish and Vata (a Niger-Congo language), have only resumption with subjects. On the theoretical side, this has been attributed by authors to
the fact that subject resumptives in Swedish and Vata behave exactly like \textit{wh}-traces, whereas object resumptives in Celtic and Arabic do not behave exactly like \textit{wh}-traces, but have a rather dual nature (McCloskey 1990; Rouveret 2011) in that they display both properties of pronouns and of \textit{wh}-traces. Also, with respect to their interpretation, resumptive pronouns have been argued to have the semantic properties of pronouns, not of gaps (Doron 1982; Sells 1984; Sharvit 1999; Guilliot 2006; Malkawi 2009).

The definition of a resumptive pronoun is given in (4.3):

(4.3) \textbf{DEFINITION OF A RESUMPTIVE PRONOUN (Rouveret 2011)}:

\begin{quote}
The overt pronominal element found in some languages in the variable position of unbounded A’-dependency constructions—the latter include relative clauses, constituent questions, comparative clauses, dislocation and focus constructions.
\end{quote}

Sells’ (1984) seminal contribution is to argue that the pronoun in (4.2) is possible because the language (i.e. Hebrew, in this case) allows for pronouns to be interpreted as variables bound by an operator. The Hebrew relative clause in (4.2) contains a \textbf{true resumptive pronoun}: (i) Sells argues that this pronoun appears in a non-island context, or in other words it appears freely in a relative clause, (ii) the pronoun is interpreted as a bound variable and (iii) it is bound by an operator.

Now, about this operator in (4.2), a few words are in order, because the particulars of the analysis in this thesis are different than those proposed in Sells (1984). In brief, an operator is an element found in an A’-position which binds a variable; the operator and the variable are the two elements essentially present in an A’-dependency (such as the one in a relative clause, for example). The theory has developed and advanced over the years regarding the identification of the operator. Back in 1984, authors had not yet proposed a CP projection; rather syntactic trees had an S’ node. S’ did not have a specifier position. Its head was COMP (4.4):

(4.4) \textbf{THE SENTENCE PROJECTION IN EARLIER TRANSFORMATIONAL GRAMMAR}

![Diagram of the sentence projection in earlier transformational grammar](image)
In light of this, Sells’ (1984) analysis of (4.2) is that *that* resides in COMP. After the extension of the X'-model to functional projections, S' became CP – a functional projection which has a head position, C, and a specifier position, SpecCP. For relative clauses such as (4.2) authors proposed that *that* resides in C and that there is a null operator in SpecCP. In brief, regardless of the details of the analysis throughout time, the pronoun *him* finds itself in a binding relation just as the gap does. This binding of a pronoun from an A'-position is possible in Hebrew, but not in English. In this thesis I argue that *that* is a complementizer (“subordinative conjunction” in traditional grammar terminology) which resides in C and is categorically different from a relative pronoun, which resides in SpecC. This difference in the element introducing the relative clause is one of the factors which makes resumption either optional (in case the relative clause is introduced by a complementer) or obligatory (in case it is introduced by a relative pronoun and the language allows for pronouns to be operator bound). I discuss this in detail in (§4.2.2).

Back to the issue of whether pronouns can be interpreted or not as bound variables, Sells (1984) observes that in English pronouns cannot be interpreted as bound variables (4.5):

ENGLISH (Sells 1984)

(4.5) ANTECEDENT: REGULAR NP VERSUS QUANTIFIER PHRASE

a. regular NP

I’d like to meet the linguist whom Mary couldn’t remember if she had seen___/ him before.

b. quantifier phrase

I’d like to meet every linguist whom Mary couldn’t remember if she had seen___/ *him before.

The difference between the two sentences in (4.5) is that *the linguist* in (4.5a) is a regular NP, while *every linguist* in (4.5b) is a quantifier phrase. This difference is relevant because quantifier phrases only participate in bound variable anaphora. In (4.5a) the pronoun *him* has as antecedent the NP *the linguist*. But in (4.5b), since the quantifier phrase *every linguist* can only participate in bound variable anaphora, the sentence is fine with the gap, because the gap can function as a bound variable in English. The fact that (4.5b) is ungrammatical with a pronoun reveals that in English the pronoun cannot function as a bound variable directly bound by a quantifier. In other words, (4.5a) is possible with the pronoun, because the pronoun does not function as a bound variable; in (4.5b) the pronoun is illicit because only a bound variable is possible in that position in English.

However, in a language like Hebrew, unlike English, pronouns can take a quantifier phrase as antecedent (4.6):
HEBREW (Sells 1984)

(4.6) ANTECEDENT: REGULAR NP VERSUS QUANTIFIER PHRASE
kol gever я Dina xojevet я hu ohev et Rina
‘every man that Dina thinks that he loves et Rina
‘every man that Dina thinks that he loves Rina…’

The Hebrew sentence in (4.6) is grammatical; the pronoun hu “he” has as antecedent the quantifier phrase kol gever “every man”; in other words, pronouns in Hebrew can function as bound variables in contexts in which in English only a gap can function as bound variable.

That resumptive pronouns are pronouns which can function as operator bound variables is the foundation on which Sells (1984) builds his analysis of resumptive pronouns in the languages that he researched (Swedish, Hebrew, Irish and Welsh). There are additional assumptions which Sells (1984) makes in order to explain the empirical data found in these languages, but they are not relevant in this thesis. The additional requirements necessary for resumption to occur that this current thesis proposes are detailed in the following sections of this chapter; for a brief preliminary overview, they are: (i) the nature of the elements introducing the relative clause and (ii) the nature of the pronoun itself. More on these in section (§4.3).

Sells (1984) argues that there are two kinds of resumptive pronouns: true resumptive pronouns – as in examples (4.2) and (4.6) – which are pronouns that are bound by an operator and function as bound variables, and intrusive resumptive pronouns – as in example (4.5a) – which are pronouns that appear inside islands as a repair for island violations (Chao & Sells 1983; Sells 1984; Bianchi 2002). In this thesis, as starting point I adopt Sells’ (1984) division into true resumption and intrusive resumption. This is of crucial importance because true resumption and intrusive resumption are distinct phenomena: though pronouns may improve the grammaticality of islands as in (4.5a), they may not appear freely in a non-island context (4.1b). In this thesis I propose and operate with the following definition of true resumption (4.7):

(4.7) DEFINITION OF TRUE RESUMPTION

True resumption appears freely in non-island contexts and it cannot rescue islands.

I will discuss intrusive resumptives and islands in (§4.1.2).

To summarize this section, true resumptive pronouns are pronouns that can function as operator bound variables; in other words they appear in contexts in which in English only a gap can be expected. In this thesis, whenever “resumptive” or “resumptive pronoun” is used, it refers to the element described in (4.7) unless otherwise noted.
To follow up on the distinction between true resumption and intrusive resumption illustrated in this section, in the next section I talk about pronouns and their relation to islandhood. The point I attempt to make is that since true resumption and intrusive resumption are distinct phenomena, the presence or absence of intrusive resumption in a language cannot be taken as indication of absence or presence of true resumption in that same language.

4.1.2 Resumption does not equal island saving

So far, following Sells (1984), we have seen that there are two distinct phenomena that involve pronouns: true resumption and intrusive resumption. Of course, nothing rules out the possibility that there are languages in which both true resumption and intrusive resumption can occur. I will illustrate this with some varieties of Arabic.

Recall that intrusive resumption refers to the syntactic phenomenon where pronouns appear inside islands as a repair for island violations (Chao & Sells 1983; Sells 1984; Bianchi 2002). Firstly, I aim to explain the theory which connects islands and pronouns. The example in (4.8) is a classic example of an island saved by a pronoun:

ENGLISH (Ross 1986)

(4.8) INTRUSIVE RESUMPTION

a. *I just saw a girl who Long John’s claim that ____ was a Venusian made all the headlines.

b. I just saw a girl who Long John’s claim that she was a Venusian made all the headlines.

The clause in (4.8a) ungrammatical, while the presence of the pronoun she in (4.8b) seems to improve the grammaticality of the sentence\(^\text{15}\). The pronoun in (4.8b) is an *intrusive resumptive pronoun* in Sells’ (1984) terminology. Sells (1984) argues that in (4.8b) the pronoun *she* has an E-type interpretation (Evans 1980), not a bound variable one.

Since (Ross 1986), authors have identified other types of islands (Cinque 1990; Szabolcsi & denDikken 1999); these will be discussed whenever it becomes relevant for the topic at hand.

Authors (Sells 1984; Aoun & Benmamoun 1998; Aoun et al 2001; Boeckx 2003; Malkawi 2009) observe that in the languages which have true resumption, pronouns that appear in islands (i) appear in all types of islands and improve grammaticality, as is claimed to be the case of Hebrew (Sells 1984) or (ii) improve the grammaticality of only some types of islands, while having no improvement effect on other types of islands, as is the case in Arabic (Aoun & Benmamoun 1998; Aoun et al 2001; Sterian 2011), Greek

\(^{15}\) The sentence in (3.10b) is better than the ungrammatical one in (3.10a), but it is very contentious in the literature as to whether it is actually fully grammatical.
(Boeckx 2003; Alexopoulou 2006) or Welsh (Rouveret 1994). By this observation alone, it follows that the behaviour of pronominal elements in island contexts – intrusive resumption - is not a criterion for deciding whether a language has true resumption or not.

To exemplify this, I focus on Arabic, because it is a language on which resumption has been studied in great detail and for which it is not contested in any way that it has true resumption. Though Arabic has true resumptive pronouns, still pronouns in Arabic do not necessarily improve the grammaticality of some types of islands. In fact, some islands, such as adjunct islands or complex-NP islands, cannot be saved by pronouns in Arabic. This will become relevant later in this thesis (chapter 5) when I will argue against claims that, because in Romanian resumption does not save islands, this constitutes evidence that Romanian does not have resumption (Dobrovie-Sorin 1990).

In the following I discuss island data from various Arabic vernaculars in an attempt to illustrate that in a language which indisputably has true resumption, pronouns do not necessarily improve the grammaticality of islands. In other words, though pronouns can be A’-bound in Arabic, still pronouns are illicit in some island contexts. In the following I examine data from Lebanese Arabic, Jordanian Arabic and Iraqi Arabic. Lebanese Arabic has been the object of lively research on resumption. Firstly, observe a true resumption context in Lebanese Arabic (4.9):

**LEBANESE ARABIC (Aoun & Choueiri 1997)**

(4.9) **TRUE RESUMPTION**

a. resumptive

l-kteeb yalli ftaray=o mbeerIH d'af'a
the=book.M which bought.1S=him yesterday lost

‘The book that I bought [it] yesterday is lost.’

b. gap

*l-kteeb yalli ftaray_____ mbeerIH d'af'a
the=book.M which bought.1S_____ yesterday lost

‘The book that I bought yesterday is lost.’

The Lebanese Arabic example in (4.9) is a relative clause. The example in (4.9a) contains the pronoun o “him” at the extraction site. The lack of this pronoun, or in other words the presence of a gap at the extraction site, renders the sentence ungrammatical (4.9b). The pronoun o “him” in (4.9) is a true resumptive pronoun (Aoun & Choueiri 1997).

Notice how the presence of a pronoun in an island context does not improve grammaticality in Lebanese Arabic (4.10):
The sentence in (4.10) is an island example in which the presence of the pronoun *“him”* does not improve grammaticality. In other words, the pronoun *“him”* is not able to save this island. If (4.9) and (4.10) were the only facts we looked at, then we would wrongly conclude that Lebanese Arabic only has true resumption, because as assumed in (4.6), true resumption cannot rescue islands. However, this is not the whole story. Observe now a different example in this same language where a pronoun does improve the grammaticality of an island (4.11):

**LEBANESE ARABIC (Aoun & Benmammoun 1998)**

(4.11) **WH-ISLAND**

**a. resumption**

\[
\text{Smọft } ?\text{nnu Naadya, byaʃrfo } ?\text{ayya walad } \text{feef=a.} \\
\text{heard.1S that Nadia know.3P which boy saw.3S=her} \\
\]

*I heard that Nadia, they know which boy saw her.*

**b. gap**

\[
*\text{Smọft } ?\text{nnu Naadya, byaʃrfo } ?\text{ayya walad } \text{feef=} \\
\text{heard.1S that Nadia know.3P which boy saw=} \\
\]

*I heard that Nadia, they know which boy saw.*

The example in (4.11) is an island in Lebanese Arabic. Notice how in (4.11a) the sentence containing an island with the pronoun *“her”* inside it is grammatical. But notice how in (4.11b) the lack of the pronoun renders the sentence ungrammatical. In other words, the pronoun saves the island. How can it be that in Lebanese Arabic the pronoun saves the island in (4.11), but does not save the island in (4.10)? To understand this it is relevant to note that islands come in different varieties. The example in (4.10) is a Complex-NP island, while the example in (4.11) is a *wh*-island. At this point a discussion of island types becomes relevant.

Authors who work on islands divide them into two major categories: strong islands and weak islands (Cinque 1990; Szabolcsi & den Dikken 1999). Strong islands are islands that can at best contain a DP-gap and weak islands are islands that allow a PP-gap (Cinque 1990), as in (4.12):
(4.12) CINQUE’S (1990) DEFINITION OF STRONG VERSUS WEAK ISLANDS
Among the domains that do not allow all standard extractions, those that allow a PP-gap are weak islands and those that can at best contain a DP-gap are strong islands.

Returning to resumption, it has been argued that in some languages – most relevantly for the discussion here, some Arabic dialects – resumption can rescue extraction out of weak, but not strong islands (Aoun et al 2001; Boeckx 2003; Sterian 2011).

To summarize the facts about Lebanese Arabic, it (i) has true resumptive pronouns, (ii) pronouns do not rescue strong islands and (iii) pronouns rescue weak islands\textsuperscript{16}. In other words, Lebanese Arabic is a language which has both true resumption and intrusive resumption.

Let’s now move on to facts observed for Jordanian Arabic with respect to resumption and islands (Malkawi 2009). Firstly, notice that, like Lebanese Arabic, Jordanian Arabic has true resumption (4.13):

JORDANIAN ARABIC (Malkawi 2009)

(4.13) TRUE RESUMPTION
a. resumption
l-ktab illi ḫtarayt-uh mbariH d'aša
the=book.M which bought.1S=him yesterday lost
‘The book that I bought [it] yesterday is lost.’

b. gap
* l-ktab illi ḫtarayt___ mbariH d'aša
the=book.M which bought.1S___ yesterday lost
‘The book that I bought___ yesterday is lost.’

The Jordanian Arabic example in (4.13) is a relative clause. As before, notice that (4.13a) contains the pronoun uh “him” at the extraction site. The lack of this pronoun renders the sentence ungrammatical (4.13b). The pronoun uh “him” in (4.13) is a true resumptive pronoun in the sense of Sells (1984). Moving on to islands, consider the weak island context in (4.14):

\textsuperscript{16} It is beyond the scope of this thesis to discuss why in Lebanese Arabic pronouns improve grammaticality of weak islands but have no such effect on strong islands.
The example in (4.14) is a weak island in Jordanian Arabic. Notice how in (4.14a) the sentence containing an island with the pronoun *uh* “him” inside it is grammatical, while in (4.14b) the lack of the pronoun renders the sentence ungrammatical. So far, Jordanian Arabic and Lebanese Arabic behave similarly, in that pronouns are grammatical in weak islands in both these vernaculars. However, Jordanian Arabic and Lebanese Arabic behave differently with respect to strong islands in that Lebanese Arabic pronouns cannot save strong islands, while Jordanian Arabic pronouns can, as seen in (4.15):

(4.15) STRONG ISLAND (COMPLEX-NP)

a. pronoun inside island

\[
\text{tˤaːliːb}=\text{ha} \quad \text{l-kasul} \quad \text{ma} \quad \text{bidha} \quad \text{tiʃrif} \quad \text{wala} \quad \text{mʃallmih} \\
\text{student.}\text{M}=\text{hers} \quad \text{the}=\text{bad} \quad \text{Neg} \quad \text{want.2Pl} \quad \text{tell.2Pl} \quad \text{no} \quad \text{teacher.}\text{F}
\]

\[
\text{ʕan} \quad \text{l-bent} \quad \text{illi} \quad \text{saʃadat}=\text{uh} \quad \text{b-l-faḤis} \quad \text{about} \quad \text{the}=\text{girl} \quad \text{which} \quad \text{helped}=\text{him} \quad \text{in}=\text{the}=\text{exam} \\
\text{‘Her bad student, you don’t want to tell any teacher about the girl who helped [him] in the exam.’}
\]

The example in (4.15) is a strong island. The sentence contains the pronoun -*uh* “him” and is grammatical.

As discussed above, and illustrated again in (4.16), Hebrew has true resumption:
In (4.16) the pronoun oto “him” appears at the extraction site, where we would expect a gap. This is a case of true resumption. Like Jordanian Arabic - but unlike Lebanese Arabic – Hebrew resumptives can also appear in strong islands (4.17):

The example in (4.17) is a strong island: (4.17b) is ungrammatical because it contains a gap at the extraction site, but (4.17a) contains the pronoun oto “him” at the extraction site and is grammatical. In Hebrew strong islands can be saved by pronouns.

So far, we know that of three languages which have true resumption, namely Hebrew (Sells 1984; Borer 1984), Lebanese Arabic (Aoun & Choueiri 1997; 2000; Aoun & Benmammoun 1998; Aoun et al 2001) and Jordanian Arabic (Malkawi 2009), in Hebrew and Jordanian pronouns save all types of islands, but Lebanese Arabic pronouns only save weak islands. A first set of conclusions that can be drawn from this data are that (i) there are languages in which both true resumption and intrusive resumption are possible and (ii) intrusive resumption displays variability: the pronouns may save only weak islands or both weak and strong islands.

Let us now turn to Iraqi Arabic. This is a language with true resumptive pronouns. Consider the examples in (4.18), which illustrate resumption in Iraqi Arabic in the context of relativization. In (4.18a), the pronominal element –h ‘him’ occupies the thematic A-position of the moved constituent iltiy ‘whom’, which is in an A’-position. In (4.18b) there is a gap in the thematic A-position: in the context of relativization, the gap strategy is ill-formed in Iraqi Arabic.
Consider the weak island context in (4.19):

IRAQI ARABIC

(4.18)  a. resumptive strategy

الرجال إلي شفته ببيت سهى كاتب عظيم.

ir-ridqāː iliyi jēft=ah eb=beyt Suha ka:tib ʔaːˈyim
the-man whom saw.1S=3MS in house Suha writer great
'The man whom I saw [him] at Suha's house is a great writer.'

b. gap strategy

الرجال إلي شفته ببيت سهى كاتب عظيم.*

*ir-ridqāː iliyi fuft____ eb=beyt Suha ka:tib ʔaːˈyim
the-man whom saw.1S____ in house Suha writer great
'The man whom I saw ______ at Suha's house is a great writer.'

The example in (4.18) is a non-island context; note that resumption is obligatory. So far, Iraqi Arabic behaves in a similar fashion to Hebrew, Lebanese Arabic and Jordanian Arabic in that it has true resumption in the sense of Sells (1984). Consider the weak island context in (4.19):

IRAQI ARABIC

(4.19)  wh-ISLAND

a. resumptive strategy

يا صورة لأبنها سامر يسأل إذا كل مرة شفقتها؟

which picture.F of-son=her Samer ask.3MS if every woman

ʃagagat=ha
tore.3FS=3F
'Which photo of her son did Samer wonder if every woman tore [it] ?'

b. gap strategy

يا صورة لأبنها سامر يسأل إذا كل مرة شفقتها?

which picture.F of-son=her Samer ask.3MS if every woman

ʃagagat____
tore.3FS____
'*Which photo of her son did Samer wonder if every woman tore _____ ?'

Like Lebanese Arabic and Jordanian Arabic, Iraqi Arabic pronouns are grammatical in weak islands. Consider now the Iraqi Arabic island context in (4.20) in which a pronoun cannot save a complex-NP island (i.e. strong island):

The example in (4.20) is a non-island context; note that resumption is obligatory, unlike the case for (4.19).
To summarize the facts about Iraqi Arabic, it (i) has true resumptive pronouns, demonstrates that a pronoun is equally ungrammatical. In this section I did not aim to explain how islands work or why, for example, in variability in that, for example, in Jordanian Arabic all types of islands can have their idea that resumptive pronouns only save islands is not accurate, and (ii) languages illustrate is that (i) there are languages where resumptive pronouns freely appear in non-patterns with Lebanese Arabic and against Jordanian Arabic and Hebrew, because weak grammaticality improved by pronouns, but in Lebanese Arabic and in Iraqi Arabic only Romanian data, a language which was considered not to have resumption on account of

IRAQI ARABIC

(3.20) COMPLEX-NP ISLAND

a. resumption

.flatMap

false

"True resumptive pronouns, demonstrated by the fact that a pronoun is equally ungrammatical.

*telmi=a ha iʃ-ʃa:ʃer ma triddun txabbrun wala: muʃalma

student=her the=smart Neg want.2Pl inform.2Pl no teacher.F

\(\text{can il=bnaya illy safadat=a\text{١٠} bi=l=imtiHa:n}

about the=girl who helped.3FS=him at=the=exam

\text{Her smart student, you didn’t want to inform any teacher about the girl who helped him in the exam.}

b. gap

flatMap

false

"False resumptive pronouns, demonstrated by the fact that a pronoun is equally ungrammatical.

*telmi=a ha iʃ-ʃa:ʃer ma triddun txabbrun wala: muʃalma

student=her the=smart Neg want.2Pl inform.2Pl no teacher.F

\(\text{can il=bnaya illy saʃadat=\_ bi=l=imtiHa:n}

about the=girl who helped.3FS=\_ at=the=exam

\text{"Her smart student, you didn’t want to inform any teacher about the girl who helped \_ in the exam."

As (4.20b) shows, a gap in the island is ungrammatical, as expected. But (4.20a) demonstrates that a pronoun is equally ungrammatical.

To summarize the facts about Iraqi Arabic, it (i) has true resumptive pronouns, (ii) pronouns do not rescue strong islands and (iii) pronouns are grammatical in weak islands. With respect to the behaviour of pronouns in island contexts, Iraqi Arabic patterns with Lebanese Arabic and against Jordanian Arabic and Hebrew, because weak islands may be saved by a pronoun, but strong islands cannot be.

In this section I did not aim to explain how islands work or why, for example, in Jordanian Arabic some types of islands are rescued by pronouns and the same types of islands are not rescued by pronouns in Lebanese Arabic or Iraqi Arabic. What I aimed to illustrate is that (i) there are languages where resumptive pronouns freely appear in non-island contexts – true resumptives in the sense of Sells (1984); this in itself tells us that the idea that resumptive pronouns only save islands is not accurate, and (ii) languages may have both true resumption and intrusive resumption; among these languages, there is variability in that, for example, in Jordanian Arabic all types of islands can have their grammaticality improved by pronouns, but in Lebanese Arabic and in Iraqi Arabic only weak islands have their grammaticality improved. This is important in discussing the Romanian data, a language which was considered not to have resumption on account of

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the fact that pronouns do not improve the grammaticality of some islands (Dobrovie-
Sorin 1994).

In order to leave this section with a clearer picture of resumptive pronouns and
their distribution in different languages, see the summary in Table 5:

<table>
<thead>
<tr>
<th>Language</th>
<th>True resumption (pronouns as bound variables)</th>
<th>Strong island</th>
<th>Weak island</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Lebanese Arabic</td>
<td>√</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Iraqi Arabic</td>
<td>√</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Jordanian Arabic</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Hebrew</td>
<td>√</td>
<td>?</td>
<td>?</td>
</tr>
</tbody>
</table>

Table 5. Distribution of true resumptive pronouns and intrusive resumptive pronouns

In the following, every time the word “resumption” or “resumptive” is used, it is to be understood as “true resumption/true resumptive” as detailed in (§4.1).

In the remainder of this chapter I present an overview of resumption in Iraqi Arabic (§4.2) and then an analysis of resumption (§4.3).

### 4.2 Resumption in Iraqi Arabic

In Iraqi Arabic, resumption can be impossible, obligatory, or it can alternate with a gap. The contexts in which resumption is obligatory are relativization and left dislocation. Resumption is optional in D-linked content questions and impossible with bare interrogatives (except for long distance direct object extraction). Table 6 shows this distribution:

<table>
<thead>
<tr>
<th></th>
<th>Relativization</th>
<th>Interrogation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gap</td>
<td>Re</td>
</tr>
<tr>
<td>Subject</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Direct Object</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Prepositional Object</td>
<td>x</td>
<td>√</td>
</tr>
</tbody>
</table>

Table 6. Distribution of resumption in Iraqi Arabic

17 I could not find a Hebrew weak island example in the literature so far.
In the next sections I describe each resumptive environment: relativization (§4.2.1), key players in relativization: the relative pronoun and the resumptive pronoun (§4.2.2), D-linked content questions (4.2.3) and questions with bare interrogatives (4.2.4).

4.2.1 Relativization in Iraqi Arabic

Right from the start I want to draw attention to the two facts about relativization in [Iraqi] Arabic18. Firstly, relative clauses are constructed with a designated relative pronoun: *illyi “which”*; this designated relative pronoun in Iraqi Arabic is invariable in gender and number, unlike its counterpart in Classical/ Modern Standard Arabic, which inflects for gender, number and case. In all modern vernaculars the case morphology is lost, so implicitly the relative pronoun does not display any case morphology. Unlike English, relative clauses in Iraqi Arabic cannot be constructed with a conjunction (i.e. “that”) and cannot have a silent relative pronoun/conjunction as English does either (i.e. “The man I saw…”); this is detailed in (§4.2.2).

The second key factor about relativization in [Iraqi] Arabic is that where there is resumption in relativization, it is always obligatory (unlike Hebrew, for example, where it is always optional).

Resumption is obligatory with direct objects and prepositional objects (remember from (§4.4.2) that the indirect object is also prepositional, therefore I do not list it separately from the prepositional object example). Resumption is illicit with subjects and adjuncts. Though some languages such as Catalan (Lopez 2009) have a designated resumptive adverbial for adjuncts, Arabic does not. These descriptive details are shown in Table 7:

<table>
<thead>
<tr>
<th>Argument</th>
<th>Gap</th>
<th>Resumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Direct Object</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Object of Preposition</td>
<td>x</td>
<td>√</td>
</tr>
</tbody>
</table>

Table 7. Resumption and Gap strategies in Iraqi Arabic relativization

In the following I present the relativization data in Iraqi Arabic: with subjects (4.21) direct objects (4.22), prepositional objects (4.23):

---

18 Whenever I use square brackets, i.e. “[Iraqi] Arabic”, the statements following apply to all varieties of Arabic, namely Classical, Modern Standard and modern vernaculars (eg. “relativization is constructed with a designated relative pronoun”) but the empirical data is from Iraqi, with its specifics (eg *illyi “which”*). Whenever a phenomenon appears (to my knowledge) only in Iraqi Arabic, then I use “Iraqi Arabic”. For generic statements which to my knowledge apply to all Arabic varieties I use just “Arabic”.

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IRAQI ARABIC

(4.21) SUBJECT RELATIVIZATION

a. *gap

الرجال اللي___ اجي من بغداد كان قاعد هناك، عألقفة.

*il=redza:l illyi ___ ?idza men Bagdad ḫa:n ga:xed hna:k, ʕal
the=man who ____ came.3S from Baghdad was sitted there on
qana:fa
armchair
‘The man who____ came from Baghdad was sitting there, on the armchair.’

b. *resumption

الرجال اللي* هو اجي من بغداد كان قاعد هناك، عألقفة.

*il=redza:l illyi hwwa ?idza men Bagdad ḫa:n ga:xed hna:k,
the=man who he came.3S from Baghdad was sitted there
ʕal qana:fa.
on armchair
‘*The man who [he] came from Baghdad was sitting there, on the armchair.’

(4.22) DIRECT OBJECT RELATIVIZATION

a. *gap

الكاتب اللي شفت__ بالبيت سهى كان خليل جبران.

*il=ka:teb illyi sheft__ eb-be:t Suha ḫa:n Khalil Jubran
the=writer whom saw.1S__ at=house Suha was Khalil Jubran
‘The writer whom I saw____ in Suha’s house was Khalil Jubran.’

b. *resumption

الكاتب اللي شفته بالبيت سهى كان خليل جبران.

il=ka:teb illyi sheft=ah eb-be:t Suha ḫa:n Khalil Jubran
the=writer whom saw.1S=him at=house Suha was Khalil Jubran
‘The writer whom I saw [him] in Suha’s house was Khalil Jubran.’
Firstly, let us look at the claim that resumption is illicit with subjects. A question that arises concerns the syntactic status of subject agreement on the verb. On the one hand, if agreement is treated as a pronominal element, then subject agreement will have the status of a resumptive element, and Iraqi Arabic would be analysed as having subject resumption. But if agreement is not a pronominal element for the purposes of establishing an A’-dependency, then Iraqi Arabic would be analysed as a language in which subject resumption is illicit. To choose between these two alternatives, in Sterian (2011) I examined island contexts reasoning that if in such island contexts, subject agreement by itself is sufficient to license an A’-dependency, then one could conclude that subject agreement has the status of a pronominal element for the purposes of resumption. But if an additional pronoun was needed in such contexts, then one could conclude that subject agreement is not a pronominal element for the purposes of resumption. The relevant data are given in (4.24) and (4.25) for wh-islands and adjunct islands respectively. In (4.24a) and (4.25a), where there is subject agreement only, extraction from the island is illicit. And in (4.24b) and (4.25b), where an overt subject pronoun is present, extraction from the island is licit:

---

19 Notice that the preposition *bi* occurs three times in this Iraqi Arabic sentence, though I glossed differently each time, because I don’t have a one-to-one translation for it. In Modern Standard it is used with the instrumental complement, but in Arabic dialects it has also taken up the task of *fi* “in” which is extinct, and sometimes it takes up the task of *maša* “with” which in Modern Standard (as well as some varieties) it is used to form the associative complement.

---

(4.23) PREPOSITIONAL OBJECT

**a. gap**

*الرجال اللي التقى به بالكتبة كان دارس بغداد.*

*il=redʒa:1 illyi elteqa bi __ bi=l=maktaba ṭaː:n daːres eb-bagdad*

the=man who met.3S with__ at=the=library was learner in=Baghdad

‘The man with whom he met in the library studied in Baghdad.’

**b. resumption**

*الرجال اللي التقى به بالكتبة كان دارس بغداد.*

*il=redʒa:1 illyi elteqa bi=h bi=l=maktaba ṭaː:n daːres eb-bagdad*

the=man who met.3S with=him at=the=library was learner in=Baghdad

‘The man with whom he met in the library studied in Baghdad.’
(4.24) **WH-ISLAND**

a. *no overt pronoun*

> منو يتساءل راغب ليش باست بهجت بالحفلة؟

*minnu: ytasa:il  Ragheb le:j___ ba:sit  Behjet bi-l-Hafla who wonder.3MS Ragheb why____ kissed.3FS Behjet at-the-party

'*Who is Ragheb wondering why ___ kissed Behjet at the party ?'

b. *overt pronoun*

> منو يتساءل راغب ليش هي باست بهجت بالحفلة؟

minnu: ytasa:il  Ragheb le:j  hyi ba:sit  Behjet bi-l-Hafla who wonder.3MS Ragheb why she kissed.3FS Behjet at-the-party

'Who is Ragheb wondering why she kissed Behjet at the party ?'

(4.25) **ADJUNCT ISLAND**

a. *no overt pronoun*

> منقول سامر لراجل شوقت راح تمشي ليبغداد؟

*minnu: ga:l  Samer li-Ragheb  fw:aget____ ra:H timʃi: who said.3MS Samer to-Ragheb when___ will go.3FS

li-Baghdad
to-Baghdad

'Who did Samer say to Ragheb when ___ will go to Baghdad ?'

b. *overt pronoun*

> منقول سامر لراجل شوقت هي راح تمشي ليبغداد؟

minnu: ga:l  Samer li-Ragheb  fw:aget hyi ra:H timʃi: li-Baghdad who said.3MS Samer to-Ragheb when she will go.3FS to-Baghdad

'Who did Samer say to Ragheb when she will go to Baghdad ?'

But in (§4.1) I argued that pronouns that improve island grammaticality represent intrusive resumption, a distinct syntactic phenomenon than true resumption. In the light of this, what the data in (4.24) and (4.25) shows is that subject agreement does not function as intrusive resumption to rescue an island. Since true resumption is a distinct syntactic phenomenon from true resumption – since true resumption does not occur in islands (§4.1) – we cannot use this test to see whether subject agreement works as a resumptive element with respect to true resumption and the data in (4.24) and (4.25) does not contribute direct evidence for the lack of subject resumption in cases of true resumption.

On the other hand, just as discussed regarding lack of clitic-doubling with subjects (§3.2.4), the lack of resumption with subjects may be correlated with the fact that these languages are pro-drop. However, this does not necessarily lead to the
conclusion that subject agreement can function as a resumptive pronoun. My analysis of lack of clitic-doubling with subjects discussed in (§3.2.4) can be straightforwardly extended to resumption: when the complex-DP is selected as complement by a verb, the clitic pronoun receives Accusative case and is realized phonologically. With regard to subjects, when the complex-DP is probed by a functional head in whose configuration Nominative is licensed, φ will not be phonologically realized (§3.6.4).

In this section I presented the relativization data in Iraqi Arabic. In brief, resumption is obligatory with direct objects and objects of preposition and illicit with subjects. In the following section I focus on the relative pronoun.

### 4.2.2 Complementizers versus relative pronouns

In this section I focus on the distinction between elements that can introduce relative clauses: the element residing in C, which in traditional grammar is known as subordinative conjunction and the element residing in SpecCP, known in traditional grammar as relative pronoun. In the literature, these two distinct categories are often thrown under the generic umbrella of “complementizer”, which I find inaccurate. I find that the distinction is necessary, because the subordinative conjunction and the relative pronoun are each involved in a different syntactic relativization strategy. I argue that the relative pronoun is tied to obligatory resumption, while the subordinative conjunction is not.

Authors (Shlonsky 1992; Boeckx 2003; Alexopoulou 2006) have looked at complementizers in connection with resumption, but do not draw the distinction between conjunctions and relative pronouns in a systematic way. Shlonsky (1992) argues that the type of complementizer used in Hebrew and in Palestinian Arabic has a role in the choice of either gap or resumption; however, he does not discuss the fact that Hebrew uses a conjunction, while Palestinian Arabic uses a relative pronoun. In fact, Sells (1984) claims that Hebrew does not have relative pronouns; Arabic, on the other hand, can relativize only with the designated relative pronoun. A fundamental difference between Hebrew and Arabic is that where Hebrew has optional resumption, Arabic has obligatory resumption, and I will argue that this difference is easily captured if we take into account the nature of the elements in CP: in Hebrew, there is a conjunction in C and no overt category in SpecCP, while in Arabic there is a relative pronoun in SpecCP and no overt category in C.

Boeckx (2003) looks at chain formation in resumptive constructions and argues that complementizers play a decisive role. However, he does not make a distinction between conjunctions and relative pronouns, which he calls “complementizers”; he does not draw distinction between obligatory and optional resumption either. Building on McCloskey’s (1990) famous distinction between the complementizer which appears in gap constructions and the one that appears only with resumption, Alexopoulou (2006) argues that there is a distinction also in Greek between the various types of complementizers and their interaction with gap or resumption, though her analysis is
different than the one proposed in Boeckx (2003). I think the distinction between complementizer and relative pronoun is highly relevant however, because there seems to be a clear connection between the fact that in Arabic and Romanian there is a designated relative pronoun and there is obligatory resumption (note that this is just one of the requirements for resumption and it is not enough on its own), while languages which use conjunctions in relativization either have optional resumption or obligatory gap.

From now on in this thesis I reserve the term “complementizer” to refer to subordinative conjunctions. In this thesis, I use the following working definitions of complementizer (4.26) and of relative pronoun (4.27):

(4.26) **definition of complementizer**
subordinative conjunction that introduces declarative clauses and which is base generated in C: for example “that” in *I know that you read Dickens*; in this example, *that* is the head of the CP and resides in C.

(4.27) **definition of relative pronoun**
element introducing relative clauses which is analysed as having moved from its base position to SpecCP: for example “*which*” in *The book which I read is by Dickens*; in traditional grammar it is called *relative pronoun*. This element is of category D (Kayne 1994) and moves from its base position to SpecCP (by a raising analysis of relative clauses).

Comparative data from Middle English is more revealing than modern English with respect to *that* being base generated and *which* having moved from a base position to a higher position: that is a complementizer residing in C and that which are in SpecC (Keyser 1975; Chomsky and Lasnik 1977). Consider for exemplification the following excerpt from Chaucer, where *which that* occurs very frequently (4.28):

(4.28) **WHICH THAT IN MIDDLE ENGLISH**
‘The ascendent sothly, as wel in alle nativites as in questions and eleccions of tymes, is a thing which that these astrologiens gretly observen.’

(Chaucer’s Astrolable Treatise of 1391, edited by James E. Morrison)

Chomsky & Lasnik (1977) note that of all the known cases of *which that, which* appears to the left of *that* and argue that *which* moves from a base position all the way up to COMP to the left of the complementizer *that* (4.29):

(4.29) **CHOMSKY & LASNIK’S (1977) RULE OF WH-MOVEMENT:**
*Move the wh-phrase in the COMP position, to the left of the complementizer.*
Let us expand on this distinction between complementizer and relative pronoun. Unlike English and many other languages among which, for example, Greek and Spanish, in relativization Arabic and Romanian use only a designated relative pronoun (an “agreeing complementizer” in Boeckx’s (2003) terminology). Example (4.30a) shows a relative clause in English formed with the complementizer *that* and (4.30b) a relative clause in English formed with the relative pronoun *which*.

\[(4.30)\] *English relativization*

a. The book that I read…

b. The book which I read…

Kayne (1994) proposes an analysis of relative clauses which in the meantime has become known as “the raising analysis”. Assuming the raising analysis of relative clauses, the derivation of (4.30a) is different than the derivation of (4.30b), because the conjunction *that* in (4.30a) resides in C, *book* originates as complement of the verb *read* and it raises through SpecDP to SpecCP, while in the construction with the relative pronoun *which* in (4.30b) C is empty, *which book* originates as complement of *read* and raises to SpecCP, where *book* further raises to SpecDP in order to obtain the linear word order *the book which*.

In constructions such as the Romanian relative clause in (4.31), Kayne (1994) proposes that *care* is a relative pronoun of category D which starts out in the derivation together with its complement NP *carte* as the DP-complement of the verb. Further, based on analyses proposed in Dobrovie-Sorin (1987) and Cornilescu (1992), Kayne (1994) proposes that the DP *care carte* “which book” raises to SpecCP, and then “the head noun of the NP in SpecCP raises out of CP and left-joins to D”.

\[(4.31)\] *Romanian (Kayne 1990)*

\[\text{relative clause}\]

*cartea pe care am citit-o*

*book=the.F pe which Aux.1S read=her*

‘the book which I read’

Resuming the discussion of Arabic, let’s look at a clear-cut example of resumption in [Iraqi] Arabic. The relative clause example in (4.18) is repeated below for convenience as (4.32). As noted earlier, in (4.32a), there is an A’-dependency between the relative operator *illyi* and the pronoun –*h ‘him*. In (4.32b) the gap strategy is ill-formed.
 IRAQI ARABIC  

(4.32) a. resumptive strategy

الرجال إلي شفته ببيت سهى كاتب عظيم.

*ir-ridgDar: illyi jef=ah eb=beyt Suha ka:tiib ʕaɗ’yim
the-man whom saw.1S=3MS in house Suha writer great
'The man whom I saw [him] at Suha's house is a great writer.'

b. gap strategy

*ir-ridgDar: illyi jef_____ bi=beyt Suha ka:tiib ʕaɗ’yim
the-man whom saw.1S_____ in house Suha writer great
'The man whom I saw _____ at Suha's house is a great writer.'

The relative clause in (4.32a) cannot be formed by using a complementizer (4.33); the presence of the obligatory resumptive pronoun ɓ “him” in the (4.33a) or its absence in (4.33b) makes no difference: both relative clauses in (4.33) are ungrammatical because of the complementizer:

 IRAQI ARABIC  

(4.33) RELATIVIZATION ILLICIT WITH CONJUNCTIONS

a. resumption

*ir-ridgDar: ennu: juf=hu/_ bi=beyt Suha ka:tiib ʕaɗ’yim
the-man that saw.1S=3MS/____ in house Suha writer great
"The man that I saw [him]/____ at Suha's house is a great writer.'

b. gap

*ir-ridgDar: ennu: juf_____ bi=beyt Suha ka:tiib ʕaɗ’yim
the-man that saw.1S_____ in house Suha writer great
"The man that I saw ____ at Suha's house is a great writer.'

The examples in (4.32) and (4.33) illustrate that (i) Iraqi Arabic relative constructions are formed only with a relative pronoun and not with a complementizer and (ii) Iraqi Arabic relative constructions require an obligatory resumptive pronoun.

Note that the strategy used in (4.33) – relativization with complementizer - is the strategy used in Hebrew (4.34):
HEBREW (Sells 1984)

(4.34) RELATIVIZATION

a. resumption

ha=ʔif fe pagaʃti oto
the=man that met.1S him
‘The man that I met [him].’

b. gap

ha=ʔif fe pagaʃti____
the=man that met.1S____
‘The man that I met____.’

In (4.34) the relative clause is introduced by fe which is the declarative complementizer in Hebrew

HEBREW (4.35)

DECLARATIVE COMPLEMENTIZER

amart ti le-Adrian fe ha=sfarim al=ha=ʃulhan
said.1S to=Adrian that the=books on=the table
“I said to Adrian that the books are on the table.”

The example in (4.34) shows that (i) relativization is formed with a complementizer – the declarative complementizer observed in (4.35) – and (ii) resumption is optional. As I pointed out earlier, Sells (1984) claims that Modern Hebrew does not have relative pronouns; however, data presented in Borer (1984) points to the presence in Hebrew of an element in CP - ʔaʃer - which cannot function as a declarative complementizer (4.36):

HEBREW (Borer 1984)

(4.36) NOT A DECLARATIVE COMPLEMENTIZER

David ʔaʃer fe/ʔaʃer Rina baʔa ʔetmol
David said.3S that/ *which Rina came yesterday
‘David said that Rina came yesterday.’

In (4.36) ʔaʃer cannot be used as a declarative complementizer, just as the example (4.37) shows that ʔiʃiyi cannot be used as a declarative complementizer in Arabic:

---

20 Hebrew sentences throughout that are not cited from the literature, but they are courtesy of Adrian Andrițoiu.
IRAQI ARABIC

(4.37) DECLARATIVE SENTENCE

a. with the declarative complementizer ennu:

إيمن قال tài إنه سامر يجيء باكر.
Iman galat ennu: Samer yđyi bafr
Iman said.3FS that Samer come.3MS tomorrow
‘Iman said that Samer will come tomorrow.’

b. with illyi

*إيمن قال التي سامر يجيء باكر.
*Iman galat illyi Samer yđyi bafr
Iman said.3FS which Samer come.3MS tomorrow
*‘Iman said which Samer will come tomorrow.’

Borer (1984) shows that ʔafer can only introduce relative clauses (i.e. it follows the relative head) as in (4.38):

HEBREW (Borer 1984)

(4.38) RELATIVE CLAUSE INTRODUCED BY ʔafer

ze ha-if fe/?ʔafer Rina ?amra fe/*ʔafer Xana ?ohevet
this the=man that/which Rina said that/which Hana loves
‘This is the man that Rina said that Hana loves.’

Borer (1984) claims that ʔafer is endowed with D-features; so far this analysis is similar to mine, namely that in some languages there are elements in CP which are designated to introduce relative clauses. However, example (4.38) also shows that resumption is still optional, not obligatory, even though ʔafer is used. An explanation for this may have to do with the fact that the resumptive pronoun in Hebrew is not a clitic, but a weak pronoun; the properties of these two types of pronouns are different (see chapter 2). I argue that only clitic pronouns can form a complex-DP with the relative pronoun at First Merge.

The fact that Arabic uses a designated relative pronoun and not a conjunction to form relative clauses is essential to my analysis, because I argue that resumption is obligatory in Arabic because the relative pronoun illyi - of category D - has a categorial selectional feature that requires it to merge with a φP – the resumptive – at First Merge. This analysis is detailed in (§4.3.2).

If we continue with the reasoning that a designated relative pronouns is correlated with obligatory resumption, we would expect the presence of the relative pronoun to require obligatory resumption in Iraqi Arabic. This is indeed borne out in Iraqi Arabic – as we have seen - where in relative constructions, which are only grammatical with the relative pronoun and ungrammatical with the complementizer, resumption is obligatory. In D-linked content questions, which are formed with an
interrogative pronoun that is not morphologically similar with the relative pronoun, resumption is not obligatory, but only optional.

Consider now the example in (4.39) which shows a D-linked content question in Iraqi Arabic; notice the presence of the D-linked interrogative ya ‘which’ and the possibility of both gap (4.39a) and resumption (4.39b):

(4.39) D-LINKED CONTENT QUESTION IN IRAQI ARABIC

a. extraction with gap

إيمان يا رجال شافت بالحفلة ؟
Iman ya:  ridʒa:l ja:fit  bi-l-Hafia
Iman which man saw.3FS at-the-party
'Which man did Iman see at the party ?'

b. extraction with resumption

إيمان يا رجال شافت بالحفلة ؟
Iman ya:  ridʒa:l ja:fit=a:l bi-l-Hafia
Iman which man saw.3FS=a:L at-the-party
'Which man did Iman see [him] at the party ?'

From examples (4.32) and (4.39) we can see that in Iraqi Arabic (i) the presence of the relative pronoun requires obligatory resumption and (ii) resumption is no longer obligatory, but optional (both gap and resumption are grammatical) when the D-linked interrogative which is morphologically different from the relative pronoun is used.

Though in this thesis I am not discussing Irish in length, it is worth noting that McCloskey (1979, 1990) argues that Irish has two complementizers with which it forms relative clauses, namely aL and aN; aL requires a gap and aN requires a resumptive pronoun. Relevant to my argumentation here is that McCloskey (1979) argues that aL is not a relative pronoun. This can be tied with the fact that resumption is not possible in relatives with aL. This confirms my intuition that, in general, relatives formed with complementizers either have optional resumption or obligatory gap. However, the Irish facts may still pose a problem for my analysis, because aN is also a complementizer and it requires a resumptive pronoun. McCloskey (1979) solves the problem by analysing both aL and aN as “lexical complementizers”. The one which appears in resumptive constructions – aN – appears in C just as aL does, but there is a null operator in SpecCP of the relative clauses in whose C aN resides. This kind of approach is not possible for Romanian, for example, because care “which” from example (4.31) appears in questions besides relative clauses, indicating clear diagnostics of wh-movement to SpecCP. Also,

21 The subject in questions always occupies the first position in Iraqi Arabic, the interrogative pronoun comes second. On a larger scale, it has been observed that modern vernaculars display both VSO and SVO (Shlonsky 1997; Aoun 1999; Brustad 2000; Owens et al 2009); it has been proposed that the subject of SVO is actually a topic (Brustad 2000; Owens et al 2009). This however does not bear on the analysis in this thesis.
Romanian care inflects; Arabic illyi derives diachronically from al-laðy, which inflected for number, gender and case. These could not be analysed as C-heads.

At this point it seems that with respect to resumptive strategies on the one hand we come to a divide between languages that relativize using relative pronouns (i.e. a D-type element in SpecCP), such as Arabic and Romanian, and languages that relativize using complementizers (i.e. C-heads), such as Hebrew and Irish; on the other hand there is a divide between languages that have resumptive pronoun clitics, such as Arabic, Romanian and Irish, and languages that have weak pronouns as resumptives, such as Hebrew. Table 8 tries to capture this cross-linguistic variation:

<table>
<thead>
<tr>
<th>Relativization strategy</th>
<th>Clitics</th>
<th>Weak pronouns</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Optional resumption</td>
<td>Obligatory resumption</td>
</tr>
<tr>
<td>Complementizer</td>
<td>Irish aN</td>
<td>Hebrew fe</td>
</tr>
<tr>
<td>Relative pronoun</td>
<td>Romanian care</td>
<td>Hebrew afer</td>
</tr>
<tr>
<td></td>
<td>Arabic illyi</td>
<td></td>
</tr>
</tbody>
</table>

Table 8. Cross-linguistic distribution of pronominal types versus elements that introduce relative clauses in resumptive strategies

In my analysis of resumption in Romanian and in Arabic, I established that in these languages the relative pronoun is of category D and has a categorial selectional feature that requires it to take a $\varphi P$ as complement. My analysis does not predict that only clitic pronouns (i.e. $\varphi P$) can be part of true resumption structures; Hebrew is a language in which non-clitic pronouns are resumptives. I further propose that for a language like Hebrew, for example, the relative pronoun afer may take a weak pronoun as complement, hence the optionality of resumption. One difference to be noted between resumption in Arabic and Romanian on the one hand and resumption in Hebrew on the other hand is that in Arabic and Romanian resumption is obligatory and it is not associated with a pragmatic effect, but in Hebrew it is optional and it is associated with a pragmatic effect (see examples (6.4)-(6.5) in chapter 6). In this thesis I have argued that obligatory resumption is a syntactic phenomenon, while optional resumption is a phenomenon at the syntax-pragmatics interface (§6). Optional resumption in Hebrew can be accounted for with the tools used in chapter 6.

Irish relatives are introduced by a complementizer and resumption is obligatory. The complementizer is base generated in C; I propose that a possible analysis of the Irish data in line with my analysis of resumption in Arabic and Romanian is that a D-element with a categorial selectional feature takes a $\varphi P$ as complement at the beginning of the
derivation. The D-element moves to SpecCP, but remains covert because of the presence of the complementizer in C (similarly to the *that*-trace effect).

### 4.2.3 Resumption in D-linked content questions

The distinction between D-linked and non-D-linked *wh*-phrases is due to Pesetsky (1987). Based on English data, he observes that there are differences in the extraction possibilities between *wh*-phrases consisting of a *wh*-determiner and an overt NP (e.g. “which book”, “which woman”) and those that are bare (e.g. “who”, “what”). Given the peculiar behaviour of *which*-phrases, Pesetsky (1987) refers to them as D-linked (for Discourse-linked); he notes that with *which*-phrases, the set of felicitous answers is limited to the set of objects which both speaker and hearer have in mind. It is in this sense that *wh*-phrases are discourse-linked. However, no such requirement is imposed on bare interrogative expressions such as *who*, *what* or *how many*. Pesetsky (1987) notes that *which*-phrases seem to function pronominally in that they are "familiar" rather than novel. To exemplify this, Pesetsky (1987) gives the examples in (4.42):

**ENGLISH (Pesetsky 1987)**

(4.40) a. Some men entered the room. Mary talked to *them*.
   b. Some men entered the room. *Which ones* did Mary talk to ?
   c. Some men entered the room. *Who* did Mary talk to ?

Pesetsky’s interpretation of (4.40) is as follows: "*In (4.40b) it is natural, almost obligatory, to assume that the question is asking for a choice among the men who entered the room. In (4.40c) considerations of textual connectedness make this assumption possible, but much less natural*".

Another notable difference between the behaviour of bare interrogative expressions and the D-linked ones is that Superiority effects appear with bare interrogative expressions and disappear with D-linked ones (Pesetsky 1987, 2000; Aoun & Li 2003, Boeckx 2003). Pesetsky (2000) further acknowledges that any attempt to explain the semantic sources of the syntactic properties of D-linking will require more conclusive investigation of this issue.

Much of what has been done on resumption in spoken Arabic relies heavily on examples with D-linked interrogative expressions (Aoun et al 2001, Guilliot & Malkawi 2006, 2009; Malkawi 2009).

In Iraqi Arabic D-linked content questions, resumption is optional with direct object extraction and obligatory with objects of preposition. The results for resumption with D-linking in Iraqi Arabic are summarized in Table 9:
Table 9. Resumption and Gap strategies in Iraqi Arabic root and embedded D-linked content questions

<table>
<thead>
<tr>
<th>Argument</th>
<th>Local extraction</th>
<th>Long distance extraction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gap</td>
<td>Resumption</td>
</tr>
<tr>
<td>Subject</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Direct Object</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Object of Preposition</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>

With D-linked interrogative expressions, subject extraction allows only the gap strategy, as in (4.41). Recall from (§4.2.1) that relativization of subject position also leaves a gap and that I proposed that this lack of subject resumption is given by $\varphi$ with Nominative being not phonologically realised.

IRAQI ARABIC

(4.41) SUBJECT

a. extraction with gap

يا صديقة اشترت شقة بغداد؟

ya: Sadi:ga iştırat*[jīgga bi-Baghdad which friend.F bought.3FS apartment in-Baghdad

'Which friend bought an apartment in Baghdad?'

b. extraction with resumption

*يا صديقة اشترت هي شقة بغداد؟

*ya: Sadi:ga istrarat *hī:jīgga bi-Baghdad which friend.F bought.3FS she apartment in-Baghdad

'Which friend [she] bought an apartment in Baghdad?'

In contrast with subject extraction, direct object extraction allows both the gap strategy and the resumptive strategy, as in (4.42). As for prepositional objects (4.43), they allow only resumption, as preposition stranding is ungrammatical in Arabic; also, PP-fronting allows only the gap strategy, because Arabic does not have resumptives for entire prepositional phrases.

(4.42) DIRECT OBJECT
a. extraction with gap

Iman ya: ridʒa:l fa:jet ____ bi-l-Hafla
Iman which man saw.3FS ____ at-the-party
'Which man did Iman see ____ at the party ?'

b. extraction with resumption

Iman ya: ridʒa:l fa:jet=eh bi-l-Hafla
Iman which man saw.3FS=3MS at-the-party
'Which man did Iman see [him] at the party ?'

(4.43) PREPOSITIONAL OBJECT

a. extraction with gap

*Suha ya: muʃallim iltergat wu:ya: ____ bi-l-kulli:a
Suha which professor met.3FS with ____ at-the-faculty
'Which professor did Suha meet with ____ at the faculty ?'

b. extraction with resumption

Suha ya: muʃallim iltergat wu:ya=:h bi-l-kulli:a
Suha which professor met.3FS with=3MS at-the-faculty
'Which professor did Suha meet with [him] at the faculty ?'

c. PP-fronting

Suha wu:ya: ya: muʃallim iltergat bi-l-kulli:a
Suha with which professor met.3FS at-the-faculty
'With which professor did Suha meet at the faculty ?'

With long-distance extraction we observe the same contrasts. While subjects allow only the gap strategy (4.44), direct objects allow both the gap and resumptive strategy, as in (4.45). Prepositional objects (4.46) allow only resumption; as stated before, PP-fronting does not employ resumption.

(4.44) SUBJECT
a. extraction with gap

Ragheb ya: Sadiga ydry ennu: _____ iftarat fiigga
Ragheb which friend.F know.3MS that_____ bought.3FS apartment

bi-Baghdad
in-Baghdad

'Which friend does Ragheb know that ____ bought an apartment in Baghdad ?'

b. extraction with resumption

*Ragheb ya: Sadiga ydry ennu: hi iftarat fiigga
Ragheb which friend.F know.3MS that she bought.3FS apartment

bi-Baghdad
in-Baghdad

'Which friend does Ragheb know that she bought an apartment in Baghdad ?'

(4.45) DIRECT OBJECT
a. extraction with gap

Behjet ya: mraya yaśaraf ennu: Iman ja:fet_____ bi-l-Hafla
Behjet which woman know.3MS that Iman saw.3FS____ at-the-party

'Which woman does Behjet know that Iman saw____ at the party ?'

b. extraction with resumption

Behjet ya: mraya yaśaraf ennu: Iman ja:fet=ha bi-l-Hafla
Behjet which woman know.3MS that Iman saw.3FS=3FS at-the-party

'Which woman does Behjet know that Iman saw [ her] at the party ?'

(4.46) PREPOSITIONAL OBJECT
In this section I presented the data on resumption in D-linked content questions. In brief, resumption is optional with direct object extraction and obligatory with prepositional object extraction and illicit with subject extraction.

### 4.2.4 Resumption with bare interrogatives

Unlike other varieties of Arabic, such as Egyptian (Wahba 1984) and Jordanian (Malkawi 2009), Iraqi Arabic does not have resumption with local extraction in bare interrogatives. With long distance extraction, resumption is possible – as one option – with direct object extraction. This is summarised in Table 10:
Table 10. Resumption and Gap strategies in Iraqi Arabic root and embedded content questions with bare interrogatives

The important point to note here is that there is a clear distinction in the behaviour of D-linked interrogatives and bare interrogatives with respect to resumption. Authors (Sharvit 1999; Aoun et al 2001; Boeckx 2003; Alexopoulou & Keller 2003; Alexopoulou 2006; Guilliot & Malkawi 2006, 2009; Malkawi 2009; Rouveret 2011; Sterian 2011) note that (i) resumption co-occurs with D-linking across-linguistically, suggesting that they are closely connected and (ii) in contrast, even languages which allow or require resumption with D-linked content questions do not permit it – or permit it only in very restricted contexts – in bare interrogatives.

First consider local extraction. Here bare interrogatives allow only the gap strategy with extracted subjects and objects, as in (4.47) and (4.48). As discussed above, extracted prepositional objects (4.49), they permit neither the gap strategy nor the resumptive strategy, reflecting the general prohibition against P-stranding in Arabic and the lack of resumptives for entire PPs (4.50):

(4.47) Subject extraction of bare interrogative - local

a. Subject extraction with gap
من هو اشترى الجريدة البارحة؟
minnu: hwu išṭara il- djarıda il-ba:riha?
*Who [he] bought the newspaper yesterday?*

b. Subject extraction with resumption
من هو اشترى الجريدة البارحة؟
*minnu: išṭara il- djarıda il-ba:riha?
who bought. 3MS the-newspaper yesterday
"Who bought the newspaper yesterday?"
(4.48) DIRECT OBJECT EXTRACTION OF BARE INTERROGATIVE - LOCAL

a. Direct object extraction with gap

إيمان منو شافت ببيت عواطف؟
Iman minnu: ja:fat bi-beyt Awatif
Iman who saw.3SF in-house Awatif
'Whom did Iman see at Awatif’s house ?'

b. Direct object extraction with resumption

*إيمان منو شافت ببيت عواطف؟
*Iman minnu: ja:fat=hu bi-beyt Awatif
Iman who saw.3SF=3MS in-house Awatif
'#Whom did Iman see [him] at Awatif's house ?'

(4.49) PREPOSITIONAL OBJECT EXTRACTION OF BARE INTERROGATIVE - LOCAL

a. Object of preposition extraction with gap

*راغب منو الثقي بالمكتبة ويا؟
*Ragheb minnu: iltaga bi-l-maktaba wuya: ___
Ragheb who met.3MS at-the-library with___
'Whom did Ragheb meet at the library with___ ?'

b. Object of preposition extraction with resumption

*راغب منو الثقي وياه بالمكتبة؟
*Ragheb minnu: iltaga wuya:=h bi-l-maktaba
Ragheb who met.3MS with=him at-the-library
'#Whom did Ragheb meet with [him] at the library ?'

(4.50) PP-FRONTING WITH BARE INTERROGATIVE - LOCAL

راغب ويا منو الثقي بالمكتبة؟
Ragheb wu:ya: minnu: iltaga bi-l-maktaba
Ragheb with who met.3MS at-the-library
'With whom did Ragheb meet at the library ?'

With bare interrogatives, long-distance extraction from subject position only allows the gap strategy, as in (4.51). Long-distance extraction from the object position permits both gap and resumption, as in (4.52). And long-distance extraction of the prepositional object is ruled out: neither gap nor resumption are possible, as in (4.53). PP-fronting is also possible with long-distance extraction (4.54):
(4.51) SUBJECT EXTRACTION OF BARE INTERROGATIVE – LONG-DISTANCE
a. Subject extraction with gap

إيمان منو تعتقد شاف أحمد بالحلفة؟
Iman minnu: taṣataqid____ fa:f Ahmad bi-l-hafla
Iman who think:2S____ saw:3MS Ahmad at-the-party
'Who does Iman think ____ saw Ahmad at the party ?'

b. Subject extraction with resumption

إيمان منو تعتقد هو شاف أحمد بالحلفة؟
*Iman minnu: taṣataqid huwwa fa:f Ahmad bi-l-hafla
Iman who think:2S he saw:3MS Ahmad at-the-party
'Who does Iman think [he] saw Ahmad at the party ?'

(4.52) OBJECT EXTRACTION OF BARE INTERROGATIVE - LONG-DISTANCE
a. Direct object extraction with gap

سهى منو تعتقد راح يعزم أحمد؟
Suha minnu: taṣataqid ra:H yaʕzim____ Ahmad ?
Suha who think.3FS will invite.3MS____ Ahmad
'Whom does Suha think that Ahmad will invite____ ?'

b. Direct object extraction with resumption

سهى منو تعتقد راح يعزمه أحمد؟
Suha minnu: taṣataqid ra:H yaʕzim=hu Ahmad ?
Suha who think.3FS will invite.3MS=3MS Ahmad
'Whom does Suha think that Ahmad will invite [him] ?'

(4.53) PREPOSITIONAL OBJECT EXTRACTION OF BARE INTERROGATIVE - LONG-DISTANCE
a. Prepositional Object extraction with gap

إيمان منو تعتقد إنه بهجت كتب الرسالة إلى؟
*Iman minnu: taṣataqid ennu: Bahjat kitab ir-risala ?ila____
Iman who think.3FS that Bahjat wrote.3MS the-letter to____
'Whom does Iman think that Bahjat wrote the letter to ?'

b. Prepositional Object extraction with resumption

إيمان منو تعتقد إنه بهجت كتب الرسالة له؟
*Iman minnu: taṣataqid ennu: Bahjat kitab ir-risala la=hu
Iman who think.3FS that Bahjat wrote.3MS the-letter to=3MS
'Whom does Iman think that Bahjat wrote the letter to [him] ?'
In this section I presented the data on resumption in questions with bare interrogatives. In brief, with local extraction resumption is not possible with either subject, direct object or prepositional object. In long distance extraction, resumption is not possible with subjects and prepositional objects. A curious fact which turns out to be important is that resumption is possible – but only optional – with direct object long-distance extraction. In chapter 6 I argue that this instance of optional resumption as observed in long distance extraction of direct objects has a pragmatic effect.

In the next section I focus on the syntactic analysis of resumption: after discussing the analyses that have been put forward in the literature (§4.3.1), I present my own analysis (§4.3.2).

4.3 Resumption: an analysis

In this section I make an excursion through the literature on resumption, focusing on works in which the resumptive pronoun is approached as being a definite description (§3.2.1). This is relevant to the current thesis, because I analyse resumptive pronouns as a φP which is part of a complex DP at First Merge (§3.2.2).

4.3.1 Previously in the most recent literature on resumption in Arabic

Previous work on resumption in other varieties of Arabic includes Lebanese (Aoun & Benmammoun 1998; Aoun & Choueiri 2000; Aoun et al 2001; Choueiri 2003), Palestinian (Shlonsky 1992; 1997), Egyptian (Wahba 1984; Demirdache 1991) and Jordanian (Guilliot 2006; Guilliot and Malkawi 2006; 2009; 2011; Malkawi 2009). The earliest theories differentiate between the gap strategy, which is analysed as the result of movement of a constituent to an A’-position leaving behind a gap or a trace, and the resumptive strategy, which has often been analysed as the result of a binding relation between an antecedent in A’-position and a pronoun in an A-position. On this view, while the gap strategy involves movement, the resumptive strategy does not (Sells 1984; McCloskey 1990; 2002). Other theories of resumption consider it a special kind of movement (Demirdache 1991). Later, resumption is analysed as a last resort to save a derivation where movement is blocked (Shlonsky 1992). Within the Minimalist Program, the Phasal Agree approach analyses the links in the resumptive chain as connected by the operation Agree (Chomsky 2000, 2007; Adger & Ramchand 2001, 2005; Rouveret 2002, 2008).
The most recent analyses of resumption approach this phenomenon by taking into consideration that resumptive elements are not a uniform class, but their status is differentiated as strong (i.e. strong pronouns and epithets) and as weak (i.e. weak pronouns and weak pronouns doubled by a strong pronoun) (Guilliot 2006; Guilliot & Malkawi 2006; Guilliot 2008; Malkawi 2009). Also, resumptive strategies give rise to reconstruction effects (Aoun & Li 2003; Boeckx 2003; Guilliot & Malkawi 2006; Malkawi 2009; Rouveret 2011, to appear). Resumptive pronouns may have different internal structures (Elbourne 2002; Déchaine & Wiltshko 2002).

Also, the most recent developments in the resumption literature have been rather semantic in nature, more than syntactic. Authors teased apart various interpretative effects with gap and resumption, arguing that resumption gives rise to interpretive effects, such as functional and pair-list readings in the presence of quantifiers (Guilliot 2006; Guilliot & Malkawi 2006; Malkawi 2009). I will address the issue of the semantics of resumption in chapter 6.

On the syntax side, several analyses that treat resumption as movement propose that the resumptive pronoun is part of a complex-DP at the start of the derivation. Since in this thesis I propose a complex-DP as well, in the following I review in more detail some of the analyses of this final type.

To explain resumption, authors (Boeckx 2003; Guilliot 2006; Malkawi 2009) adopted Elbourne’s (2002) analysis of pronouns as definite descriptions and extended it to resumptive pronouns. Elbourne (2002) proposes that pronouns are definite determiners whose NP-complement has undergone deletion in the phonology (i.e. The NP-deletion Theory) as in (4.55):

\[(4.55)\] \textbf{ELBOURNE’S (2002) INTERNAL STRUCTURE OF A PRONOUN} \\
\[
[D \text{ pronoun} [\text{NP noun}]]
\]

Boeckx (2003) takes Elbourne’s (2002) analysis further and proposes that in resumptive constructions, the pronoun and the noun start together in the numeration as part of a complex-DP. Interestingly, authors who worked on clitic-doubling also proposed that pronouns form a constituent with their antecedent (Kayne 1972; 2002; Uriagereka 1988; 1995), as discussed in (§3.6.4). Boeckx (2003) treats resumption as a case of subextraction. The resumptive is the D head and the antecedent is its NP or wh-complement as in (4.56); the complement of D moves up, while the resumptive D is stranded:
Boeckx (2003) follows Chomsky (2000) in defining a chain via the notion of occurrence OCC, where an occurrence of $\alpha$ is a sister of $\alpha$. Further, he proposes that for a chain to be licit, it must comply with the Principle of Unambiguous Chain (4.57):

\[(4.57) \quad \text{Principle of Unambiguous Chain (Boeckx 2003)}
\]

A chain is unambiguous if it contains at most one strong position (i.e. one strong occurrence or OCC).

Specifiers are strong occurrences. The notions of strong occurrence and of unambiguous chain formation are relevant to resumption in Boeckx’s analysis, because he argues that in some languages chains are formed in which more than one strong occurrence appear. Because of the principle in (4.57), the chain with more than one occurrence must split into two chains, one of which contains the resumptive. As such, resumptive chains are the result of stranding (sub-extraction) under A’-movement. One strong occurrence is SpecCP which attracts the antecedent. The other strong occurrence is given by language specific requirements: for example, Boeckx (2003) proposes that the second strong occurrence in resumptive chains with direct objects is caused by the fact that the particular language has object shift. As examples of such language, Boeckx (2003) mentions Arabic and Hebrew, among others.

However, Arabic and Hebrew do not have object shift (Shlonsky 1997), which is a problem for Boeckx’s analysis. Rather, Shlonsky (1997) states that (i) Hebrew and Palestinian Arabic have subject raising to SpecAgr, while objects do not raise and that (ii) Hebrew does not have Object Shift.

Another problem with Boeckx’s (2003) analysis is that apart from the requirement on the language to have Object Shift – which he says that it alone is not enough, or else Icelandic would have resumption, but it doesn’t – the language must have a “non-agreeing complementizer”. However, Arabic (and Romanian for that matter) have relative pronouns, which in Boeckx’s (2003) terminology are not “matching” but “agreeing” complementizers.

As mentioned in (§3.1.2), in Sterian (2011) I analyse D-linked content question in Iraqi Arabic and I argue that the resumptive pronoun is part of a complex-DP which also contains the interrogative pronoun and the noun. The difference in the make-up of the complex-DP between Boeckx (2003) and Sterian (2011) is that in Boeckx (2003) the
resumptive pronoun is a D, while in Sterian (2011), the resumptive is of category φ. Analysing the resumptive as being of category φ solves the problem of accounting for the movement of the resumptive pronoun for which Boeckx (2003) had to rely on some other phenomenon in the language, such as Object Shift.

In the following I briefly review the complex-DP proposal in Sterian (2011) and in the next section I extend it to relativization in Iraqi Arabic. The resumptive pronoun and its antecedent are part of a complex-DP at First Merge (4.58):

\[(4.58) \text{internal structure of D-linked interrogative expressions} \]

\[
\begin{array}{c}
\text{DP} \\
D \\
\text{D-linked interrogative} \\
\varphi \Phi \\
\varphi \Phi \text{resumptive pronoun} \quad \text{antecedent}
\end{array}
\]

To see how this works, consider the Iraqi Arabic D-linked content question employing the resumptive strategy (4.59a) whose numeration is given in (4.59b).

\[
\begin{align*}
\text{IRAQI ARABIC} \\
\text{(4.59) D-Linked Content Question} \\
\text{a. the resumptive strategy} \\
\text{أيمان يا رجال شافته؟} \\
\text{Iman ya: ridžda:l ja:fet=eh} \\
\text{Iman which man saw.3FS=3MS} \\
'\text{Which man did Iman see [him] ?}'
\end{align*}
\]

\[
\text{b. Numeration: } \{\text{TOP}, \text{C}, \text{I}, \text{Iman}_\text{D}, \text{Sa:fít}_\text{V}, \text{ya:D}, \text{hu}_\varphi, \text{ridža:l}_\text{N},\}
\]

In (4.60) I show the derivational analysis of (4.59a) proposed in Sterian (2011). The derivation develops by phases (i.e. the vP phase, the IP phase, etc), where each maximal projection represents a domain for the application of rules (Chomsky 1995b; Epstein et al 1998; Wojdak 2005; Hornstein 2008; Roberts 2010). Thus, within the VP phase (4.60b), the DP is built by merging the pronoun h ‘him’ with the noun ridžda:l “man” and then by merging that complex syntactic object with the D-linked interrogative ya: “which”. Then the verb V ja:fet “she saw” merges with the DP ya: h
which him man’ and cliticisation of the pronoun h ‘him’ immediately takes place via successive application of Copy and Delete. Thus the cliticisation rule of the resumptive pronoun to the verb occurs in the VP phase; the pronoun has to cliticise to the verb and this determines its early movement in the derivation, during the VP phase. The subject DP Iman then merges with the V at SpecVP. At the IP phase (4.60c), the inflectional head merges with the VP, then the subject DP Iman is moved to SpecIP via successive application of Copy and Delete. At the CP phase (4.60d), the remnant of the DP ya: h ridżda:l is moved to SpecCP via successive application of Copy and Delete. At the TopP phase (4.60e), the topical head Top merges with the CP and the subject DP Iman is moved to SpecTopP via successive application of Copy and Delete.

(4.60) derivational analysis of (4.59a)


b. VP phase
[VP [ImanD] [V [ʃa:fítv, hø] [D [ya:D] [φ [hø] [ridżda:lN]]]]]

c. IP phase
[IP [ImanD] [I [VP [ImanD] [V [ʃa:fítv hø] [D [ya:D] [φ [hø] [ridżda:lN]]]]]]]

d. CP phase
[CP [D ya:D hø, ridżda:lN][IP [ImanD][I [VP [ImanD] [V [ʃa:fítv hø] [D [ya:D] [φ [hø] [ridżda:lN]]]]]]]

e. TopP phase
[TopP ImanD [CP [D ya:D hø, ridżda:lN] [IP [ImanD] [I [VP [ImanD] [V [ʃa:fítv hø] [D [ya:D] [φ [hø] [ridżda:lN]]]]]]]]]

To summarize, cliticisation occurs then the entire copy of the DP is deleted (4.61):

(4.61) derivation of resumptive strategy
[C [D D] [[φ [φ] [NP N]]]... [I [V V] ...[D D] [[φ [φ] [NP N]]]]]

The full DP containing all three subcomponents never surfaces as a contiguous string (i.e. the form ya: hu ridżda:l is ungrammatical). An explanation for this is that cliticisation is obligatory (see chapter 2), which makes the components of the D-φ-N not surface together.

In Sterian (2011) I stipulate that the motivation for the resumptive pronoun to move up is that it cliticizes to the verb immediately after the external merge of the

22 As I mentioned earlier, VSO and SVO coexist in modern vernaculars. Some authors propose the subjects in an Arabic SVO sentence is in a TopP projection above IP. This is not relevant here and does not affect the analysis in any way.
lexical verb to V; however in this thesis I discussed how the clitic pronoun does not cliticise to V, but rather to \( v \) with which it shares features (§3.5.2). Another difference is that in Sterian (2011) I do not include \( vP \) in the derivation (4.62), because it does not affect my analysis either way. In this thesis I include the \( vP \) phase because the clitic raises in an instance of head movement from its base position to \( v \). In chapter 2 I argued that Iraqi Arabic clitic pronouns behave just like Romance clitic pronouns in that they cannot surface in their base position, but always surface in a derived position and their landing site is in IP (chapter 2). The movement of the clitic from its base position inside the complex-DP to a derived position is rather a consequence of its deficient nature (Cardinaletti and Starke 1999; Roberts 2010) than a purpose in resumption. In brief, in this thesis I amend the derivation in (4.60) such that (i) it includes \( vP \) and (ii) it captures the clitic pronoun raising to I. These will be detailed in (§4.3.2).

Another analysis that needs to be addressed here is the one proposed in Sichel (2014), since some of its concerns overlap with mine: the syntax of resumption. However, there are three main reasons why I pursue a line different from her. Firstly, her account is problematic, because it is not clear how it can be extended from relatives – the topic of her article - to D-linked questions. Sichel’s (2014) analysis of the effects observed in Hebrew optional and obligatory resumption depends on the availability in relative clauses of different analyses: head-external (i.e. the head noun originates outside the relative clause CP), raising (i.e. the head noun originates inside the relative clause CP) and matching (corresponding to the external head there is a corresponding internal head which is phonologically deleted under identity with the external head). Based on data from relative clauses in modern Hebrew, she argues that relative clauses with gap and obligatory resumption have a raising derivation, while clauses with optional resumption have a head external derivation. Sichel’s crucial argument is reconstruction: relative clauses with gap and relative clauses with obligatory resumption in Hebrew allow reconstruction; in other words, the interpretive effects observed with these structures point to the presence of a copy at the base of the derivation, hence the raising analysis. Optional resumption does not allow reconstruction in Hebrew, in other words the interpretation which requires a copy at the base of the derivation is not available, hence the head external analysis.

However, it has been observed for Jordanian Arabic (Malkawi 2009) and Iraqi Arabic (Sterian 2011) that resumption in D-linked content questions is optional; Guilliot (2006) argues extensively how resumption allows for reconstruction and, as discussed in chapter 6, Guilliot’s (2006) resumptive data which allows for reconstruction is from contexts where resumption is optional in Jordanian Arabic (Guilliot 2006; Malkawi 2009). According to Sichel’s (2014) analysis, optional resumption does not allow for reconstruction, reason for which she argues that in relative clauses it is derived by a head external derivation. It is difficult to see how Sichel’s analysis for optional resumption could be extended to the optional resumption cases in Jordanian Arabic or Iraqi Arabic D-linked questions. My analysis of resumption rather relies on the structure of the DP and can be applied across the board to all contexts in which it appears.
Secondly, with respect to obligatory resumption in relative clauses, Sichel (2014) argues that it behaves like gaps in that it allows for reconstruction – i.e. the presence of a copy at the base of the derivation - and therefore the relative clause with obligatory resumption must have a raising analysis. This implies movement, however Sichel (2014) is not explicit about what the structure of the resumptive pronoun is at the tail of the movement chain in these cases; because in her analysis resumptive pronouns are not lexical items merged from the lexicon, but rather their interpretive properties are fully determined by external factors (i.e. the derivation of the relative clause and whether there is competition between gap and resumption). The position taken in this dissertation is rather different: resumptive pronouns are ordinary pronouns (McCloskey 2006) and they have properties of their own which help explain their ability to participate in resumptive constructions.

Thirdly, the lack of condition C effects, which forces a head-external analysis for some cases in Sichel’s account, can be given a more straightforward explanation under my analysis, as I show in the following. Consider the optional resumption context in the Hebrew relative clause in (4.62):

HEBREW (Sichel 2014)

(4.62) a. zot [[ha-tmuna fel Dani]₂ (je Rina amra) je hu₁ cilem t₂ be-hodu this the-picture of Dani that Rina said that he took in-India ‘This is the picture of Dani that Rina said that he took in India.’

b. zot [[ha-tmuna fel Dani]₂ (je Rina amra) je hu₁ cilem ota₂ be-hodu this the-picture F of Dani that Rina said that he took her in-India ‘This is the picture of Dani that Rina said that he took [it] in India.’

The example in (4.62a) is a relative clause derived with gap: the tail of the relative chain is a gap. The example in (4.62b) is a relative clause which has a resumptive pronoun in the relativization site. Both (4.62a) and (4.62b) are grammatical in Hebrew, which means there is no condition C violation. A condition C violation would arise if [ha-tmuna fel Dani]₂ were reconstructed in its base position, because Dani would be bound by the pronoun hu “he” with which it is co-indexed. Lack of condition C effects lead to the conclusion that [ha-tmuna fel Dani]₂ is not found in the scope of the pronoun hu “he”. Therefore, this constituent has not moved and this can be accommodated through a head-external analysis of the relative clause. In the following I show that this argument is not problematic for my analysis and that to allow a head-external analysis for relatives, as Sichel’s analysis requires, is not desirable because it would not explain reconstruction effects observed in relative clauses in Jordanian Arabic (Malkawi 2009).

Let’s take a closer look at reconstruction versus condition C effects in Romanian and Arabic. Resumption is obligatory in relative clauses. In other words, Romanian and Iraqi Arabic examples corresponding to (4.62a) in Hebrew are ungrammatical; in Romanian and Iraqi Arabic only examples corresponding to (4.62b) are grammatical. This is illustrated in (4.63) for Arabic and in (4.64) for Romanian:
IRAQI ARABIC (inspired by example 1 in Sichel 2014)

(4.63) a. gap

*Ha: y ha: y s’u: rat Samer illy Suha etgu:l šale=ha
this.F she photo.F Samer which Suha says.3F about=her

huwwa msawwyi in=Baghdad
he photoed.3MS=her in=Baghdad
‘This is Samer’s photo which Suha say [about her] that Samer took in Baghdad.’

b. resumption

Ha: y ha: y s’u: rat Samer illy Suha etgu:l šale=ha
this.F she photo.F Samer which Suha says.3F about=her

huwwa msawwyi=ha eb=Baghdad
he photoed.3MS=her in=Baghdad
‘This is Samer’s photo which Suha say [about her] that Samer took [her] in Baghdad.’

ROMANIAN (inspired by example 1 in Sichel 2014)

(4.64) a. gap

*Aceasta este poza lui Andrei pe care Laura zice că și-a făcut____
this is photo.F Gen Andrei pe which Laura says that se=Aux.3S____

în Grecia.
in Greece

b. resumption

Aceasta este poza lui Andrei pe care Laura zice că și-a
this is photo.F Gen Andrei pe which Laura says that se=Aux.3S

făcut-o în Grecia
done=her in Greece
‘This is Andrei’s picture which Laura says that he took [her] in Greece.’

The examples in (4.63) and (4.64) are meant to show that the relative clauses in Arabic and in Romanian corresponding to the relative clauses in (4.63) in Hebrew have obligatory resumption. In (4.63) s’u: rat Samer “Samer’s photo” is resumed inside the relative clause illyi (…) huwwa msawwyi=ha eb=Baghdad “which (…) he took [it] in Baghdad” by the resumptive pronoun ha “her” (picture is feminine in Arabic). In (4.64b) poza lui Andrei “Andrei’s picture” is resumed inside the relative clause by the
resumptive pronoun o “her”. This sentence is grammatical, therefore I conclude that there is no condition C violation. A condition C violation would result if a copy resulted by movement of poza lui Andrei “Andrei’s picture” would be interpreted in its base position, because it would place the R-expression Andrei in the scope of pro. How can this be reconciled with a movement derivation of resumption such as the one proposed in this dissertation? I propose, following Fox (1999), that the copy at the base is not the one interpreted.

Fox (1999) argues that condition C applies only at LF. During his demonstration, he notes that there are structures derived by movement which do not cause condition C effects. This is illustrated in (4.65):

**ENGLISH (Fox 1999)**

(4.65) **a.** [Which of the papers that he\textsubscript{1} gave to Ms. Brown\textsubscript{2}] did every student\textsubscript{1} hope that she\textsubscript{2} will read t?

b. *[Which of the papers that he\textsubscript{1} gave to Ms. Brown\textsubscript{2}] did she\textsubscript{2} hope that every student\textsubscript{1} will revise t?**

The difference in between (4.65a) and (4.65b) is given by the choice in reconstruction site: base or intermediate. The example in (4.65a) is grammatical, therefore we conclude that there is no condition C violation. First of all, if we do not resort to reconstruction and want to interpret he in its surface position, every student would end up in vacuous quantification. However, (4.65a) is grammatical because the copy of the moved [Which of the papers that he\textsubscript{1} gave to Ms. Brown\textsubscript{2}] is reconstructed in the intermediate movement site, namely in t’, where he is in the scope of every student, satisfying condition B, on the one hand and avoiding a condition C violation, on the other hand, because Ms Brown bind she. The interpretation of this copy in its base position would cause a condition C violation, because Ms Brown would end up being bound by she. Therefore (4.65a) is grammatical because [Which of the papers that he\textsubscript{1} gave to Ms. Brown\textsubscript{2}] is reconstructed in the intermediate movement site t’. Moving on to (4.65b), this example in ungrammatical because if the copy is interpreted in the intermediate site t’ or in the base position t, it would cause a condition C violation, because Ms. Brown would be bound by she. Example (4.65) reveals that a lack of a condition C violation is explained in structures derived by movement by reconstructing the copy of the moved element in an intermediary site.

Movement is local, therefore cyclic. In resumptive constructions of the kind in (4.63) and (4.64) which would pose a possible condition C violation, the copy at the base is not the one interpreted. The example in (4.64) has the derivation in (4.66):

(4.66) **derivation of (4.64)**

\[
\begin{array}{c}
[DP \text{ poza lui Andrei}]\ldots[CP \text{ care}\ldots[vP \text{ care o poza lui Andrei}]\ldots[VP \text{ care o poza lui Andrei}]\end{array}
\]
The copy in the vP is the one which avoids the condition C violation. As I said earlier, to allow a head-external analysis for relatives based on Sichel’s account is not desirable because it would not explain reconstruction effects observed in relative clauses in Jordanian Arabic (4.67):

JORDANIAN ARABIC (Malkawi 2009; 62)

(4.67) RELATIVE CLAUSE

\[ \text{شفت صورة بنته اللي كل أبي يحبها.} \]
\[ \text{fuft } [\text{Surit } \text{bint}=\text{uh}_1]_2 \text{ illi kull } \text{?abb}_1 \text{ bi=Hib}=\text{ha}_2 \]
\[ \text{saw.1S picture.F daughter=his which every father likes=her} \]
\[ \text{‘I saw the picture of his daughter which every father likes [it].’} \]

The example in (4.67) is a relative clause in Jordanian Arabic. Malkawi (2009) observes that the distributive reading of the relativized expression – where every father likes a different picture of his own daughter – is available in (4.67) and in order to account for this reading, the relativized expression is reconstructed at the site occupied by the resumptive pronoun (i.e. at the base of the derivation). A head external analysis of the relative clause in (4.67) following Sichel’s (2014) account would not be able to explain the reconstruction effect observed by Malkawi (2009).

4.3.2 Resumption in obligatory contexts: an analysis

In the previous section (§4.3.1) I briefly presented my analysis of resumption from Sterian (2011). In this analysis, resumption is derived by movement: the resumptive pronoun and its antecedent start out in the derivation as a complex-DP. In this section I amend this derivation to include the vP phase and to follow the head-movement derivation of the clitic pronoun discussed in (§3.5). I extend this analysis to relativization in Iraqi Arabic. At the moment, I focus only on the syntax of resumption. The pragmatics of gap and resumption are detailed later in chapter 6.

As I said earlier in the thesis, I argue that in environments where resumption is obligatory, it is obligatory because the syntax requires it. In other words, obligatory resumption is a purely syntactic phenomenon, not an interface one.

Two basic principles to assume for the current analysis are the Inclusiveness Condition (Chomsky 1995; 225) and the Copy Theory of Movement (Chomsky 1995; Lebeaux 1990). The definition of the Inclusiveness Condition is given in (4.68) and the definition of the Copy Theory of Movement is given in (4.70):

(4.68) INCLUSIVENESS CONDITION

Any structure formed by the computation is constituted of elements already present in the lexical items selected for numeration; no new objects are added in the course of the computation apart from the rearrangement of lexical properties.
According to Chomsky’s (1995a) Inclusiveness Condition, only the elements present in the numeration can participate in the derivation (4.69):

\[(4.69)\text{ Merge} \]
\[
\text{Merge } \{\alpha\} \text{ and } \{\beta\} = \text{def } \{\alpha, \beta\}
\]

\[(4.70)\text{ Copy Theory of Movement} \]
\[
\text{A moved element leaves behind a copy of itself (rather than a trace).}
\]

A consequence of the Inclusiveness Condition and of the Copy Theory of Movement for the current paper is that pronouns exist in the numeration (i.e. they are not spelled-out traces or anything of the sort) and when they move, they leave behind a copy. Authors working on pronouns (Cinque 1990; Hoekstra 1990; 1999) or even more specifically on clitic-doubling Kayne (2002) have convincingly argued that pronouns cannot be spelled-out traces of movement.

As observed earlier in this chapter, resumption is optional in D-linked content questions (§4.2.3), but it is obligatory in relativization (§4.2.1). Earlier in this chapter I argued that the obligatoriness or optionality of resumption is caused by the nature of the D involved: in relativization, the relative pronoun *illyi – of category D - has a categorial selectional feature which requires it to merge with a φP at First Merge. The D involved in D-linking *ya:, however, does not have this categorial selectional feature which requires it to merge with a φP, therefore it may merge with a φP – resulting in a D-linked content question with resumption – or it may merge with an NP – resulting in a D-linked content question with gap.

As we have seen, [Iraqi] Arabic has obligatory resumption in relativization with direct objects and objects of preposition (§4.2.1). Consider the relative clause in (4.71):

IRAQI ARABIC
\[(4.71)\text{ DIRECT OBJECT RELATIVIZATION} \]
\[
\text{الكاتب الذي شفته } \text{بالبيت سهمي } \text{كان خليل جبران.}
\]
\[
\text{il}=\text{ka:teb illyi}=\text{ah//} \text{eb-be:t Suha } tl=\text{a:n Khalil Jubran}
\]
\[
\text{the}=\text{writer whom saw.1S=him at=house Suha was Khalil Jubran}
\]
\['\text{The writer whom I saw [him] in Suha’s house was Khalil Jubran.}’\]

The relative clause in (4.71) contains an obligatory resumptive pronoun. As I explained in (§4.2.2), the relative clause can be realised only via the relative pronoun. There are therefore two obligatory elements in the sentence in (4.71): (i) the relative pronoun *illyi “which” and (ii) the resumptive pronoun *h “him”. The derivation in which the relative pronoun *illyi “which” has a categorial selectional requirement to merge with the phrase headed by the resumptive pronoun is illustrated in (4.72), assuming a bare phrase structure and Kayne’s (1994) raising analysis of relative clauses:
In (4.72) the complement of the verb is a complex-DP. The derivation develops by phases (i.e. the vP phase, the IP phase, etc), where each maximal projection...
represents a domain for the application of rules (Chomsky 1995; Epstein et al 1998; Wojdak 2005; Hornstein 2008; Roberts 2010). Thus, the DP is built by merging the pronoun *h* ‘him’ with the noun *ka:teb* “writer” and then by merging this complex syntactic object with the relative pronoun *illyi* “which”. Then the verb *ʃeft* “saw” is merged, taking the complex-DP as complement. After *v* is merged, the verb raises to it and then it raises further to I. Regarding the complex-DP, two movement requirements appear at the moment: one is for the clitic to raise from its base position to a derived one and the other is for the relative pronoun to move to SpecCP. In (4.72b) *v* probes the complex-DP and cannot attract D because it is not a proper goal for it, in other words D is distinct from *v* and therefore unable to incorporate to it; on the other hand, φ is able to move to *v*, because *v* and φ have identical features (Roberts 2010); thus φ raises to *v* as discussed in chapter 2. In (§3.1.2) I proposed that it raises from its base position and moves cyclically all the way to I: following Richards (2010), (i) the clitic pronoun raises first to *v*, then it moves together with the verb to I and (ii) to obtain the enclitic order, the verb moves further over the clitic (§3.1.3). D is a proper goal for C, because C has both D and φ features and attracts the DP to SpecCP in an instance of wh-movement.

Another issue to discuss is that in (4.72b) there is an apparently unbound copy of the clitic pronoun: the copy that is part of the complex-DP in SpecCP. The issue of such unbound copies is discussed in the literature within the topic of remnant movement (Müller 1996; Abels 2007). Müller (1996) looks at asymmetries observed with scrambling and A’-movement in German, such as (4.73) and argues that remnant movement is sensitive to the nature of the movement types involved:

**GERMAN (Müller 1996)**

(4.73) REMNANT MOVEMENT

\[
\text{[VP ʃeft \text{Gelesen}]_k hat [IP [NP das Buch]_k [IP keiner tk]}\]
\]

In (4.73) *das Buch gelesen* starts out in the derivation in the usual VP base position. There is first scrambling of *das Buch* out of VP to SpecIP and then further movement of the remnant VP to the left of the auxiliary as an instance of topicalization. There is thus an unbound trace of *das Buch* in SpecCP. Müller (1996) observes that this is possible because the position of the XP containing the unbound trace is different than the position containing the antecedent: there is a a distinction between the landing sites. In other words, the constituents that moved – *das Buch* on the one hand and then *das Buch gelesen* on the other hand – underwent different types of movement: *das Buch* moved as scrambling and *das Buch gelesen* moved as topicalization. To account for this remnant movement asymmetry, Müller (1996) proposes the following principle (4.74):
MÜLLER’S (1996) UNAMBIGUOUS DOMINATION

In a structure \([A \ldots [B \ldots \ldots]], A\) and \(B\) may not undergo the same kind of movement.

The “kind of movement” in (4.74) refers to types of movement that are driven by different syntactic requirements, such as: \(wh\)-movement, scrambling, topicalization, etc. In \(wh\)-movement, for example, there is a strong \([\text{\textit{u}}\text{wh}*]\) feature on \(C\) which makes an interrogative expression move from its base position to SpecCP, while in clitic movement, the clitic moves from its base position to check its features against a functional head (§2.1); these are different types of movement. Thus, back to (4.73), it can be argued that a similar situation can be observed in resumption: the clitic pronoun moves to its final landing site because of the requirement for clitic pronouns to move as discussed in chapter 2, while the complex-DP containing the copy of the clitic pronoun moves as \(wh\)-movement to SpecCP; these are two different types of movement and the unbound copy is in a different type of position than its antecedent.

One of the questions that arises at this point regards the lack of subject resumption. As I said earlier (§4.2.1), \(\phi\) with Nominative case has no phonological realisation. For the sake of concreteness, let us consider a D-linked content question with subject extraction (4.75):

(4.75) LACK OF SUBJECT RESUMPTION

\begin{itemize}
  \item \textbf{a. D-linked content question with subject extraction}
    \begin{center}
      \textit{يا صديقة اشتترت شقة ببغداد؟}
    \end{center}
    \textit{ya: Sadi:ga \textit{ijtarat\ldots\ldots}\textit{fjiga bi-Baghdad}}
    
    which friend.F bought.3FS\ldots\ldots apartment in-Baghdad
    
    ‘Which friend bought an apartment in Baghdad?’
  
  \item \textbf{b. derivation of (4.76a)}
    \begin{center}
      \textit{[VP [DP [D ya: [\phi P [\phi ha [NP Sadi:ga]]]]] [V \ldots\ldots]}
    \end{center}
\end{itemize}

In (4.75b), the subject \textit{ya: Sadi:ga }“which friend” is externally merged in the specifier of the verb (whether it’s \(V\) or \(v\), it has no different effect on this analysis); when the complex-DP containing the \(\phi\) pronoun raises to a configuration where Nominative is licensed, \(\phi\) remains covert, a silent resumptive.

In this section I argued how the analysis of resumption in Iraqi Arabic D-linked content questions can be extended to relativization in Iraqi Arabic. I claimed that the relative pronoun has a categorial selection feature which requires it to merge with a \(\phi P\) at First Merge. In other words, the relative pronoun, the resumptive pronoun and the antecedent noun all form a complex-DP at First Merge. The resumptive pronoun is a clitic pronoun which cannot surface in its base position, but must raise to a derived position (§2.4.2). The remnant DP raises to SpecCP following the raising analysis of relative clauses. In the next section (§4.3.3) I discuss empirical data regarding gap and
resumption in questions with bare interrogatives and propose an analysis which argues that it is again the nature of the D involved that makes resumption impossible. Further, in (§4.4) I discuss how φ raises out of the complex-DP past the D head.

4.3.3 Resumption with bare interrogatives: an analysis

Earlier in this chapter (§4.2.4) I showed the data from which it can be observed that resumption with bare interrogatives is possible – and in this case it is only optional – only with long distance direct object extraction. I briefly commented at that time that (i) there is a clear dichotomy noticed by authors in the behaviour of D-linked content questions and bare interrogatives: resumption is more often observed with D-linked interrogatives, while it is rarely observed or even not at all in questions with bare interrogatives (Sharvit 1999; Aoun et al 2001; Boeckx 2003; Guilliot & Malkawi 2006, 2009; Malkawi 2009; Rouveret 2011; Sterian 2011), (ii) this dichotomy is best captured by proposing – again – that it is the nature of D-head which makes resumption available or not and (iii) the resumptive observed with long distance direct object extraction in Iraqi Arabic may be an intrusive resumptive, not a true one. In this section I expand on each of these ideas.

(i) Dichotomy observed between the behaviour of D-linked content questions and bare interrogatives

As I said before, resumption appears often in D-linked questions and very rarely in questions with bare interrogatives (Boeckx 2003).

In section (§4.2.3) I presented the data from Iraqi Arabic D-linked content questions which reveals that resumption is possible with direct objects and objects of preposition (remember that the indirect objects falls under the category of “prepositional object”). However, the situation is not at all the same with questions with bare interrogatives (§4.2.4), because resumption is possible in one context alone: direct object long distance extraction. In the next sub-section I correlate this distribution of resumption observed in D-linked questions, relativizations and questions with bare interrogative with the characteristics of the various Ds in Iraqi Arabic: D-linked, bare interrogatives, etc.

(ii) The nature of D in D-linked content questions versus the bare interrogative pronoun

A first question that arises is how the D-linked pronoun ya: “which” is related to other pronominal and determiner elements in Iraqi Arabic. In the following I present data which illustrates that:

(i) ya: is morphologically unrelated to other interrogative expressions
(ii) ya: is in complementary distribution with D-elements
(iii) ya: requires an overt lexical noun after it
(iv) ya: “which” occurs in a wider range of contexts than bare interrogative expressions
Consider Table 11, which lists the inventory of Iraqi Arabic interrogative expressions. There are six non-D-linked interrogative forms. The D-linked form ya: ‘which’ doesn’t seem to be transparently related to any of the non-D-linked forms. This establishes that, the D-linked interrogative form ya: is not part of that paradigm.

<table>
<thead>
<tr>
<th>non D-linked forms</th>
<th>who</th>
<th>what</th>
<th>when</th>
<th>how</th>
<th>where</th>
<th>why</th>
</tr>
</thead>
<tbody>
<tr>
<td>D-linked form</td>
<td>ya:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 11. The inventory of Iraqi Arabic interrogative pronouns

Etymologically, the Iraqi Arabic D-linked interrogative pronoun ya: ‘which’ is related to the Classical and Modern Standard Arabic form أي اَي؟ ayy “which”. As shown in (4.76), I speculate that in Iraqi Arabic the initial glottal stop has been dropped, leaving ayy, which in turn underwent compensatory vowel lengthening and then has been resyllabified into CV ya:, there are many other case of metathesis in this dialect:

(4.76) 1 SOURCE OF IRAQI ARABIC ya: ‘which’

<table>
<thead>
<tr>
<th>?ayy</th>
<th>Classical and Modern Standard Arabic</th>
</tr>
</thead>
<tbody>
<tr>
<td>*ayy</td>
<td>loss of initial glottal stop</td>
</tr>
<tr>
<td>*a:y</td>
<td>compensatory lengthening of vowel</td>
</tr>
<tr>
<td>ya:</td>
<td>metathesis/resyllabification into CV.</td>
</tr>
</tbody>
</table>

The D-linked interrogative pronoun in Iraqi Arabic does not match with the paradigm of the demonstrative pronouns either. Table 12 presents the paradigm of the demonstrative pronouns in Iraqi Arabic.

<table>
<thead>
<tr>
<th>Near</th>
<th>Distance</th>
</tr>
</thead>
<tbody>
<tr>
<td>MS</td>
<td>hāda:</td>
</tr>
<tr>
<td>FS</td>
<td>hādyi</td>
</tr>
<tr>
<td>Pl</td>
<td>hādo:la</td>
</tr>
</tbody>
</table>

Table 12. The paradigm of the demonstrative pronouns in Iraqi Arabic

D-linked ya: ‘which’ precedes the noun it combines with (4.77a) just as the demonstrative pronouns do (4.77b) and il doesn’t co-occur with demonstratives, (4.77c-d):
(4.77) D PRECEDES N

a. D-linked

سَهْيَا يَا مَغْنِي شَافَت بِالْمَطْعُم؟
Suha ya: muʕanyy ʃa:fet bi-l-maTʕam
Suha which singer saw.3FS in-the-restaurant
'Which singer did Suha see in the restaurant?'

b. demonstrative

سَهْيَا شَافَتُهَا هُذَا الْمَغْنِي بِالْمَطْعُم.
Suha ʃa:fet haða: il-muʕanyy bi-l-maTʕam
Suha saw.3FS this the-singer in-the-restaurant
'Suha saw this singer in the restaurant.'

c. *سَهْيَا شَافَتْهَا يَا الْمَغْنِي بِالْمَطْعُم.
*Suha ʃa:fet haða: ya il-muʕanyy bi-l-maTʕam
Suha saw.3FS this which the-singer in-the-restaurant
*'Suha saw this which singer in the restaurant.'

d. *سَهْيَا شَافَتْ يَا هُذَا الْمَغْنِي بِالْمَطْعُم.
*Suha ʃa:fet ya haða: il-muʕanyy bi-l-maTʕam
Suha saw.3FS which this which the-singer in-the-restaurant
*'Suha saw this which singer in the restaurant.'

Similarly, D-linked ya: is in complementary distribution with the proclitic
definite article ʾal, il- “the” (4.78):
D-LINKED VERSUS DEFINITE ARTICLE COMPLEMENTARITY

a. D-linked

Suha ya: mувanyy ja:fit bi-l-maTغam
Suha which singer saw.3FS in=the=restaurant
'Which singer did Suha see in the restaurant?'

b. definite article

Suha ja:fit il-mувanyy bi-l-maTغam
Suha saw.3FS the-singer in-the-restaurant
'Suha saw the singer in the restaurant.'

c. *Suha ja:fit il-ya: mувanyy bi-l-maTغam
Suha saw.3FS the-which-singer in-the-restaurant
*Suha saw the which singer in the restaurant.'

As noted in (§4.2.3) in content questions, the interrogative pronoun is moved to the left periphery, preceded by the subject as left-most topic. Aoun & Benmammoun (1998) and Malkawi (2009) state that in Arabic there are three strategies to form content questions: the gap strategy, the resumptive strategy and the in situ strategy; however their examples are D-linked ones. As we will see, this option of three strategies does not carry over to questions with bare interrogative pronouns. Their examples are replicated below for Iraqi Arabic showing in (4.80a) the gap strategy, in (4.80b) the resumption
strategy and in (4.80c) the in-situ strategy:

(4.80) INTERROGATIVE STRATEGIES WITH D-LINKED INTERROGATIVES

a. the gap strategy

Suha ya: muyanyy fa:fit bi-l-maT’am
Suha which singer saw.3FS in-the-restaurant
'Which singer did Suha see in the restaurant?'

b. the resumption strategy

Suha ya: muyanyy fa:fit=hu bi-l-maT’am
Suha which singer saw.3FS=3MS in-the-restaurant
'Which singer did Suha see [him] in the restaurant?'

c. the in-situ strategy

Suha fa:fit ya: muyany bi-l-maT’am
Suha saw.3FS which singer in-the-restaurant
'Suha saw which singer in the restaurant ?'

In (4.81), a bare interrogative expression is well-formed with the gap strategy (4.81a), but ill-formed with the resumptive strategy and the in-situ strategy (4.81b-c):

(4.81) INTERROGATIVE STRATEGIES WITH BARE INTERROGATIVES

a. the gap strategy

Suha minnu: fa:fit bi-l-maT’am
Suha who saw.3FS in-the-restaurant
'Whom did Suha see in the restaurant ?'

b. the resumption strategy

*Suha minnu: fa:fit=hu bi-l-maT’am
Suha who saw.3FS=3MS in-the-restaurant
'Whom did Suha see [him] in the restaurant ?'

c. the in-situ strategy

*Suha fa:fit minnu: bi-l-maT’am
Suha saw.3FS who in-the-restaurant
'Suha saw whom in the restaurant ?'
The patterning of the interrogative strategies described above with respect to the behaviour of the D-linked and non-D-linked interrogative expressions is given in Table 13:

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Word Order</th>
<th>Bare interrogative</th>
<th>D-linked interrogative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gap</td>
<td>Subject - interrogative - Verb</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Resumptive</td>
<td>Subject - interrogative – Verb – Resumptive</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>In-situ</td>
<td>Subject - interrogative</td>
<td>x</td>
<td>√</td>
</tr>
</tbody>
</table>

Table 13. Interrogative strategies in Iraqi Arabic

In brief, the data presented so far has attempted to establish that: (i) the D-linked interrogative pronoun is not morphologically related to the bare interrogative pronoun (and it is not, for that matter, related to the relative pronoun illyi either), (ii) it is in complementary distribution with the definite article and it is also in complementary distribution with the demonstrative pronoun, (iii) it requires an overt lexical noun after it and (iv) it occurs in a wider range of contexts (fronted, in situ, with resumption) than bare interrogative expressions (only fronted).

Having established that the D-linked interrogative ya: is different in its nature and behaviour from both illyi and the bare interrogative pronoun, I further propose one more difference: the D-linked interrogative ya: may take a φP or an NP as complement, but illyi must take a φP as complement, while the bare interrogative minnu: can take neither a φP or an NP as complement. This can be evidenced from the fact that in relative clauses resumption is obligatory, hence D-φ-N, while in D-linked interrogatives resumption is optional – hence both D-N and D-φ-N are possible, and finally in questions with bare interogatives resumption is impossible – hence D. In the following I discuss the case of the bare interogatives.

A valid question would be why English doesn’t have obligatory resumption in relatives formed with which (4.82):

ENGLISH
(4.82) a. The book which I took from the library is very interesting.

b. *The book which I took it from the library is very interesting.

In (4.82) there is no obligatory resumption because (i) which does not have a categorial selectional feature to select a φP as complement and (ii) English does not have clitic pronouns in the sense of Cardinaletti and Starke (1999). Rather, the third form of the
pronoun is weak by their classification. In the D, φ, N terminology, the English pronouns are Ds (Dechaine & Wiltshko 2002; Roberts 2010).

With regard to the question of why resumption is not as wide in the Romance family as in Semitic even though there is extensive cliticisation, it must firstly be noted that Romanian is the only language for which resumption is attested and as I mentioned earlier (§2), I do not equate cliticisation with resumption. Secondly, so far in this thesis I established that resumption is not parasitic on clitic-doubling. If it were, we would expect resumption at least in River Plates Spanish, where clitic-doubling is attested. Spanish however does not have relative pronouns, rather it relativizes using a complementizer like English that. In other words, given the analysis proposed in this thesis, Spanish does not have the syntactic conditions for resumption. French uses relative pronouns and it also has pronominal clitics; it may be the case that in French relativization the clitic resumptive remains phonologically unrealised.

(iii) Resumption in questions with bare interrogatives

Having established that there is a clear-cut difference between the behaviour of D-linked interrogatives and bare interrogatives in that resumption is possible with D-linked interrogatives, but illicit with bare interrogatives, because the nature of the D is such that the D-linked one may take a φP or an NP as complement, but the bare interrogative cannot take a φP or an NP as complement.

It remains to be explained how resumption is possible with direct object long-distance extraction in Iraqi Arabic. Consider again (4.38) which is an example of local direct object extraction in Iraqi Arabic given below as (4.83) and (4.52) which is an example of long-distance direct object extraction in Iraqi Arabic given below as (4.83):

(4.83) DIRECT OBJECT EXTRACTION OF BARE INTERROGATIVE - LOCAL

a. Direct object extraction with gap

إيّامن منو شافته ببيت عواتف ؟
Iman minnu: fa:fat_____ bi-beyt Awatif
Iman who saw.3SF in-house Awatif
'Whom did Iman see at Awatif's house ?'

b. Direct object extraction with resumption

إيّامن منو شافته ببيت عواتف ؟
*Iman minnu: fa:fat=hu bi-beyt Awatif
*Iman who saw.3SF=3MS in-house Awatif
'*Whom did Iman see [him] at Awatif's house ?'
(4.84) OBJECT EXTRACTION OF BARE INTERROGATIVE - LONG-DISTANCE
a. Direct object extraction with gap

Suha minnu: taʕatagid ra:H yaʕzim____ Ahmad ?
Suha who think.3FS will invite.3MS____ Ahmad
'Whom does Suha think that Ahmad will invite____ ?'

b. Direct object extraction with resumption

Suha minnu: taʕatagid ra:H yaʕzim=hu Ahmad ?
Suha who think.3FS will invite.3MS=3MS Ahmad
'Whom does Suha think that Ahmad will invite [him] ?'

Observe the contrast that in (4.83b) resumption is ungrammatical with local direct object extraction in a question with a bare interrogative pronoun and in (4.84b), resumption is grammatical with long-distance direct object extraction in a question with a bare interrogative pronoun. Authors have observed that resumptive pronouns become more acceptable as the extraction site becomes more deeply embedded (Erteschick-Shir 1992; Alexopoulou and Keller 2003). Alexopoulou and Keller (2003) argue that this is caused by the memory cost involved in storing syntactic information over longer dependences and that resumption intervenes in such case to compensate for the memory cost, because resumptive pronouns being specified for φ-features are easier to access and process. In (§4.3.2 ii) I argued that the interrogative pronoun minnu: does not subcategorize for a φP and therefore resumption in questions with bare interrogatives is illicit. For examples such as (4.84) I assume that the resumptive pronoun is a case of intrusive resumption.

4.3.4 The syntax of resumption in optional contexts

In section (§3.3.2) I argued that in contexts in which resumption is obligatory, the presence of the resumptive pronoun is required by the syntax. More precisely, in relativization in Iraqi Arabic resumption is obligatory because the relative pronoun has a categorial selectional feature which requires it to merge with a φP at First Merge. In this section I discuss the syntactic derivation of resumption in contexts in which it is optional.

As we have seen, the relative pronoun in Iraqi Arabic is morphologically different from the D-linked interrogative: the relative pronoun is illy and the D-linked interrogative is ya:. This difference is also reflected in the obligatoriness versus optionality of resumption: in relativization, resumption is obligatory with all direct and indirect objects as well as with objects of preposition, but in D-linked content questions resumption is optional with all direct and indirect objects as well as with objects of preposition. The elements which have resumption are the same in both obligatory and
optional contexts: direct objects, indirect objects and objects of preposition. Therefore, I argue that it is the nature of the D involved which is a factor in whether resumption is obligatory or optional.

Consider again the example in (4.59) which is given below for convenience as (4.85):

IRAQI ARABIC

(4.85) D-LINKED CONTENT QUESTION

a. the resumptive strategy

İmânıyârâlşââ? 
İmân ya: rişââ:1ja: fet=eh
İmân which man saw.3FS=him

'Which man did İmân see [him]?'


In (4.86) I present the amended derivation of (4.85) which contains the vP phase.

(4.86) derivational analysis of (4.85a)


b. VP phase

\[ v [ja: fet V] [D [ya: D ] [φ [h φ] [risâa: lN] ] ]\]

c. TopP phase


In the derivation in (4.86), the D-head - which is the D-linked interrogative pronoun – merges with the resumptive pronoun as part of the formation of the complex-DP at First Merge. But I propose that this head has more freedom in the categories it can combine with than the relative pronoun illyi does; as well as being able to combine with a φP, it can combine with just an NP. Therefore, in the structure with the gap (4.87a), the numeration does not contain the resumptive pronoun (4.87b):
IRAQI ARABIC
(4.87) D-LINKED CONTENT QUESTION
a. the resumptive strategy

إيمن يا رجال شافت؟
Iman ya: ridżda:l fa:fet
Iman which man saw.3FS
'Which man did Iman see [him]?'


The derivation of (4.87a) develops similarly with the derivation of (4.85a), except that at First Merge, the D-head, namely the D-linked interrogative pronoun ya:, merges with the noun ridżda:l “man”. This is illustrated in (4.88):

(4.88) DERIVATION OF (4.87a)

[TopØ Iman [CP [DP [ya:D] [ridżda:lN]][C [IP Iman [I [fa:fetV]] [I [fa:fetV]] [vP Iman [v [fa:fetV] [v [fa:fetV] [D [ya:D] [ridżda:lN]]]]]]]]]

In chapter 6 I discuss the difference in interpretation observed with examples such as (4.85) – (4.87).

4.4 Conclusion

In this chapter I discussed the resumptive construction and I used Sells’s (1980) distinction between true resumption and intrusive resumption to account for the distribution of resumption in Arabic and Romanian and clarified this distinction at least for these two languages. I analysed resumption in relative clauses and D-linked questions in Arabic in terms of a complex-DP with at least two movement requirements: wh-movement and cliticisation. I also said that the relative pronoun – the D of this complex-DP – has a categorical selectional feature that requires it to take a φP as complement at First Merge.

In the next chapter I extend to Romanian the analysis proposed here.
5. DIFFERENT MOTIVATIONS FOR $\Phi P$ IN THE DERIVATION OF CLITIC-DOUBLING AND RESUMPTION

In doing systematic research directed towards the formulation of an abstract model, facts (or asymmetries) are not interesting in and of themselves. What is to be explained by the model are (genuine) generalizations.

Anna Cardinaletti and Michal Starke, The typology of structural deficiency

Romanian is a striking example of a language which exhibits both the phenomenon of clitic-doubling and the phenomenon of resumption. Therefore, Romanian is a language where it is possible to investigate the similarities and dissimilarities between these two phenomena and also see how the analysis presented in chapter 3 for clitic-doubling and in chapter 4 for resumption can be applied within the same language.

Earlier accounts of A′-binding of pronouns in Romanian (i.e. resumption), consider this phenomenon to be parasitic on clitic-doubling (Steriade 1980; Comorovski 1986; Dobrovie-Sorin 1990). Taking this assumption as background, the aim of this chapter is twofold. Firstly, at the empirical level I present a systematic overview of pronouns with antecedents in A-positions (i.e. doubling clitic pronouns) and of pronouns with antecedents in A′-positions (resumptive pronouns) in Romanian which shows that in fact in Romanian resumption is independent of clitic-doubling.

Secondly, at the theoretical level I argue that with respect to clitic-doubling, this phenomenon in Romanian is consistent with clitic-doubling in Romance and it arises because human nouns have a feature which requires they be selected by a $\Phi$-pronoun at First Merge (§3.2.4). In chapter 3 I argued for Arabic that resumption arises because of the nature of the D involved: the relative pronoun illiy “which” has a categorial selectional feature that requires it to take a complement headed by the resumptive pronoun. In this chapter I extend this analysis to Romanian and I argue that resumption arises in this language because the relative pronoun as well as the D-linked interrogative care “which” has a categorial selectional feature that requires it to take a complement headed by the resumptive pronoun. In other words, clitic-doubling is not needed to explain resumption in Romanian. If Romanian did not have clitic-doubling, it would still have resumption, just like Arabic does. Cliticisation is only part of the explanation of the clitic-doubling phenomenon in Romanian and cliticisation is only part of the explanation of resumption in Romanian. This is as far as the similarities go for clitic-doubling and resumption in Romanian. The difference is that the requirements for clitic-doubling are different than the requirements for resumption: in clitic-doubling Romanian patterns with Romance, in that the construction targets definite human nouns and has a designated preposition, while resumption arises in Romanian because of the nature of the D involved: the relative pronoun/ the D-linked interrogative pronoun has a categorial selectional feature which requires it to take a $\Phi$P as complement at First Merge.
In order to obtain a more comprehensive understanding of the phenomenon of clitic-doubling and of the phenomenon of resumption in Romanian, I address the following questions:

(1) are there constructions with pronouns bound from A-positions with a shared θ-role which following A’-movement do not show bound pronouns, that is, are there contexts where clitic-doubling is obligatory but resumption is illicit?

(2) are there constructions which do not have pronouns bound from A-positions with a shared θ-role, but which following A’-movement show obligatory bound pronouns, that is, are there contexts where resumption is obligatory but clitic-doubling is illicit?

This chapter is structured as follows. I review some proposals which were made regarding clitic-doubling in Romanian (§5.1). I present the distribution of clitic-doubling (§5.2.1) and of resumptive pronouns (§5.2.2), as well as the contrast between complementizers and relative pronouns observed in Romanian (§5.2.2). My analysis of clitic-doubling and resumption in Romanian is detailed in (§5.3).

5.1 Previously on clitic-doubling in Romanian

Steriade (1980) observes that in Romanian in A’-environments such as relativization, content questions and topicalizations, there is an obligatory operator-bound pronoun at the extraction site (i.e. a resumptive pronoun). She analyses this operator-bound pronoun as parasitic on clitic-doubling. Steriade (1980) bases her analysis on the “necessary assumption that wh-movement replaces the dislocated constituent by a pronominal copy similar to Perlmutter’s (1972) shadow pronouns. This is not however a universal characteristic of the operation of wh-movement, as we shall see from a comparison of the Romanian facts with the corresponding constructions in River Plates Spanish.”

Steriade (1980) argues that wh-movement replaces the moved NP with a pronominal copy which matches its specificity and definiteness and that clitic-doubling is triggered by this element; therefore clitic-doubling is triggered in Romanian wh-constructions by a pronominal copy of the moved object. The pronoun which is phonologically realized is not the “shadow” pronoun, rather the shadow pronoun is, in our terms, a silent resumptive pronoun which is doubled by the overt clitic pronoun. From a Minimalist perspective, Steriade’s (1980) account has as downside the assumption of a “shadow” pronoun. Since this “shadow” pronoun is not a lexical entry in the numeration, to assume it would violate the Inclusiveness Condition.

Dobrovie-Sorin (1990) considers that the pronoun with an antecedent in an A’-position in Romanian is not a resumptive pronoun, because it does not rescue an island (5.1):
(5.1) *Pe Ion n-am întâlnit fata care l-a văzut pe Ion neg=Aux.1S met girl=the which 3MS=Aux.3S seen anul trecut. year=the past ‘Ion I haven’t met the girl who saw him last year.’

As I discussed in (§4.1.2), the phenomenon in which pronouns save islands known as intrusive resumption is distinct from the phenomenon in which pronouns appear freely in in the variable position of unbounded A’-dependency constructions, known as true resumption. Recall that Sells (1984) shows that there are two kinds of resumptive pronouns: true resumptive pronouns and intrusive resumptive pronouns; some languages have true resumptive pronouns (i.e. Arabic, Hebrew, Irish, etc) and some languages only have intrusive resumptive pronouns (i.e. English). The example in (5.1) illustrates that intrusive resumption cannot save strong islands in Romanian; it does not reveal anything about true resumption. Dobrovie-Sorin’s (1990) claim based on the example in (5.1) that Romanian does not have resumptive pronouns is also refuted by Boeckx (2003) who notes that there are languages which make productive use of resumption (i.e. who have true resumption), but in which pronouns fail to save some island violations, such as in Greek (Alexiadou and Anagnostopoulou 2000) and Arabic (Demirdache 1991; Aoun et al 2001).

In (§5.1.2) I presented data from Hebrew, Lebanese Arabic, Jordanian Arabic and Iraqi Arabic which shows that (i) these languages have true resumption and intrusive resumption and (ii) intrusive resumption varies in that in Hebrew and Jordanian Arabic, both strong and weak islands can be saved by a pronoun, but in Lebanese Arabic and Iraqi Arabic only weak islands can be saved by a pronoun, strong islands cannot. In the following I present data from Romanian to illustrate that in this language, too, pronouns can save weak islands but cannot save strong islands. Consider the weak island example in (5.2):
In the grammatical example in (5.2a) is a weak island in which there is a pronoun. The ungrammatical example in (5.2b) does not have a pronoun, but a gap: the presence of the pronoun improves the grammaticality of the island context. This contrasts with the strong island example in (5.1) given below as (5.3):

\[(5.3) \quad \text{strong island (as relative clause)}\]
\[
\begin{align*}
\text{*Am & auzit c\u0103 Mihaela, & stie & care & nepot & a & vazut-0.} \\
\text{Aux.1S heard that Mihaela se know which grandson Aux.3S seen=her} \\
\text{I heard that Mihaela, they know which grandson saw her.} \\
\text{a cunoscut-o anul trecut.} \\
\text{Aux.3S known=her year=the passed} \\
\text{I heard that Mihaela, they know a man who met her last year.}
\end{align*}
\]

The ungrammatical example in (5.3) is a strong island which contains a pronoun; the presence of the pronoun does not improve the grammaticality of the sentence, as it did in (5.2). The fact that pronouns can save weak islands but cannot save strong islands suggests that Romanian patterns with Lebanese Arabic and Iraqi Arabic. Again, all that this shows is that intrusive resumption can save weak islands in Romanian, but cannot save strong islands. There is nothing in here revealing of true resumption.

5.2 The distribution of bound pronouns in Romanian

5.2.1 Distribution of clitic-doubling in Romanian

As seen in chapter 2, clitic-doubling is the phenomenon in which a pronoun shares a \(\theta\)-role with an argument. In Romanian, clitic-doubling is not possible with subjects or with adjuncts. Also, there is no clitic-doubling for objects of prepositions.
Consider first the relevant examples which show that clitic-doubling is not possible with subjects (5.4) or with prepositional objects (5.5):

(5.4) SUBJECT
Andrei *el/___ merge în excursie.
Andrei he goes on trip
‘Andrei is going on a trip.’

(5.5) PREPOSITIONAL OBJECT
Andrei merge la școală cu *ea/___ bunica.
Andrei goes to school with she grandmother=the
‘Andrei is going to school with his grandmother.’

A reason why clitic-doubling is not possible with objects of prepositions in (5.5) is the fact that prepositions cannot serve as proper supports to which a pronoun can cliticise. As I said in (§3.1), in Romanian prepositions take the strong form of the pronoun as complement, never the clitic form. Recall also that in Arabic prepositions take clitic pronouns, never strong forms of the pronoun; in other words the ban on prepositions hosting clitic pronouns is not universal. That in Romanian prepositions can only be followed by strong forms of the pronouns, and not by clitic pronouns is illustrated in (5.6), in which the strong form of the pronoun ea “she” is licit with a preposition, but the clitic form of the pronoun o “her” is not.

(5.6) PREPOSITION FOLLOWED BY PRONOUN
Andrei vorbește cu ea/*o.
Andrei speaks with she/ *her
‘Andrei is speaking with her.’

Let us consider now the distribution of clitic-doubling with direct and indirect objects in Romanian. Doubling clitic pronouns which occur with direct and indirect objects have the following distribution: (i) they occur obligatorily with direct objects only if they are both definite and human (ii) they occur obligatorily with all human indirect objects and are optional with animate non-human indirect objects (Gramatica Academiei Române 2008). For both (i) and (ii) some authors add the category “pronominal” direct objects (Steriade 1980; Gramatica Academiei Române 2008). Nevertheless, the “pronominal” direct object can only refer to a human. That strong pronouns denote only humans is noticed also in Cardinaletti and Starke (1999).

Consider first the empirical data about direct objects. Example (5.7) shows the obligatoriness of the pronoun with human direct objects which are proper nouns (5.7a), pronominal (5.7b) and definite common nouns (5.7c):
DISTRIBUTION OF PRONOUNS BOUND FROM DIRECT OBJECT POSITIONS

a. proper nouns denoting humans
   *____/L-am văzut pe Andrei.
   *____/him=Aux.1S seen pe Andrei
   ‘I saw [him] Andrei.’

b. pronominal
   *____/L-am văzut pe el.
   *____/him=Aux.1S seen pe el
   ‘I saw [him] him.’

c. definite human
   *____/L-am văzut pe băiat.
   *____/him=Aux.1S seen pe boy
   ‘I saw [him] the boy.’

If the direct object is not human (5.8) or is indefinite human (5.9), it is not accompanied by a bound pronoun:

(5.8) NON-HUMAN DIRECT OBJECT
a. Am văzut caietul lui Andrei.
   Aux.1S seen notebook=the.M Gen Andrei
   ‘I saw Andrei’s notebook.’

b. *L-am văzut (pe) caietul lui Andrei.
   him=Aux.1S seen pe notebook=the.M Gen Andrei
   ‘I saw [it] Andrei’s notebook.’

(5.9) INDEFINITE HUMAN DIRECT OBJECT
a. Am văzut un băiat.
   Aux.1S seen a boy
   ‘I saw a boy.’

b. *L-am văzut (pe) un băiat.
   him=Aux.1S seen pe a boy
   ‘I saw [him] a boy.’

The examples in (5.8b) and (5.9b) are ungrammatical with the clitic regardless of the presence or absence of pe. We see from (5.8) and (5.9) that Romanian has clitic-doubling with direct objects only when they are both definite and human, and in these cases it is obligatory. This becomes relevant when we look at the distribution of resumption, where the pronoun is not limited to definiteness or to whether the object denotes a human or not.
Some authors (Steriade 1980; Dobrovie-Sorin 1990) argue that clitic-doubling is also possible with a specific indefinite (5.10):

ROMANIAN (Steriade 1980)
(5.10) SPECIFIC INDEFINITE
O caut pe o fată de la noi din sat.
her seek.1S pe a girl from us from village
‘I am looking for [her] a girl from our village.’

Regarding grammaticality judgments for the example in (5.10), Steriade (1980) does not state anything and the reader is left with the impression that (5.10) has the same status as the examples in (5.7). Dobrovie-Sorin (1990) also presents an example in which an indefinite human noun is doubled by a clitic pronoun given below as (5.11b), along with the example in (5.11a).

ROMANIAN (Dobrovie-Sorin 1990)
(5.11) INDEFINITE HUMAN
a. no clitic-doubling
Caut o secretară.
seek.1S a secretary.F
‘I am looking for a secretary.’

b. clitic-doubling
O caut pe o secretară.
her seek.1S pe a secretary.F
‘I am looking for [her] a secretary.’

The example in (5.11a) taken from Dobrovie-Sorin (1990) is on a par with the example I gave in (5.9a) and shows that indefinite human direct objects do not have to be doubled by a clitic. In the following I present Dobrovie-Sorin’s (1990) explanation for (5.11b) regarding grammaticality judgments.

Dobrovie-Sorin (1990) notes that “Some Romanian speakers reject (5.11b) as belonging to the “popular style”; they feel it is incorrect from the point of view of normative grammar, although Romanian grammars do not explicitly mention this type of example (...). For other speakers, including myself, such examples are grammatical and no significant style is perceived. This second category of speakers all agree that the only possible reading is the specific one”. Firstly, I note that (5.11b) is not grammatical in the Romanian that I speak. The informants I consulted all rejected (5.11b). Secondly, though Dobrovie-Sorin (1990) says that “they feel it is incorrect from the point of view of normative grammar, although Romanian grammars do not explicitly mention this type of example”, I assume that the Romanian grammars do not explicitly mention this kind

24 I consulted 4 native speakers of Romanian, three of whom are from Bucharest and one from Mangalia.
of example because they do not list all the types of examples which are ungrammatical (there could be an infinite number of them). Regarding the “popular style” Dobrovie-Sorin (1990) refers to, I point to the fact that the Grammar of the Romanian Academy (2008), though it makes note of utterances specific to colloquial speech (i.e. “popular style”), does not attest at all examples like the one in (5.11b). Because I have been unable to find speakers who replicate this judgment, I rely on Dobrovie-Sorin’s (1990) judgements that (5.11b) is optional for speakers who allow it. This brings us to a two-way divide: (i) obligatory gap for speakers like myself for which (5.11b) is ungrammatical and for which only (5.11a) is grammatical, and (ii) optional clitic-doubling for speakers like Dobrovie-Sorin, for which both (5.11a) and (5.11b) are possible and for whom (5.11b)’s only possible reading is specific. This actually confirms my analysis that wherever \( \phi \) is optional, it has a pragmatic effect. This will be dealt with in detail in chapter (§6), where I discus optional versus obligatory presence of \( \phi \).

In characterizing (5.10) as specific, Steriade’s (1980) does not refer a particular theory of specificity, but only says that the example in (5.10) is a specific indefinite because the direct object is known to the speaker, but not known to the hearer. In concluding, example (5.10) belongs to (i) a variety of Romanian and (ii) in this variety it is only optional. I will talk about optionality and pragmatic effects in the semantics chapter.

Consider now the data about indirect objects. The Grammar of the Romanian Academy (2008) notes that clitic pronouns occur obligatorily with all indirect objects which are human and optional with the non-human animate indirect objects and illicit with inanimate indirect objects; they also note that in the colloquial speech of some people, there is a tendency for the pronoun to become optional (5.12c). This may bring us to a two-way divide between people for whom (5.12c) is possible and people for whom clitic-doubling is obligatory. Example (5.12) shows the obligatoriness of the bound pronoun with human indirect objects which are common nouns (5.12a) or pronouns (5.12b). Cross-linguistically indirect objects are generally human. The Grammar of the Romanian Academy (2008) also notes that the pronoun is optional with non-human animate indirect objects (5.12d) and illicit with inanimate indirect objects (5.12e):
(5.12) DISTRIBUTION OF CLITIC-DOUBLING WITH INDIRECT OBJECTS

a. common noun
   *___/I-am dat cartea băiatului.
   *___/he.Dat=Aux.1S given book=the boy=the.Dat
   ‘I gave [him] the book to the boy.’

b. pronoun
   *___/I-am dat lui cartea.
   *___/he.Dat=Aux.1S given he.Dat book=the
   ‘I gave [him] him the book.’

c. optional in colloquial speech
   Laura ___/îi dă sfaturi lui Andrei.
   Laura ___/he.Dat gives advice the.Dat Andrei
   ‘Laura gives [him] advice to Andrei.’

d. animate – optional
   Andrei ___/îi dă de mîncare pisicii.
   Andrei she.Dat gives of food cat.FDat
   ‘Andrei gives [her] food to the cat.’

e. inanimate – illicit
   Voi *i-/___ați cîntat cu glas fierbinte
   You.Pl her.Dat/___Aux.2Pl sung with voice hot
   naturii calde imnuri sfinte.
   nature.FDat warm.FDat hymns holy
   ‘You sang holy hymns in a passionate voice to the warm nature.’
   George Coșbuc, “Spring’s heralds”

The examples in (5.12) show that, for people for whom clitic-doubling is obligatory with indirect objects, it is so only with human indirect objects. We already saw that with direct objects, clitic-doubling is obligatory with definite humans. This is important to keep in mind, because it becomes relevant when we look at the distribution of resumption, where the pronoun is not limited to definiteness or to the human feature. With non-human animate indirect objects the doubling is only optional.

In the next section, I present the distribution of pronouns bound from A’-positions.

5.2.2 Distribution of pronouns bound from A’-positions in Romanian

In A’-environments, Romanian has obligatory resumptive pronouns with all
direct and indirect objects in relativization and D-linked content questions, regardless of whether they are human or non-human nouns, definite or indefinite.

5.2.2.1 Distribution of A’-bound pronouns in relativization

In relativization, the A’-bound pronoun is obligatory with all direct and indirect objects regardless of factors such as: definiteness/ indefiniteness or human/ non-human/ inanimate. Clitic-doubling is illicit with subjects (5.13a) and it is also illicit with prepositional objects (5.13b). Descriptively, Romanian does not allow preposition stranding on the one hand and is a PP-fronting language on the other hand). Resumption is also illicit with adjuncts.

(5.13) RELATIVIZATION

a. subject

Omul care *el/___ venise din nori ședea acolo, pe bordura de piatră.
man=the who he/___ came.PQP from clouds was sitting there on rim of stone

‘The man who had come from the clouds was sitting there, on the stone rim.’
(Radu Tudoran, The Prodigal Son)

b. prepositional object

Mai târziu, găsind rîndurile acestea de care *le/___ uitase,
more late finding lines=the these of which them forgot.PQP
le regăsi și semnificația, de asemenea uitată.
them.Dat retrieved and significance=the also forgotten

‘Later, finding these lines which she had forgotten, she re-found their significance too, also forgotten.’
(Radu Tudoran, The Prodigal Son)

Resumption is obligatory with all direct and indirect objects, regardless of the human versus non-human or definite vs. indefinite distinction. Consider the examples in (5.14), which illustrate an A’-dependency in Romanian in the context of relativization. In (5.14a), the pronominal element l- “him” (a weak pronoun) occupies the thematic A-position of the moved constituent care “which”, that is in an A’-position. Thus, there is an A’-dependency between the relative pronoun care and the weak pronoun l- “him”; in other words, l- is a resumptive pronoun. In (5.14b), there is a gap in the thematic A-position: in the context of relativization, the gap strategy is ill-formed in Romanian.
(5.14) RELATIVIZATION – DEFINITE HUMAN DIRECT OBJECT

**a. resumption**

Studentul pe care l-am salutat a cîştigat marele premiu.

premiu.

‘The student I greeted [him] won the great prize.’


**b. gap**

*Studentul pe care am salutat a cîştigat marele premiu.

premiu.

‘The student I greeted won the great prize.’

The direct object in (5.14) is human. Nevertheless, if the direct object is non-human (whether animate or inanimate), the resumptive is still obligatory (5.15):

(5.15) RELATIVIZATION – DEFINITE NON-HUMAN DIRECT OBJECT

**a. íî părea rău după marea pe care nu avea s-o vadă niciodată.**

 Conj=her see.3S never

‘He sorrowed after the sea which he would never see.’

(Radu Tudoran, The Prodigal Son)

**b. *íî părea rău după marea pe care nu avea să___ vadă niciodată.**

 Conj see.3S never

‘He sorrowed after the sea which he would never see.’

Resumption is obligatory also irrespective of definiteness/ indefiniteness. In searching for examples, I used the novel Fiul Risipitor “The prodigal Son” by Radu Tudoran and researched all the relative clauses. I found a lot of examples of relativization on indefinite non-human nouns; they all have resumption. I also found relativization on indefinite human nouns; though these were much less in number than the indefinite non-human nouns, they all had resumption. There was no instance of
relativization without resumption. This state of affairs is not restricted to this novel, rather it is characteristic of Romanian in general. Consider the examples in (5.16) which show relativization with an indefinite human and in (5.17) which show relativization with an indefinite non-human. In both (5.16) and (5.17), the lack of resumption renders the sentences ungrammatical.

(5.16) RELATIVIZATION – INDEFINITE HUMAN DIRECT OBJECT

a. E bine așa, gîndea Eva. Să ai un soț
   is good so thought Eva Conj have.2S a husband
   pe care lumea să-l cunoască și să-l respecte.
   pe which people Conj=him know and Conj=him respect
   ‘It is good like this, Eva was thinking. To have a husband whom people know [him] and respect [him].’

b. Pare un chefliu din Grienzing, bine hrănit, pe care
   seems a drunkard from Grienzing well fed pe which
   nu-l miră nimic.
   Neg=him suprises nothing
   ‘He seems like a drunkard from Grienzing, well fed, whom nothing surprises [him].’

c. El era un om pe care poate nu-l iubea dar care, așa cum îl
   he was a man pe which maybe Neg=him loves but which so how him
   știa, reprezenta singura ei rațiune de a fi.
   knew represented alone her reason of to be
   ‘He was a man which maybe she didn’t love, but who, as she knew him, represented her only raison d’etre.’
d. indefinite pronoun

Și **unul**, pe care l-am ăsat să mă țină în brațe șic and **one.M** pe which **him=Aux.1S** let Conj me hold in arms how 

i-a plăcut, a socotit că nu e nevoie să-și mai bată capul cu mine. 
anymore beat head=the with me 
‘And one, whom I let [him] hold me in his arms for as long as he liked to, thought it was not necessary anymore to worry about me.’

**RELATIVIZATION – INDEFINITE NON-HUMAN DIRECT OBJECT**

a. Auzi un glas necunoscut, strigînd-o într-un fel pe care îl cunoștea 
heard a voice unknown calling=her in a manner.M pe which **him** knew 
‘She heard an unknown voice, calling her in a way which she knew [it].’

b. Și atunci adăugă cu o îndrăzneală pe care n-o înțelegea and then added with a boldness.F pe which Neg=her understood 
și nu ș-și-o recunoștea… and Neg se.Dat=her recognize 
‘And then she added with a boldness which she did not understand [it] and did not recognize [it] [as being hers].’

c. Noaptea, tîrziu, scria bilete de dragoste 
night late write **letters.F** of love 
pe care n-avea să le trimită niciodată. pe which Neg=Aux.3S Conj them send.3S never 
‘Late at night she was writing letters of love which she would never send [them].’
d. Sub șopron mergea un fierăstrău mișcîndu-se necontenit, under barn worked a saw moving=se continuously
mînat de niște roti pe care le învărtea apa.
driven by some wheels pe which them span water=the
‘Under the barn a saw was working moving continuously, driven by some wheels
which the water was spinning [them].’

e. Panciu era un orășel pe care-l cunoștea din copilărie.
Panciu was a town.M pe which=him knew from childhood
‘Panciu was a town which he knew [it] since childhood.’

f. Am să-ți cînt un cântec pe care nu l-ai auzit
Aux.1S Conj=you sing a song.M pe which Neg him=Aux.2S heard
niciodată, nu-l știu încă, dar îl simt în inima mea…
ever Neg=him know yet, but him feel in heart my…

‘I will sing you a song which you have never heard [it] before, [which] I don’t
know [it] yet, but [which] I feel [it] in my heart…

g. Lipsi o sătpămînă, pe care Eva o petrecu speriată,
missed a week.F pe which Eva her spent afraid
fiindcă nu ștea niciodată ce înseamnă plecările lui.
because Neg knew never what mean departures his
‘He was away for a week which Eva spent [it] afraid, because she never knew
what his departures meant.’

h. Eva simți întîi o ușurare pe care nu o șteptase.
Eva felt first a relief.F pe which neg her expected
‘Firstly, Eva felt a relief which she did not expect.’

Moving on to relativization with indirect objects, resumption is obligatory
regardless of distinctions such as human vs. non-human or definite/ indefinite, just as in
the case of relativization with direct objects. Consider the example in (5.18) which
shows a relative clause with a definite human indirect object and (5.19) shows a relative
clause with an indefinite human indirect object. As a conclusion, the resumptive
pronoun is obligatory.
(5.18) RELATIVIZATION – DEFINITE HUMAN INDIRECT OBJECT
a. resumption
Studentul căruia i-am dat cartea
student=the.M who.Dat 3MS=Aux.1S gave book=the

a căștigat marele premiu
Aux.3S won great-the prize
‘The student to whom I gave [him] the book won the great prize.’

b. gap
*Studentul căruia ___am dat cartea
student=the.M who.Dat ___Aux.1S gave book=the

a căștigat marele premiu
Aux.3S won great-the prize
‘The student to whom I gave ____ the book won the great prize.’

(5.19) RELATIVIZATION – INDEFINITE HUMAN INDIRECT OBJECT
a. A rămâne umbra unei forme definitive putea fi o menire,
to remain shadow=the a.Gen shape.Gen definitive could be a destiny

umbra unei case sau a unui copac, de pildă.
shadow a.Dat house or of a.Dat tree of example

Nu însă a unei forme nestatornice, a unui om căruia
Not but of a.Dat shape fickle of a.Gen man which.Dat

îi stă în fire să înșele soarele în orice clipă
him.Dat sits in nature Conj cheat.3S sun=the in any instance

și să fugă fără umbră.
and Conj run.3S without shadow
‘To remain the shadow of a definitive form could be a destiny, the shadow of a house or of a tree, for example. Not however of a fickle shape, of a man in whose nature is to cheat [to him sits in the nature to cheat] at any moment and run without shadow.’

(Radu Tudoran, The Prodigal Son)
b. A rămâne umbra unei forme definitive putea fi o menire,
   to remain shadow=the a.Gen shape.Gen definitive could be a destiny
   umbra căruia sau a unui copac, de pildă.
   shadow which.Dat or of a.Dat tree of example
   Nu însă a unei forme nestatornice, a unui om căruia *
   Not but of a.Dat shape fickle of a.Gen man which.Dat ___
   stă în fire
   sits in nature
   să înșele soarele în orice clipă și să fugă fără umbră.
   Conj cheat.3S sun=the in any instance and Conj run.3S without shadow
   Also, resumption is obligatory in relativization with indirect objects regardless of
   them being human or not. Example (5.20) shows relativization with a definite non-
   human indirect object and (5.21) shows relativization with an indefinite non-human
   indirect object.

   (5.20) RELATIVIZATION – DEFINITE NON-HUMAN INDIRECT OBJECT
   a. Îi părea rău după marea căreia îi
      him.Dat seemed bad after sea=the.F which.FDat her.Dat
      sang serenade
      cîntase serenade.
      'He sorrowed after the sea to which he had sung serenades [to it].
   b. *Îi părea rău după marea căreia ___
      him.Dat seemed bad after sea=the.F which.FDat ___
      cîntase serenade.
      sang serenade
      'He sorrowed after the sea to which he had sung serenades [to it].

   (5.21) RELATIVIZATION – INDEFINITE NON-HUMAN INDIRECT OBJECT
   a. București e un oraș căruia guvernul îi acordă
      Bucharest is a city which.MDat government=the him.Dat grants
      fonduri de dezvoltare.
      funds of development
      'Bucharest is a city to which the government grants [to it] development funds.'
b. *București e un oraș căruia guvernul ___ acordă Bucharest is a city which.MDat government=the ___ grants
fonduri de dezvoltare.
funst of development
‘Bucharest is a city to which the government grants [to it] development funds.’

What examples (5.18)-(5.21) show is that relativization with indirect objects has obligatory resumption regardless of definiteness vs. indefiniteness or human versus non-human. The constants are always (i) the relative pronoun and (ii) the resumptive pronoun. The distribution of pronouns bound from A’-positions in relative clauses versus gaps is given in Table 14:

<table>
<thead>
<tr>
<th>Syntactic position</th>
<th>Gap</th>
<th>A’-bound pronoun</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Direct Object</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Indirect Object</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Prepositional Object</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 14. Distribution of resumptive pronouns in relative clauses

5.2.2.2 Distribution of A’-bound pronouns in content questions

Moving on to questions, firstly I note that, similar as in Arabic (§4.2.3 – §4.2.4) there is in Romanian as well a dichotomy in the distribution of resumption depending on whether the question has a bare interrogative or whether the question is D-linked. However, in Romanian resumptive pronouns are obligatory in D-linked content questions, whereas in Arabic they are optional. Resumption occurs in Romanian with direct and indirect objects; subjects and prepositional objects have obligatory gap. The difference here between Romanian and Arabic is that in Arabic resumption is also possible with extraction of objects of preposition.

In Romanian, resumptive pronouns are illicit with bare interrogatives, except for indirect object extraction where resumption is optional. In Iraqi Arabic there is optional resumption with embedded direct object extraction in questions with bare interrogatives. Since Romanian indirect object extraction with bare interrogatives and Iraqi Arabic direct object extraction with bare interrogatives are both cases of optional resumption, I address them in more detail in (§6), where I discuss interpretive effects observed with optional resumption.

As mentioned in chapter 4, the dichotomy between bare interrogatives and D-linked interrogatives with respect to the licit presence of resumptive pronouns was noticed for Hebrew (Sells 1984), Greek (Alexopoulou 2006), Jordanian Arabic (Guiliot 2006; Malkawi 2009) and Iraqi Arabic (Sterian 2011); Boeckx (2003) notes that
generally that languages with resumptives have them in D-linked content questions and not with bare interrogatives.

Consider now the resumption data in D-linked content questions in Romanian. As with relativization, resumption is illicit with subject extraction (5.22) and with prepositional object extraction (5.23):

(5.22) D-LINKED CONTENT QUESTION – SUBJECT EXTRACTION

a. gap
Care student a cîștigat concursul ?
which student Aux.3S won competition=the
‘Which student won the competition ?’

b. resumption
*Care student a cîștigat el concursul ?
which student Aux.3S won he competition=the
‘Which student [he] won the competition ?’

(5.23) D-LINKED CONTENT QUESTION – PREPOSITIONAL OBJECT EXTRACTION

a. PP-fronting
Cu care profesoară vorbește Andrei ?
with which professor speaks Andrei
‘With which professor is Andrei speaking ?’

b. gap
*Care profesoară vorbește Andrei cu _____ ?
which professor speaks Andrei with
‘Which professor is Andrei speaking with ?’

c. resumption
*Care profesoară vorbește Andrei cu ea ?
which professor speaks Andrei with her
‘Which professor is Andrei speaking with [her]?’

The examples in (5.24) and (5.25) show that when a D-linked direct object is extracted, resumption is obligatory regardless of whether the direct object is human (5.24) or non-human (5.25). The presence or absence of pe in (b) does not affect the ungrammaticality of the question.
Moving on to indirect objects, the examples in (5.26) and (5.27) show that when a D-linked indirect object is extracted, resumption is obligatory regardless of whether the indirect object is human (5.26) or non-human (5.27):

(5.26) D-LINKED CONTENT QUESTION – HUMAN INDIRECT OBJECT EXTRACTION

a. A’-bound pronoun

Cărui băiat i-ai dat cartea ?
Which.MDat boy.M him.Dat=Aux.2S given book=the
‘To which boy did you give [him] the book ?’

b. gap

*Cărui băiat ____ai dat cartea ?
Which.MDat boy.M ____Aux.2S given book=the
‘To which boy did you give the book ?’
D-LINKED CONTENT QUESTION – NON-HUMAN INDIRECT OBJECT EXTRACTION

a. resumption
Căruia orași din România îi tot acordă guvernul fonduri?
‘To which city in Romania does the government keep on granting funds ?’

b. gap
*Căruia orași din România ___ tot acordă guvernul fonduri?
‘To which city in Romania ___ all grants government=the funds’

The data regarding the distribution of gap and resumption in D-linked content questions in summarized in Table 15:

<table>
<thead>
<tr>
<th>Grammatical function</th>
<th>Gap</th>
<th>Resumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Direct object</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Indirect objects</td>
<td>x</td>
<td>√</td>
</tr>
<tr>
<td>Prepositional objects</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 15. Distribution of gap and resumption with D-linked content questions

As for questions with bare interogatives, resumption is illicit with subjects (5.28) and direct objects (4.29).

(5.28) BARE INTERROGATIVE – SUBJECT EXTRACTION

a. gap
Cine pleacă in Turcia ?
who departs in Turkey
‘Who is leaving for Turkey ?’

b. resumption
*Cine el pleacă in Turcia ?
who he departs in Turkey
‘Who is leaving for Turkey ?’
(5.29) BARE INTERROGATIVE – DIRECT OBJECT EXTRACTION

a. gap
Pe cine ai strigat?
*Pe who Aux.2S called
‘Whom did you call out?’

b. resumption
*Pe cine l-ai strigat?
*Pe who him=Aux.2S called
‘Whom did you call [him] out?’

Dobrovie-Sorin (1990) also mentions the example in (5.29b) as ungrammatical and adds that: “However, Sandfeld and Olsen (1936) give some examples of this type, taken from literary works written at the beginning of the century (…) These examples are considered to be substandard in modern Romanian (educated people would probably never use them). Note also that even in those dialects that accept (5.29b) the clitic is only optional, as opposed to the obligatory presence of a clitic in care “which” constructions.”

Resumption is optional with indirect objects in questions with bare interrogatives (5.30):

(5.30) BARE INTERROGATIVE – INDIRECT OBJECT EXTRACTION

a. gap
Cui ___ai vîndut mașina?
Who.Dat ___Aux.2S sold car=the
‘To whom did you sell the car?’

a. resumption
Cui i-ai vîndut mașina?
Who.Dat him.Dat=Aux.2S sold car=the
‘To whom did you sell [him] the car?’

The example in (5.30) is rather an outlier, because as I mentioned earlier, the occurrence of resumption in questions with bare interrogatives is far less frequent as compared to its distribution in D-linked questions even in the languages which have true resumption (Boeckx 2003).

Resumption is not possible with non-human direct (5.31) objects:
 ROMANIAN

(5.31) BARE INTERROGATIVE – NON-HUMAN DIRECT OBJECT EXTRACTION

a. gap
Ce ai văzut?
what Aux.2S seen
‘What did you see?’

b. resumption
*Ce l=ai văzut?
what him=Aux.2S seen
‘What did you see [it]?’

The non-human interrogative pronoun ce “what” does not have a dative form. Any indirect object extraction with bare interrogatives is done with cui which is the dative of cine; the question then has the form in (5.30) and the understood indirect object is human.

The distribution of gap and resumption in questions with bare interrogatives and in questions with D-linked interrogatives is given in Table 16:

<table>
<thead>
<tr>
<th></th>
<th>Bare interrogatives</th>
<th>D-linked interrogatives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Gap</td>
<td>Resumption</td>
</tr>
<tr>
<td>Subject</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Direct Object</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Indirect Object</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Prepositional object</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 16. A’-bound pronouns in questions with bare interrogatives and D-linked interrogatives

5.3 Analysis: Resumption is not parasitic on clitic-doubling

Regarding the binding of pronouns from A- and A’- positions in Romanian, I draw attention to the following facts:

1. Clitic-doubling in Romanian is a phenomenon which falls in line with clitic-doubling throughout Romance. The clitic-doubling data observed in Romanian is similar in essential aspects with the clitic-doubling data observed for other Romance languages, such as varieties of Spanish, Portuguese and some varieties of Italian (Uriagereka 1995; Gutierrez-Rexach 2000). The human feature seems to be the common denominator that cuts across all Romance languages (Uriagereka 1995; Cardinaletti and Starke 1999).
2. With respect to its distribution in relative clauses and to its obligatoriness, resumption in Romanian patterns with resumption in Arabic.

Consider Table 17 which shows the distribution of clitic-doubling and resumption in Romanian:

<table>
<thead>
<tr>
<th></th>
<th>Clitic-doubling</th>
<th>Resumption</th>
<th>Relativization</th>
<th>D-linked</th>
<th>Non-D-linked</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subject</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Object of preposition</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Human</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Object</td>
<td>Definite</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Indefinite</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Object</td>
<td>Definite</td>
<td>√</td>
<td></td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>Indefinite</td>
<td>√</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Non-human</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Direct Object</td>
<td>Definite</td>
<td>x</td>
<td>√</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>Indefinite</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Indirect Object</td>
<td>Definite</td>
<td>x</td>
<td></td>
<td>√</td>
<td>N/A</td>
</tr>
<tr>
<td>Indefinite</td>
<td>x</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 17. Distribution of clitic-doubling and resumption in Romanian

What Table 16 shows is that the overlapping of clitic-doubling and resumption occurs only with definite human direct objects and human indirect objects.

In the remainder of this section, I show that resumption in Romanian is not parasitic on clitic-doubling. Firstly, I present the empirical evidence which shows that some root sentences where clitic-doubling is obligatory have corresponding content questions in which the doubling pronoun is illicit (§5.3.1) and some root sentences where clitic-doubling is illicit have corresponding A’-constructions with obligatory resumption (§5.3.2). I then show that a clear distinction must be made between complementizers and relative pronouns (§5.3.3) and that this is relevant to resumption. Then I propose an analysis of resumption (§5.3.6) and an analysis of clitic-doubling (§5.3.8).

In brief, I show that clitic-doubling is a bottom-up process in which human nouns have a $u\varphi$ categorial selectional feature which requires them to be selected as complements by a $\varphi$P, while resumption is a top-down process, in which the relative pronoun is a $D$ head which has a strong $u\varphi$ categorial selectional feature which requires it to take a $\varphi$P as complement.

5.3.1 Clitic-doubling does not feed resumption in A’-movement with bare interrogatives

In the beginning of this chapter, I asked the question (1), given below as (5.32):
(5.32) are there constructions with pronouns bound from A-positions with a shared θ-role which following A’-movement do not show bound pronouns?

The answer is yes. There are obligatory clitic-doubling constructions for which A’-movement leaves an obligatory gap. This relevant A’-environment is in questions with bare interrogatives.

Consider the declarative and interrogative pair of sentences in (5.33) where the declarative sentence contains an obligatory pronoun bound from a direct object position (5.33a) and the interrogative sentence in which extraction of the direct object following A’-movement leaves a gap (5.33b):

(5.33) CLITIC-DOUBLING IN DECLARATIVE SENTENCES VERSUS GAP IN QUESTIONS

a. declarative sentence – obligatory clitic-doubling
Laura *___/ 1-a văzut pe Andrei la bibliotecă.
Laura *___/ him=Aux.3S seen pe Andrei at library
‘Laura saw [him] Andrei in the library.’

b. question with bare interrogative pronoun
Pe cine ___/ *l-a văzut Laura la bibliotecă?
pe who ___/ *him=Aux.3S seen Laura at library
‘Whom did Laura see in the library?’

In (5.33a), the pronoun l “him” is bound by Andrei with whom it shares the same θ-role. The lack of this pronoun renders the sentence ungrammatical. In (5.33b), with direct object extraction, A’-movement binds a gap; the presence of the bound pronoun makes the sentence ungrammatical. One aspect that the pair of sentences in (5.33) shows is that a clitic-doubling construction does not feed into A’-movement with resumption (at least in this environment). Since this is the case, then a legitimate question that arises is what prevents resumption? I argue that the bare interrogative in (5.33b) cannot take an φP complement. This will be detailed in (§5.4.1).

5.3.2 Resumption in the absence of clitic-doubling

The second question I asked in the beginning of this chapter is given in (5.34):

(5.34) are there constructions which do not have pronouns bound from A-positions with a shared θ-role, but which following A’-movement show obligatory bound pronouns?
This mismatch is seen by pairing root sentences in which clitic-doubling is ungrammatical with their corresponding relative clauses, which have obligatory resumption.

Let us take one of the contexts in which clitic-doubling is ungrammatical, seen in (§5.2.2). In Romanian clitic-doubling is illicit with non-human direct objects. However, following relativization or in D-linked content questions these same non-human nouns obligatorily bind a pronoun.

Consider the example in (5.35):

(5.35) NO CLITIC-DOUBLING IN ROOT SENTENCES VERSUS RESUMPTION IN RELATIVIZATION

a. Nu avea să *o/ ___vadă niciodată marea.
   neg Aux.3 Conj *her/___see.3S never sea=the.F
   ‘He would never see the sea.’

b. Îi părea rau după marea pe care nu avea
   him.Dat seemed bad after sea=the.F pe which neg Aux.3
   s-o vadă niciodată
   Conj=her see.3S never
   ‘He sorrowed after the sea which he would never see.’
   (Radu Tudoran, The Prodigal Son)

In (5.35a) the direct object marea “the sea” does not bind a pronoun, rather the presence of a bound pronoun renders the sentence ungrammatical. However, when marea ‘the sea’ is relativized, then it obligatorily binds the pronoun o “her” (5.35b). This example shows that that constructions where clitic-doubling is illicit, once relativized must contain a resumptive pronoun.

From the examples in (§5.3.1) as well as from the examples in this section, it becomes clear that the mismatch goes both ways: there are there constructions with pronouns bound from A-positions with a shared θ-role which following A’-movement do not show bound pronouns, and there are constructions which do not have pronouns bound from A-positions with a shared θ-role, but which following A’-movement show obligatory bound pronouns. In conclusion, this indicates that resumption is not parasitic on clitic-doubling.

5.3.3 Complementizers and relative pronouns in Romanian

In (§4.2.2) I discussed the distinction between elements introducing relative clauses residing in C (i.e. “complementizers”) and elements residing in SpecCP (i.e. “relative pronouns”) and I argued that obligatory resumption is only found when there is
a relative pronoun. I showed in (§4.2.2) that in Arabic (i) there is a designated relative pronoun that introduces relative clauses, (ii) relative clauses cannot be formed with a complementizer and (iii) resumption is obligatory. In this section I see how this relates to Romanian. Empirically I show that Romanian, just like Arabic, (i) has a designated relative pronoun with which it forms relative clauses, (ii) it cannot form relative clauses with a complementizer and (iii) has obligatory resumption. I argue that the analysis proposed in chapter 4 that the relative pronoun is a D head which takes a φP as complement can be extended to Romanian, as well.

Consider now the Romanian relative clause in (5.36); the relative clause in (5.36a) which is formed with the relative pronoun care “which” is grammatical, but the relative clause in (5.36b) formed with the complementizer că “that” is ungrammatical.

**ROMANIAN**

(5.36) RELATIVIZATION

a. relative pronoun

Cartea pe care am citit-o
book=the.F pe which Aux.1S read=her
‘The book which I read’

b. complementizer

*Cartea că am citit-o
book=the.F that Aux.1S read=her
‘The book that I read’

Just like Arabic (§4.2.2), Romanian uses only a designated relative pronoun to form relative clauses. In Romanian, only the relative pronoun care appears in relativization and resumption is obligatory with all direct and indirect objects, just like in Arabic. Significantly, care is also the interrogative pronoun which appears in D-linked content questions and resumption is obligatory with all direct and indirect objects here, as well. But in Iraqi Arabic, the relative pronoun is morphologically different from the D-linked interrogative: the relative pronoun is ily and the D-linked interrogative is ya:.

This difference is also reflected in the obligatoriness versus optionality of resumption: in relativization, resumption is obligatory with all direct and indirect objects as well as with objects of preposition, but in D-linked content questions resumption is optional with all direct and indirect objects as well as with objects of preposition (§4.2). Therefore, as already mentioned in (§4.3.2 ii) I propose that it is the nature of the D involved which is a factor in whether resumption is obligatory or optional. It is obligatory in relative clauses in Arabic and in Romanian, because the relative pronoun takes a φP as complement. It is only optional in D-linked questions in Arabic, because the D-linked interrogative may take a φP or an NP as complement.
5.3.4 Interim conclusion

At this point the Romanian data face us with the following facts:

(i) there are environments in which clitic-doubling does not feed resumption (§5.3.1), and

(ii) there are constructions in which clitic-doubling is illicit, but which after A’-movement such as relativization or D-linked interrogation display obligatory resumption (§5.3.2).

(iii) Romanian has a designated relative pronoun. Relativization with conjunctions is not possible (§5.3.3).

Later in this section I propose an analysis of resumption (§5.4.1) and of clitic-doubling (§5.4.2) in which these two phenomena are given a separate analysis.

5.4 Resumption and clitic-doubling in Romanian: analysis

The analysis of resumption proposed for Arabic in (§4.2.2) can be extended to Romanian as well.

5.4.1 Resumption as top-down c-selectional requirement

In (§4.3.2) I proposed for Iraqi Arabic that the obligatoriness of resumption in relativization is caused by the nature of the D involved: in relativization, the relative pronoun illyi – of category D - has a categorial selectional feature which requires it to merge with a φP at First Merge. Also in (§4.3.2) I proposed that the D involved in D-linking ya:, however, is not restricted in this way. It may merge with a φP, resulting in a D-linked content question with resumption. Or it may merge with an NP, resulting in a D-linked content question with gap. Remember that in Iraqi Arabic the relative pronoun and the D-linked interrogative pronoun are morphologically different. This is not the case in Romanian, however, where the relative pronoun and the interrogative pronoun are morphologically identical: this correlates with the fact that both in relativization and in D-linked content questions resumption is obligatory.

In Romanian relativization and in D-linked content questions in which resumption is obligatory, resumption arises because of the nature of the D involved: care “which” has a categorial selectional feature that requires it to take a complement headed by the resumptive pronoun (5.37), that is, the D head in both relative and D-linked questions in Romanian has the properties I associated with the relative D head in Iraqi Arabic.
(5.37) STRUCTURE OF THE DP AT FIRST MERGE IN RELATIVIZATION AND D-LINKED QUESTIONS

The complex-DP in (5.37) is just the same as for Iraqi Arabic: I take the relative pronoun care in Romanian and illy in Iraqi Arabic to be of category D and to always have a categorial selectional feature $u\phi P$. In order to have this uninterpretable $u\phi P$ feature checked, care/illy needs to merge with a $\phi P$. Once care/illy merges with the $\phi P$, it checks its $u\phi P$ feature.

Let us see in more detail how this analysis works in a relative clause in Romanian. Consider (5.38) which is a relative clause with obligatory resumption: the pronoun îl “him” has moved from the larger DP headed by care “which” by the process of cliticisation; this DP has then moved to an A’-position:

(5.38) cântecele$^{25}$ pe care îl ascult cu atenție
song=the.M pe which him listen.1S with attention
‘the song I am listening [it]’

In line with (5.37), the derivation of a relative structure such as (5.38) is the one shown in (5.39). I assume the raising analysis for relatives and I skip intermediate steps which are not immediately relevant. As proposed for Iraqi Arabic in (§4.3.2), the complement of the verb is a complex-DP. The derivation develops by phases (i.e. the vP phase, the IP phase, etc), where each maximal projection represents a domain for the application of rules (Chomsky 1995; Epstein et al 1998; Wojdak 2005; Hornstein 2008; Roberts 2010). In (5.39) the relative pronoun care “which”, the resumptive pronoun îl “him” and the noun cântece “song” start as a complex-DP at First Merge: at Step (i), the pronoun îl “him” merges with the noun cântece “song” and at Step (ii) this complex syntactic object

$^{25}$ cântece “song” in Romanian is neuter, which means it has masculine agreement in the singular and feminine in the plural. Since this is not relevant to the discussion, I glossed it as “M” to make it easier on the reader.
then merges with the relative pronoun care “which”. Then the verb ascult “listen” is merged, taking the complex-DP as complement. After v is merged, it probes the complex-DP and cannot attract D because it is not a proper goal for it, in other words D is distinct from v and therefore unable to incorporate to it; on the other hand, φ is able to move to v, because v and φ have identical features (Roberts 2010), see (§3.1.2-3.1.3); thus φ raises to v to value its features. Similar as with the derivation of a relative clause in Iraqi Arabic (§4.3.2), two movement requirements appear with regard to the complex-DP: one is for the clitic to raise from its base position to a derived one and the other is for the relative pronoun to move to SpecCP. In (§3.1.2) I discussed the movement of the clitic pronoun: in brief, (i) it raises to value its features against a suitable probe and (ii) the clitic does not necessarily move together with a host on its way up. In (§3.1.2) I proposed that the clitic pronoun raises from its base position and moves cyclically all the way to I: following Richards (2010), the clitic pronoun raises to v, then it moves to I. On the other hand, D is a proper goal for C, because C has both D and φ features and attracts the DP to SpecCP in an instance of wh-movement. In Romanian, since the clitic pronoun is proclitic, there is further movement of clitic past the verb. At Step (iii) the noun cîntec “song” raises to the specifier of the DP whose head is the definite article.

(5.39) DERIVATION OF (5.38)

(i) Step 1: the pronoun îl “him” merges with the noun cîntec “song”
[φP [îl φ] [cîntec N ]]

(ii) Step 2: φP merges with the relative pronoun
[DP [D care][φP [îl φ] [cîntec N ]]]
Having seen how the derivation of a relative clause with obligatory resumption unfolds, let us now see how the derivation of a D-linked content question with obligatory resumption works. In brief, the derivation of a D-linked content question with obligatory resumption proceeds in a similar way as the derivation of a relative clause with obligatory resumption, minus the final step taken to derive the relative clause, namely the one in which the noun raises from SpecCP to the specifier of the DP whose
head is the definite article. For concreteness, let us consider the example in (5.40), which shows a D-linked content question with object extraction and obligatory resumption.

(5.40) Pe care cânte\c{t}e \i\l\ ascul\’i ?
   pe which song.M him listen.2S
   ‘Which song are you listening [it] ?’

In line with (5.37), the derivation of a D-linked content question such as (5.40) proceeds as shown in (5.41). I skip intermediary steps which are not immediately relevant. In (5.41) the D-linked interrogative pronoun care “which”, the resumptive pronoun îl “him” and the noun cânte\c{t}e “song” start as a complex-DP at First Merge (the resumptive pronoun and the noun merge first and form the $\phi$P which then merges with D). At Step 1, the pronoun îl “him” merges with the noun cânte\c{t}e “song” and at Step 2 this complex syntactic object then merges with the D-linked interrogative care “which”. The lexical verb takes this complex-DP care îl cânte\c{t}e as complement, after which $v$ is merged, taking VP as complement. At Step 3 the resumptive pronoun îl “him” raises to value its features against $v$. Then the remnant of the complex-DP care îl cânte\c{t}e is moved to SpecCP via successive application of merge and delete.

(5.41) DERIVATION OF (5.40)

\textbf{Step 1: the pronoun îl “him” merges with the noun cânte\c{t}e “song”}

$[\phi P [\tilde{\ell}_\phi] [\texttt{c\^{a}ntec}_N]]$

\textbf{Step 2: $\phi$P merges with the relative pronoun}

$[D \texttt{care}][\phi P [\tilde{\ell}_\phi] [\texttt{c\^{a}ntec}_N]]$
So far, I have proposed an analysis for all resumptive constructions across the board involving *care* “which” such as relativization and D-linked content questions in Romanian and relativization in Iraqi Arabic to have a derivation as in (5.39)/(5.41).

As mentioned earlier, both in Arabic and in Romanian resumption is not possible with subjects. In (§2.2) I said that overt subjects in Arabic and in Romanian can only be full noun phrases (DPs) or strong pronouns; where English would have an unstressed pronoun, here we find pro-drop. The resumptive pronoun in both Arabic and Romanian is a clitic pronoun, of category $\varphi$; as mentioned before, $\varphi$ with Nominative case has no phonological realisation (§3.2.4). In (§4.3.2) I proposed that the relative pronoun *illiy “which”* has a categorial selectional feature which requires it to take a $\varphi$P as complement and that when the complex-DP is merged as the external argument of the verb, $\varphi$ is not phonologically realised. I propose that this is analysis can be extended to Romanian, as
well: when the complex-DP is merged in subject position, \( \phi \) is not phonologically realised.

For the sake of concreteness, let us consider a D-linked content question with subject extraction (5.42):

**ROMANIAN**

(5.42) a. D-LINKED CONTENT QUESTION WITH SUBJECT EXTRACTION

Care student a căștigat concursul ?
which student Aux.3S won competition=the
‘Which student won the competition ?’

b. derivation of (4.45a)

\[
[VP [DP [D care [\( \phi \)P [\( \phi \) îl [NP student]]]]]] [v . . . . .]
\]

In (5.42b), the complex-DP `care îl student` “which him student” is externally merged in the specifier of the verb (whether it’s V or v, it has no different effect on this analysis); this complex-DP subject then raises to the position where it is assigned Nominative case. Even though it contains a \( \phi \) pronoun in its shell, the pronoun is phonologically not realized – indicated by the shade in (4.45b) - because \( \phi \) pronouns do not have a Nominative realisation (§4.2.1).

A similar reasoning goes for the impossibility of resumption with object of preposition extraction. Consider again (5.23) given here as (5.43):

(5.43) D-LINKED QUESTION WITH PP-EXTRACTION

a. PP-fronting

Cu care profesoră vorbește Andrei ?
with which professor speaks Andrei
‘With which professor is Andrei speaking ?’

b. gap

*Care profesoră vorbește Andrei cu\
which professor speaks Andrei with
‘Which professor is Andrei speaking with ?’

b. resumption

*Care profesoră vorbește Andrei cu ea?
which professor speaks Andrei with her
‘Which professor is Andrei speaking with [her]?’

As mentioned earlier, the examples in (5.43) show that the extraction of an object of preposition is not grammatical in Romanian. PP-fronting is the only option; Romanian is a language that does not allow preposition stranding, hence (5.43b) and (5.43c) are
ungrammatical. On the other hand, prepositions in Romanian check Nominative features found with strong pronouns. This is where a difference between Arabic and Romanian is seen. In Arabic, prepositions allow cliticisation; in actual fact, prepositions in Arabic cannot be followed by the strong form of the pronoun. This makes resumption in D-linked content questions with objects of preposition possible in Iraqi Arabic (Arabic also has PP-fronting like Romanian does; preposition stranding is not possible). Since in Romanian prepositions check Nominative case, when the prepositions selects the complex DP containing the φ pronoun, then φ with Nominative remains phonologically unrealised. The strong form of the pronoun is the one that bears the Nominative features that can be checked against the corresponding feature on the preposition. Case gets checked inherently rather than structurally.

So far we have seen how the derivation of resumption proceeds in D-linked content questions. D-linked content questions with direct and indirect object extraction have obligatory resumption, because the direct/indirect object has a D-φ-N structure at First Merge; the resumptive pronoun is a φ head which raises to cliticise to the verb, and the remnant-DP raises to SpecCP. In D-linked content questions with subject extraction, overt resumption is not possible because the φ pronoun is not phonologically realized as discussed earlier (§3.2.4) and (§4.2.1). Also, in D-linked content questions extraction of prepositional object is not possible either; however this is independent of D-linking and rather has to do with the fact that in Romanian prepositions undergo piped-piping. In the following I explain in detail why resumption is not possible with bare interrogatives.

Recall from (§4.3.3) that the presence or the lack of resumption with interrogatives in Iraqi Arabic was caused by the nature of the D involved and I concluded that it is the fact that the various D heads have different selectional requirements that explains why resumption is variously obligatory, only an option or even impossible: for Iraqi Arabic, proposed that the D-linked interrogative ya: may take a φP or an NP as complement, but ilyi must take a φP as complement, while the bare interrogative minnu: can take neither a φP or an NP as complement. This is evidenced in Iraqi Arabic from the fact that in relative clauses resumption is obligatory, hence D-φ-N, while in D-linked interrogatives resumption is optional – hence both D-N and D-φ-N are possible, and finally in questions with bare interrogatives resumption is impossible – hence D. In Romanian, significantly, relative clauses and D-linked content questions have in common the relative pronoun/D-linked interrogative care “which”. I argue that the the D-linked interrogative/ relative pronoun care must take a φP as complement, while the bare interrogative cine can take neither a φP or an NP as complement.

In the following I extend to Romanian this analysis proposed in (§4.3.3) for Iraqi Arabic and I propose that what blocks resumption in questions with bare interrogatives such as cine “who” is the fact that the bare interrogative lacks the categorial selectional

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26 please refer to footnote 1
feature which requires it to merge with a φP and so it cannot form a complex-DP at First Merge. Let us see this in more detail.

Consider the case of (5.33) which I give below as (5.45):

(5.45) CLITIC-DOUBLING IN ROOT SENTENCES VERSUS GAP IN RELATIVIZATION

a. declarative sentence
Laura 1-a văzut pe Andrei la bibliotecă.
Laura him=Aux.3S seen pe Andrei at library
‘Laura saw [him] Andrei in the library.’

b. question with bare interrogative pronoun
Pe cine ___/*l-a văzut Laura la bibliotecă ?
pe who ___/*him=Aux.3S seen Laura at library
‘Whom did Laura see in the library ?’

The example in (5.45a) is a declarative main clause in which the pronoun l- “him” doubles the direct object pe Andrei. On direct object extraction with bare interrogative (5.45b), the pronoun is illicit and only gap renders the question grammatical. Resumption is blocked with bare interrogatives. What blocks resumption in (5.45b) is the impossibility of cine “who” and the pronoun l- “him” to be part of a constituent at First Merge. Remember that earlier in this section I showed that care “which” in Romanian has a categorial selectional feature uφP. In order to have this uninterpretable uφP feature checked, care “which” needs to select a φP as its complement. Once care “which” merges with the φP, it checks its uφP feature. I posit that cine “who” does not have a categorial selectional feature that would allow it to take a φP as complement. Implicitly resumption is not possible. In other words, cine “who” cannot form a complex DP of the D-φ-N form, but care “which” must always form a D-φ-N.

While in English who can introduce a relative clause (5.46a), in Romanian cine “who” cannot introduce a relative clause (5.46b):

(5.46) RELATIVIZATION WITH WHO

a. English
The man whom I saw is Jake Gyllenhaal.

b. Romanian
*Bărbatul cine l-am văzut este Jake Gyllenhaal.
man whom him=Aux.1S seen is Jake Gyllenhaal

The difference between cine and who probably has to do with the fact that cine is always a D endowed with an interrogative feature, which must be checked by an interrogative functional head.
In this section I showed that resumption arises in Romanian because of the nature of D involved: the relative pronoun/ D-linked interrogative pronoun care “which” has a categorial selectional feature that requires it to take a complement headed by the resumptive pronoun. The resumptive pronoun is a φ. Resumptive structures have a D-φ-N structure.

5.5 Pe as secondary head merged in the highest nominal projection

In this section I present an analysis of pe which is necessary considering that pe participates in both the clitic-doubling construction and in the resumptive construction. Cardinaletti and Starke (1999) argue that dummy prepositions such as Spanish a and Romanian pe are lexically specified [+human] and are only compatible with a [+human] noun. This may seem like a plausible story of pe if we only considered the clitic-doubling context, because here the direct object which is clitic-doubled is human and is always introduced by pe. But when we look at A’-environments we can no longer maintain this story, because pe appears in resumptive constructions in relativization and D-linked content questions with all direct objects, regardless of them being human or not.

I analyse pe as a grammaticalized preposition which is merged in the specifier of the highest nominal projection. This analysis can be extended to its Spanish counterpart a and to its Lebanese Arabic counterpart l-. In Romanian, pe serves two purposes: it is a semantic preposition meaning “on” as in (5.47a), where it is the as head of a PP whose role is of a location adjunct, and it is part of the clitic-doubling construction (5.47b) or of relativization of direct objects (5.47c), in which it no longer has a semantic value.

(5.47) VARIOUS FUNCTIONS OF PE

a. semantic preposition
Am pus cărțile pe masă.
aux.1S put books=the on table
‘I put the books on the table.’

b. in the clitic-doubling construction
Îl văd pe băiat.
him see.1S pe boy
‘I see the boy.’

c. relativization of direct objects
Cartea pe care am citit-o
book=the.F pe which Aux.1S read=her
‘The book which I read’
The Grammar of the Romanian Academy notes: “The preposition *pe* is a grammatical mark of the direct object specific to Romanian. *Pe* does not represent in this syntactic position the head of a prepositional phrase; the thematic role [of the noun] is assigned exclusively by the verb and that is why [the noun] remains unchanged by the presence of the preposition. This marker should be distinguished from the directional preposition *la* ‘to’ which precedes some locatives. In general, human/ animate direct objects require this preposition which can be considered an animacy marker and, in some environments, a specificity marker” (Gramatica Academiei Române 2008).

In a similar note, Cardinaletti and Starke (1999) also note that “markers such as Spanish *a* and Romanian *pe* force the [+human] interpretation. This is replicated in Central and Southern Italian dialects, with the dummy marker *a* which appears on left-dislocated accusatives.”

At the moment, I see two possible analyses for *pe*:

(i) in direct object constructions, *pe* is a grammatical preposition in the sense of Grimshaw (1991). In the spirit of Grimshaw (1991), we could consider that the PP whose head is *pe* forms an extended projection with its complement, and P is a functional category, (ii) in direct object constructions, *pe* is a grammaticalized preposition which is merged as a specifier, a type of secondary head, in the spirit of Cann (1999). In the following I adopt the second option, because it easily accounts for all instances in which *pe* appears as a grammaticalised preposition, whether with a DP or just with a φP.

In the following I present the derivation of a clitic-doubling construction and then of a resumptive construction which make use of *pe*. In (§3.2.4) I treated clitic-doubling as resulting from a complex-DP structure. Consider again (3.45) given here as (5.48) which is a clause with a clitic-doubling construction and its derivation in (5.48):

**ROMANIAN**

(5.48) **CLITIC-DOUBLING WITH DIRECT OBJECT**

*a. obligatory clitic-doubling*

Laura *l-a* văzut pe băiat la bibliotecă.
Laura **him**=Aux.3S seen *pe* boy at library
‘Laura saw [him] the boy in the library.’

*b. gap is illicit*

*Laura ____*a văzut pe băiat la bibliotecă.
Laura ____Aux.3S seen *pe* boy at library
‘Laura saw the boy in the library.’
In (§3.2.4) I did not discuss why \( pe \) is found in SpecDP. Since \( pe \) is not a semantic preposition in (5.48), it does not function as a P-head, and cannot be part of an extended projection. Since it has become fully grammaticalised, it does not have a projection of its own, rather is merged in the specifier of the nominal projection corresponding to the construction which \( pe \) is part of. As a general rule for constructions where \( pe \) is a grammaticalized preposition, I propose that \( pe \) is merged in the specifier of the highest nominal projection (5.49):

(5.49) RULE OF PE AS GRAMMATICALIZED PREPOSITION

Merge \( pe \) in the specifier of the highest nominal projection of direct objects where \( \varphi \) is phonologically realised.

This analysis of \( pe \) as grammaticalised preposition merged in the specifier of the highest nominal projection can be extended to the Hebrew \( \varpi \)et and to the Palestinian and Lebanese Arabic \( l(a) \). The difference between \( \varpi \)et and \( pe \) is that \( \varpi \)et introduces all definite direct objects, while \( pe \) only human definite direct objects. At the moment, I do not see a reason why this difference would bear on the analysis presented here. Shlonsky (1997) states: “Extraction of mi “who” shows that \( \varpi \)et must be carried along. Put a different way, the object wh-operator must be taken to range over definite descriptions. Extraction of ma can proceed with or without \( \varpi \)et. The former elicits an answer in the form of a definite description, while the latter calls for an indefinite one.” The example in (5.50) shows the preposition \( \varpi \)et in Hebrew, which introduces definite direct objects; it’s derivation is shown in (5.51):
HEBREW (Shlonsky 1997; 17)

(5.50) GRAMMATICALIZED PREPOSITION
raʔiti ʔet ha=yeled
saw.1S ʔet the=boy
‘I saw the boy’.

(5.51) DERIVATION OF STRUCTURE WITH ʔET IN (5.50)

In a similar fashion, consider again the Palestinian Arabic (3.48) given below as (5.52):

PALESTINIAN ARABIC (Shlonsky 1997)

(5.52) CLITIC-DOUBLING
fhimt=ha la 1-mʕalme
understood.1S=her for the=teacher.F
‘I understood the teacher.’
Considering Romanian pe, Hebrew ʔet, and Arabic li as grammaticalised prepositions that are merged in the specifier of the highest nominal projection is a very economical and simple way of dealing with this phenomenon.

5.6 Conclusion

In this chapter I argued that resumption in Romanian is not dependent on clitic-doubling and I extended the analysis of resumption proposed for Arabic (§3). The relative pronoun care in Romanian, just as Arabic illyi, has a categorial selection feature that requires it to take a φP as complement. The relative pronoun care and the interrogative pronoun care have the same morpho-syntactic behaviour. This straightforwardly accounts for the obligatoriness of resumption in relativization and D-linked questions in Romanian.
6. INTERPRETIVE EFFECTS OF CONSTRUCTIONS WITH PRO-φ

So far in this thesis I argued that in environments where the category φ pronoun participates in obligatory clitic-doubling constructions and in obligatory resumptive constructions, its presence is required solely by the syntax for reasons specific to each construction as detailed in chapter 3 for clitic-doubling and in chapter 4 for resumption. In this chapter I argue that in constructions in which the category φ pronoun is optional, that is in environments where both gap and clitic-doubling or resumption are possible, then the presence of the category φ pronoun gives rise to a change in interpretation; this is a phenomenon at the syntax-pragmatics interface. In other words, the account of the interpretations observed with resumption in optional contexts is not a purely syntactic one, but one in which syntax and pragmatics interact.

As a preliminary observation, I note that previous analyses of resumption and its interpretive effects (Guilliot 2006; Malkawi 2009; Sterian 2011; Sichel 2014) or of clitic-doubling and its interpretive effects (Dobrovie-Sorin 1994; Uriagereka 1995; Suñer 1998) thought of these to be interface phenomena, regardless of whether resumption or clitic-doubling were obligatory or only an option in the particular environment in which they were surfacing. These authors attempt a unified interface analysis of both obligatory and optional contexts. Instead, I argue that obligatory resumption and optional resumption are not both interface phenomena because (i) with respect to the syntax, the derivation of resumption in obligatory contexts is the same as in optional contexts: the resumptive pronoun starts out in the derivation as part of a complex DP in which the relative pronoun/interrogative pronoun is the D head, the resumptive is the φ complement of D and the antecedent is the complement of φ, and (ii) though the syntax is the same, the interpretive effects differ.

While the structures which appear in obligatory contexts and structures which appear in optional contexts share the same derivation, in optional contexts there is an extra element at play that restricts the interpretation: since here the resumptive pronoun is not required by the syntax, I argue that the effects observed arise because of the module pragmatics interacting with the module syntax. The structures which are only required by the syntax represent the unmarked case. However, in optional contexts the syntax does not require the resumptive pronoun; at the same time this derivation is associated with a particular interpretation. This is the marked case: the derivation contains an extra element not required by the syntax that is associated with an interpretive effect. This interpretive effect observed with resumption in optional contexts is always similar in that an interpretive option that remains available to the gap strategy is removed by resumption. In other words, in contexts where there is competition between the gap strategy and the resumptive strategy, the result is not that the two possible structures specialize, with one interpreted in a way and the other in a different way, but rather that the gap strategy retains all the interpretive possibilities, while the resumptive strategy loses one.
I will give support to my account of the interpretive effects observed with the clitic-doubling construction or with the resumptive construction in contexts in which these are only optional by referring to Relevance Theory. The relevance of the $\phi$ pronoun when there is a choice between a derivation with it and a derivation without it – in other words when $\phi$ is used though there is no syntactic requirement for it - is that $\phi$ is “evidence for a communicator’s intention to convey a particular meaning which is inferred by the audience on the basis of the evidence provided (...) the expectations of relevance raised by an utterance are precise and predictable enough to guide the hearer towards the speaker’s meaning.” (Sperber & Wilson 2006; 250). In brief, in case there are two possible ways of expressing an utterance and the difference between them is the presence of pro-$\phi$, the hearer must interpret this pro-$\phi$ in a relevant way: hence the difference in interpretation between the two utterances. If there is a choice, there are conditions on the choices made – as is detailed in this chapter.

In the remainder of this chapter, on the empirical side I present the contexts in which clitic-doubling (§6.1) and resumption (§6.2) are optional and the interpretive effects associated with these constructions. On the theoretical side, I present the semantic analysis of interpretive effects proposed by Guilliot (2006) for resumptive constructions and I argue that it’s not definiteness that is responsible for the observed effects and that this analysis cannot explain a particular interpretive effect observed in obligatory resumption contexts (§6.3). Further, I present the information structure account of interpretive effects observed with particular syntactic structures, such as topicalisation and clitic left dislocation (Lopez 2009) and discuss why this cannot account for the observed interpretive effects with resumption (§6.4). Finally, in section (§6.5) I propose an analysis of the optional clitic-doubling and resumptive constructions at the syntax-pragmatics interface that posits a feature assigned by pragmatics to the more marked derivation, namely to the one containing the pronoun not required by the syntax; I then present Relevance Theory to explain how this general principle came about.

6.1 Interprettive effects: clitic-doubling

With respect to clitic-doubling, authors observe interpretive effects which they discuss as pertaining to specificity. Recall that in (§3.5.2) I discussed Torrego’s (1998) findings for Spanish and compared these with Romanian. It emerged at that time that:

(i) in clitic-doubling contexts, both Spanish and Romanian have the following characteristics:
   (a) when clitic-doubling occurs, it doubles human direct objects and
   (b) the presence of the designated preposition introducing the object is obligatory in clitic-doubling constructions,
(ii) the specificity effect reported for clitic-doubling constructions is actually the specificity which is considered to be inherent in all definite descriptions (Enç 1991; Torrego 1998), not otherwise caused by the clitic-doubling construction per se. As concluded in chapter 2, considering the clitic-doubling construction is a purely syntactic phenomenon.

In the following I discuss the optional clitic-doubling context reported for a variety of spoken Romanian mentioned in Dobrovie-Sorin (1994), to argue that in this context in which the pronoun is optional, it is indeed associated with an interpretive effect. In this variety of Romanian, the φ pronoun participates in certain clitic-doubling constructions in which it is not obligatory, but only optional, such as doubling of indefinite human nouns discussed in §5.2.1 and illustrated in example (5.11), repeated here as (6.1):

ROMANIAN (Dobrovie-Sorin 1990)

(6.1)  INDEFINITE HUMAN DP
   a. no clitic-doubling
   Caut  o secretară.
   seek.1S a secretary.F
   ‘I am looking for a secretary.’
   b. clitic-doubling
   O   caut   pe  o secretară.
   her seek.1S pe  a secretary.F
   ‘I am looking for [her] a secretary.’

   c. no clitic-doubling, PP direct object
   *Caut   pe  o secretară.
   seek.1S pe  a secretary.F
   ‘I am looking for a secretary.’

   d. clitic-doubling, no PP direct object
   *O   caut       o secretară.
   her seek.1S a secretary.F
   ‘I am looking for [her] a secretary.’

Firstly, the clitic is only possible if the preposition pe also appears, see (6.1b) versus (6.1d); equally, the preposition pe can only appear if the clitic does: see (6.1b) versus (6.1c). In brief, for some speakers only (6.1a) is grammatical, while (6.1b-c) are all illicit. For speakers for whom both (6.1a) and (6.1b) are possible, (6.1c-d) are ungrammatical. In other words, for all speakers (6.1c-d) are ungrammatical. This is indicative of the fact that clitic-doubling must be accompanied by the grammaticalised preposition (§5.5) at all times and vice versa: the presence of the preposition is always accompanied by the presence of the clitic.
As discussed in §5.2.1, Dobrovie-Sorin’s (1990) judgements are that (6.1b) is
optional for speakers who allow it. This brought us to a two-way divide: (i) obligatory
gap for speakers like myself for whom (6.1b) is ungrammatical and for whom only
(6.1a) is grammatical, and (ii) optional clitic-doubling for speakers like Dobrovie-Sorin,
for whom both (6.1a) and (6.1b) are possible and for whom (6.1b)’s only possible
reading is specific, while (6.1a) is ambiguous between a non-specific and a specific
reading. For speakers who find (6.1b) grammatical, the interpretation is that the speaker
is looking for a particular secretary whom he knows but whom the hearer might not
know; the non-specific reading is blocked (Steriade 1980; Enc 1991; Dobrovie-Sorin
1994). This is entirely consistent with my claim that wherever $\varphi$ is optional, it triggers a
change in interpretation and the utterance is marked.

6.2 Interpretive effects with resumption: Arabic, Hebrew and
Romanian

With respect to resumption, the discussion of interpretive effects mainly focuses
on D-linked questions with quantifiers, because these are cases where there are
demonstrable ambiguities or differences in meaning between cases with and without
resumption. Questions’ semantics is assumed to be revealed by the appropriate answers
that they elicit (Hamblin 1973; Kartunnen 1977; Pesetsky 1987; Hornstein et al 2006),
while the presence of quantifiers or D-linked interrogatives gives rise to distributive
readings (Chierchia 1993; Guilliot 2006). A lot of this research on the interpretive
effects with resumption in the scope of quantifiers was done on Hebrew and Arabic
(Doron 1982; Sharvit 1999; Guilliot 2006; Malkawi 2009; Guilliot & Malkawi 2011;
Sterian 2011; Sichel 2014). In this section I present (a) what the main points of
discussion are regarding interpretive effects with resumption, (b) what Hebrew,
Jordanian Arabic and Romanian have in common, (c) the particularities of each of these
languages and (c) how Iraqi Arabic fits in.

Firstly, with respect to questions, the interpretive difference that authors observe
relates to a distinction made in the semantics literature between the natural function
reading versus the pair-list reading of a question as in (6.2), where the extracted
element is c-commanded by a quantified expression:

\[(6.2) \quad \text{Which woman did every man invite?} \]
\[\text{a. NATURAL FUNCTION READING: } \text{His sister} \]
\[\text{b. PAIR-LIST READING: } \text{John, Sue; Bill, Lucy…} \]

With respect to resumption versus gap in D-linked questions with quantifiers
authors observe that in contexts in which both gap and resumption are possible, the gap
allows for both a functional and a pair-list reading, while resumption allows only for a
functional reading, and in contexts in which resumption is obligatory, it allows for both
a functional and a pair-list reading (Sharvit 1999; Guilliot 2006; Malkawi 2009; Sterian
I discuss these authors’ observations in detail in the following. The various interpretive effects observed with gap and resumption in obligatory versus optional contexts are detailed in Table 18:

<table>
<thead>
<tr>
<th></th>
<th>OBLIGATORY</th>
<th></th>
<th>OPTIONAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>GAP</td>
<td>RESUMPTION</td>
<td>GAP</td>
<td>RESUMPTION</td>
</tr>
<tr>
<td>FUNCTIONAL READING</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>PAIR-LIST READING</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 18. Functional and pair-list readings versus optional and obligatory contexts

Sharvit (1999) observes that the gap strategy and the resumptive strategy differ from one another in regard to the possible answers that can be given to a D-linked content question. This can be seen with content questions that also contain a quantificational expression, as in (6.3). D-linked questions with quantifiers can have three possible answers: an expression denoting an individual as in (6.3a); an expression denoting a natural function (where the “natural function” names a salient function), as in (6.3b), or a list of pairs, as in (6.3c):

**ENGLISH (Sharvit 1999)**

(6.3) Q: Which woman did every man invite?  
A: a. individual denoting expression: Mary
   
b. natural function: His mother.
   
c. pair-list answer: John invited Mary; Bill invited Sally.

Sharvit (1999) argues that in Modern Hebrew, if D-linked questions use the gap strategy, as in (6.4), then all three answers are possible: the individual reading (6.4a), the natural functional reading (6.4b) and the pair-list reading (6.4c). However, with the resumptive strategy, only the individual and natural function readings are possible (6.5-ab); the pair-list reading isn’t possible (6.5c):
HEBREW (Sharvit 1999)

(6.4) POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - GAP STRATEGY

Ezyo ifa kol gever hizmin____
which woman every man invited____
'Which woman did every man invite____?'

a. individual denoting expression: et Gilla
   Acc Gilla
   'Gilla'

b. natural function: et im-o
   Acc mother-his
   'his mother'

c. pair-list answer: Yosi et Gilla; Rami et Rina.
   Yosi Acc Gilla Rami Acc Rina
   'Yosi, Gilla; Rami, Rina'.

(6.5) POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - RESUMPTIVE STRATEGY

Ezyo ifa kol gever hizmin ota
which woman every man invited her
'Which woman did every man invite [her]?'

a. individual denoting expression: et Gilla
   Acc Gilla
   'Gilla'

b. natural function: et im-o
   Acc mother-his
   'his mother'

*c. pair-list answer: Yosi et Gilla; Rami et Rina.
   Yosi Acc Gilla Rami Acc Rina
   'Yosi, Gilla; Rami, Rina'.

Note that (6.4) and (6.5) represent a context in which resumption is only an option; while the gap allows both the functional and the pair-list readings (6.4), resumption is the marked case (i.e. it contains the extra element not required by the syntax) which allows only the functional reading (6.5).

Hebrew does not only have contexts of optional resumption. It has obligatory resumption in cases of relativization from within PP and NP (Sichel 2014) as in (6.6):
HEBREW (Sichel 2014)

(6.6) Dani yimca et [ha=iʃa₁ je hu xolem aley=ha₁]
Dani will find Acc the=woman that he dreams of=her
‘Dani will find the woman he is dreaming of.’

The sentence in (6.6) does not have a quantified expression binding a variable; (Sichel 2014) notes that the relative clause in (6.6) has a de dicto reading: the woman is unspecific, Dani is dreaming about a woman, but he doesn't have any beliefs about who this person may be. Since (6.6) is a context of obligatory resumption which does not show a specific reading of some sort, it supports my claim that obligatory contexts supply only requirements of the syntax and there is no particular meaning that stands out.

Guilliot (2006) observes similar interpretive effects with gap versus resumption in D-linked content questions with quantifiers in Jordanian Arabic. He uses earlier proposals in the literature as tests to distinguish between the functional and the pair-list readings as follows: (i) the possible answers to questions based on Karttunen (1977) and (ii) the type of quantifier (every versus none) based on Sharvit (1997). By working with (i) and (ii) Guilliot (2006) proposes that in Jordanian Arabic the resumptive strategy allows a functional reading, but a pair-list reading is blocked, just as in Hebrew.

Assuming Karttunen’s (1977) semantics of questions, namely that the semantics of questions is given by their possible answers, Guilliot (2006) looks at possible answers to questions containing a resumptive pronoun in Jordanian Arabic. He notices that a question employing the resumptive strategy can have a functional reading answer, but not a pair-list reading answer (6.7):

JORDANIAN ARABIC (Guilliot 2006)

(6.7) QUESTION WITH RESUMPTION
أية صورة إلله كل زلمة مزعها؟
?ayya s'ura il=uh kull zalamih mazaṣṣa=ha
which photo.F of=him every man tore=her
‘Which photo of his did every man tear?’

a. functional answer
صوره زوجه
s'urit zawadʒ=uh
‘the picture of his wedding’

b. pair-list answer
كريم، صورة ابنه؛ رضوان، صورة زواجه.
Karim, s'urit ibn=uh; Radwan, s'urit zawa:dʒ=uh
*‘Karim, the picture of his son; Radwan, the picture of his wedding’
The question in (6.7) can have both a functional reading (6.7a) and a pair-list reading (6.7b); Guilliot (2006) does not list the individual reading for (6.7), this may be because the individual reading always has the same distribution as the functional one. The question in (6.7) is also possible with a gap, as Malkawi (2009) points out; in other words (6.7) is an optional resumptive context. This is significant to note, because the interpretive effects with resumption are different depending on whether resumption is obligatory or optional: Malkawi (2009) presents data from Jordanian Arabic which shows that while in optional contexts resumption indeed allows only a functional reading as Guilliot (2006) argued, however in obligatory contexts it allows for both the functional and the pair-list readings. This is illustrated with an example from Malkawi (2009;120), who shows that the question in (6.7) that Guilliot (2006) presents as example of resumption in content questions forms a minimal pair with (6.8) which has a gap rather than a resumptive, but is also grammatical. In other words, the question in (6.7) is a question in which resumption is optional, not obligatory:

JORDANIAN ARABIC (Malkawi 2009)

(6.8) QUESTION WITH GAP
أية صورة إله كل زلامة مزع؟
؟اية s'ura il=uh kull zalamih mazaš'a__
which photo.F of=him every man tore__
‘Which photo of his did every man tear?’

a. functional answer
صورة زوجه
s'urit zawadž=uh
‘the picture of his wedding’

b. pair-list answer
كريم، صورة ابنه، رضوان، صورة زوجه.
Karim, s'urit ibn=uh; Radwan, s'urit zawadž=uh
‘Karim, the picture of his son; Radwan, the picture of his wedding’

On the other hand, Malkawi (2009;125) shows that in contexts in which resumption is obligatory, the resumptive strategy allows for both the functional and the pair-list readings; this is illustrated in (6.9), where, although this is not explicitly discussed by Malkawi, it is the presence of the relative pronoun illi that makes the resumption obligatory:
JORDANIAN ARABIC (Malkawi 2009)

(6.9) OBLIGATORY RESUMPTION CONTEXT

؟اية صورة إله التي كل زلمة مزعها؟

*ةُرْوَى سُقَرَىٰ فِي أَيْنَ كَلِّ زَلْمَة مَزْعَهَا؟

which photo of his did every man tear her

‘Which photo of his did every man tear [it]?’

a. functional answer

صورة زوجه

ُسُقَرَىٰ زَاوَذِجَ=ُه

‘the picture of his wedding’

b. pair-list answer

كريم، صورة ابنه، رضوان، صورة زوجه

ُسُقَرَىٰ بْنِ=ُه; رَضِوَانَ،ُسُقَرَىٰ زَاوَذِجَ=ُه

‘Karim, the picture of his son; Radwan, the picture of his wedding’

Thus Malkawi (2009) shows that the description in Guilliot (2006), according to which the resumptive strategy can only have a functional reading, is not completely accurate: where resumption is the only grammatical option, it can have both a functional and a pair-list reading. A further distinction arises in obligatory contexts in Jordanian Arabic, where two resumptive strategies are possible: one with resumptive clitic and the other with resumptive clitic doubled by strong pronoun (Malkawi 2009). With respect to pronominal resumption, Jordanian Arabic has the peculiarity of allowing an extra variable, namely a strong pronoun which doubles the clitic pronoun in obligatory contexts; Malkawi (2009) shows that when there is optionality between different types of resumption, again there is a pragmatic effect: the resumption with only the clitic pronoun is ambiguous between the two readings, while resumptive with a doubled pronoun is only compatible with the natural function reading. These findings are summarised in Table 19:
The significance to the current study of Malkawi’s (2009) findings in Table 2 is that when there is optionality, namely optionality between gap and resumption, or optionality between different types of resumption (i.e. resumption with a resumptive clitic or resumption with resumptive clitic doubled by a strong pronoun), there is a pragmatic effect: the structure with an element not required by the syntax has its meaning restricted. This competition effect observed by Malkawi (2009) for Jordanian Arabic between the gap strategy and the resumptive strategy or between two resumptive strategies (the one with clitic pronoun and the one with clitic pronoun doubled by a strong pronoun) are explained by him in terms of an economy principle: there is a hierarchy that ranks zero variables (i.e. the gap) higher than pronominal variables, such that the gap strategy is the most preferred, while the resumptive strategy with clitic pronoun doubled by a strong pronoun is the least preferred.

Iraqi Arabic behaves similarly to Jordanian Arabic in that in contexts in which resumption is optional (6.10), the gap strategy allows for both the functional and the pair-list answers, while the resumptive strategy allows only for the functional reading, and when resumption is obligatory (6.11), the resumptive strategy allows for both the functional and the pair-list readings:

<table>
<thead>
<tr>
<th>Optional Resumption</th>
<th>NATURAL FUNCTION READING</th>
<th>PAIR-LIST READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAP</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>WEAK PRONOUN</td>
<td>√</td>
<td>x</td>
</tr>
<tr>
<td>WEAK PRONOUN DOUBLED BY STRONG PRONOUN</td>
<td>(n/a)</td>
<td>(n/a)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Obligatory Resumption</th>
<th>NATURAL FUNCTION READING</th>
<th>PAIR-LIST READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>GAP</td>
<td>(n/a)</td>
<td>(n/a)</td>
</tr>
<tr>
<td>WEAK PRONOUN</td>
<td>√</td>
<td>√</td>
</tr>
<tr>
<td>WEAK PRONOUN DOUBLED BY STRONG PRONOUN</td>
<td>√</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 19. Distribution of natural function and pair-list readings in Jordanian Arabic content questions (adapted from Malkawi 2009)
IRAQI ARABIC (Sterian 2011)
(6.10) OPTIONAL RESUMPTION CONTEXT

a. gap

يا مِرْيَة كُل رَجَال عَزْم؟
yā mreyye kull ridjā:1 Ŝazam___
which woman every man invited.3MS
'Which woman did every man invite ___ ?'

i. functional answer

أخته
uht=ah
‘his sister’

ii. pair-list answer

سامر عْزُم سَهْي، أَحْمَد عْزُم نِجْوَى..
Samer Ŝazam Suha, Ahmad Ŝazam Najwa
Samer invited Suha; Ahmad invited Najwa; etc

b. resumption

يا مِرْيَة كُل رَجَال عَزْمَهَا؟
yā mreyye kull ridjā:1 Ŝazam=ha
which woman every man invited.3MS=3FS
'Which woman did every man invite [her] ?'

i. functional answer

أخته
uht=ah
‘his sister’

ii. pair-list answer

*سامر عْزُم سَهْي، أَحْمَد عْزُم نِجْوَى.
*Samer Ŝazam Suha, Ahmad Ŝazam Najwa
*Samer invited Suha; Ahmad invited Najwa; etc
(6.11) OBLIGATORY RESUMPTION CONTEXT

يا مرية سامر يسأل إذا كل رجال سلم عليهم؟

Samer ys?al iða kull ridʒa:la sallæm ʕalæ=ha

Which woman Samer ask.3MS if every man greeted.3MS for=3FS

‘Which woman did Samer wonder if every man greeted [her]?’

i. functional answer

أخته

uht=ah

‘his sister’

ii. pair-list answer

سامر يسأل إذا بهجت سلم على سهى، وإذا أحمد سلم على نجوى...

Samer ys?al iða Behjet sallæm ʕalæ Suha, w iða Ahmad sallæm ʕalæ Najwa

Samer wonders whether Behjet greeted Suha and whether Ahmad greeted Najwa...

The behaviour of gap and resumption in Iraqi Arabic D-linked questions is summarized in Table 20:

<table>
<thead>
<tr>
<th></th>
<th>NATURAL FUNCTION READING</th>
<th>PAIR-LIST READING</th>
</tr>
</thead>
<tbody>
<tr>
<td>OPTIONAL</td>
<td>GAP</td>
<td>✓</td>
</tr>
<tr>
<td></td>
<td>CLITIC PRONOUN</td>
<td>x</td>
</tr>
<tr>
<td>OBLIGATORY</td>
<td>GAP</td>
<td>(n/a)</td>
</tr>
<tr>
<td></td>
<td>CLITIC PRONOUN</td>
<td>✓</td>
</tr>
</tbody>
</table>

Table 20. Distribution of natural function and pair-list readings in Iraqi Arabic D-linked Content Questions

In Romanian, resumption is always obligatory in D-linked content questions. In these contexts of obligatory resumption, both the functional answer and the pair-list answer are possible (6.12):
(6.12) **OBLIGATORY RESUMPTION**

Pe care femeie a invitat-o fiecare bărbat ?
Pe which woman Aux.3S invited=**her** every man
‘Which woman did every man invite ?’

a. **functional answer**
Pe nevasta lui
Pe wife his
‘his wife’

b. **pair-list answer**
Carlos, pe Loredana; Cristi, pe Anda, etc

So far, by employing the test based on the possible answers to questions, we find that Guilliot’s (2006) claim that the resumptive strategy can only have a functional reading is invalidated, because in Jordanian Arabic, in Iraqi Arabic and in Romanian in contexts where resumption is obligatory, resumption allows for both the functional and the pair-list answers.

Let’s now turn to Guilliot’s (2006) test (ii) which relies on the interpretive effects observed depending on the type of quantifier (every versus none) as initially reported in Sharvit (1997). Guilliot (2006) tests examples with a negative quantifier, expecting that this negative quantifier blocks the pair-list reading; this is borne out in French, as in (6.13):

**FRENCH (Guilliot 2006)**

(6.13) Quelle femme est-ce qu’aucun home n’a embrassée ?
‘Which woman didn’t any man embrace [**her**] ?’

a. Marie
b. sa mere
c. *Jean, Marie; Fred, Justine, etc

Guilliot (2006) assumes that if it is possible to employ the resumptive construction in a structure with a negative quantifier, than it must be the case that the resumptive strategy allows only a functional reading. Therefore, Guilliot (2006) presents the example in (6.14) which is a dislocation from a complex NP in Jordanian Arabic in which a negative quantifier binds the resumption site:
(6.14) NEGATIVE QUANTIFIER BINDS RESUMPTIVE

Since (6.14) is possible in Jordanian Arabic, Guilliot (2006) concludes that the resumptive strategy allows a functional reading; this conclusion is valid. The only problem with this particular test is that it cannot be used - by itself - to argue that the resumptive structure *only* allows a functional reading. In fact, Malkawi (2009) presented examples from Jordanian Arabic in which resumption allows both the pair-list and the functional reading; of course, in these examples, the resumptive pronoun is not in the scope of a negative quantifier (example 6.11 above).

If we applied this test to Iraqi Arabic and Romanian, we see that indeed even in Iraqi Arabic (6.15) and in Romanian (6.16) a negative quantifier can take scope over a resumptive site:

IRAQI ARABIC

(6.15) إيه مريه ما حظنها ولا رجال؟
yā mārēma ma ḥaţhāna ṭalā wa ṭalā:la
which woman Neg embrace.3MS=her no man
‘Which woman didn’t any man embrace [her]?’

a. Amira

b. أخته
uḥṭ=ah
‘his sister’

c. سامر ما حظنها سهي، أحمد ما حظنها نجوى. *
Samer ma ḥaṭṭan Suha, Ahmad ma ḥaṭṭan Najwa
Samer did not embrace Suha; Ahmad did not embrace Najwa; etc
ROMANIAN

(6.16) NEGATIVE QUANTIFIER VERSUS RESUMPTION
Pe care femeie n-a îmbățișat-o nici un bărbat?
‘Which woman didn’t any man embrace [her]?’

a. pe Maria

b. pe mama lui
pe mother=the his

c. *Carlos, pe Loredana; Cristi, pe Anda, etc

Examples (6.15) and (6.16) illustrate that in questions with negative quantifiers, both Iraqi Arabic and Romanian behave as French (6.13), in that they allow only an individual and a functional answer, but not a pair-list one. Note however that since Sharvit (1997) argued that pair-list readings are blocked in general in the scope of a negative quantifier, these examples illustrate that the resumptive structure can have a functional reading, but they cannot be used as an argument that it cannot – in other contexts – also have a pair-list reading. In fact, where there is no negative quantifier, as in the examples (6.11) and (6.12), we can see that the pair-list reading is available both in Iraqi Arabic and in Romanian even though a resumptive is present. I conclude that resumptive structures allow both the functional and the pair-list readings (unless the pair-list reading is blocked for independent reasons, as it is in the scope of a negative quantifier). Malkawi (2009) already argued this for Jordanian Arabic and I have shown that the same is true in both Iraqi Arabic and Romanian. Therefore, while Guilliot’s (2006) test (i) is useful in teasing apart various interpretive effects with gap and resumption, his test (ii) cannot be used to demonstrate that resumption blocks the pair-list reading, at best it can be used to say that it allows the functional reading.

So far in this section we have seen that (i) in Hebrew, Jordanian Arabic and Iraqi Arabic resumption allows only a functional reading in contexts in which it is optional (Romanian does not have optional resumption in D-linked questions) and (ii) in Jordanian Arabic, Iraqi Arabic and Romanian resumption allows for both the functional and the pair-list reading in contexts in which it is obligatory (Hebrew does not have obligatory resumption with direct object extraction, as resumption is obligatory only with objects of preposition and genitives). Also, Jordanian Arabic obligatory resumption contexts have two possible derivations: one with resumptive clitic which allows both readings and one with resumptive clitic doubled by a strong pronoun which allows only the functional reading. This shows that there is indeed a pattern correlated with pragmatic effects: when there is a choice between two derivations, namely when there is a choice between gap or resumption on the one hand or between resumption with a clitic or resumption with a clitic doubled by strong pronouns on the other hand, then the least marked derivation allows for both readings and the more marked one allows only one reading, namely the functional.
6.3 A syntax-semantics account of resumption (Guilliot 2006)

In this section I discuss Guilliot’s (2006) proposal for deriving the functional reading observed with resumption while blocking the pair-list reading. I will then discuss whether his solution can be extended to contexts in which resumption allows both the functional and the pair-list reading and show that in fact, his analysis cannot explain the pair-list reading in such contexts. Also his analysis cannot be applied to a full movement account of gap and resumption, such as the one presented here. As mentioned earlier, this full movement account of gap and resumption is preferable because it does not have to resort to elements not found in the numeration, such as “a special kind of ellipsis”.

As seen from (§6.2), Guilliot (2006) concludes that the resumptive construction only allows a functional reading, not a pair-list reading. As a consequence, he develops an analysis that is intended to explain not only why the functional reading is possible with resumption, but why the pair-list is not. Crucially to note is that Guilliot (2006) only looks at resumption in environments where it is optional (i.e. the gap is also possible): recall from (§6.2) in these environments indeed resumption only allows a functional reading. Recall that Malkawi (2009) shows that, while it is true that in optional contexts resumptive has only a functional reading, however in contexts in which resumption is obligatory, it gives rise to both the functional reading and the pair-list reading. This phenomenon is not specific to Jordanian Arabic, but is observed also in Iraqi Arabic (Sterian 2011) and Romanian, where as seen from (§6.2), obligatory resumption allows both the functional and the pair-list readings, just as Jordanian Arabic does.

Guilliot (2006) achieves the derivation of the functional reading and of the pair-list readings by (i) using syntactic copies which he treats either as indefinite or definite (6.17) and by (ii) considering that the semantic interpretation of a copy as indefinite gives the pair-list reading and the semantic interpretation of a copy as definite gives the functional reading:

(6.17) Syntactic copies are interpreted either as indefinite or as definite (Guilliot 2006;25).

Guilliot (2006) explains the two possible readings of the gap strategy, namely the functional reading and the pair-list reading, by associating them to the copies created by the movement of the interrogative DP to SpecCP; the copy that is left in its base position is interpreted as a definite description associated with the functional reading, while the copy left in an intermediate site, namely in SpecvP, is interpreted as an indefinite description associated with the pair-list reading. In a question such as (6.18), the DP “which woman” starts out as complement of the verb (6.18a), then it moves to SpecCP by passing through SpecvP (though when it comes to the semantic interpretation, Guilliot works only with the NP restriction):

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(6.18) GAP - DERIVED BY MOVEMENT

a. Which woman did every man invite which woman?

b. [CP which woman [IP [I did [vP [which woman [VP every man [V invite which woman]]]]]]

The resumptive construction according to Guilliot is not derived by movement and therefore the absence of an intermediate copy explains the lack of a pair-list reading. However, there is a base copy available because Guilliot considers the resumptive pronoun as a definite description in the sense of Elbourne (2002), having an NP-complement elided in the phonology. This copy is interpreted as a definite description and associated with the functional reading. This translates to the fact that structurally the functional reading is associated with the external merge position of a constituent and the pair-list reading is associated with an internal merge position of the moved constituent. He explains the functional reading of the resumptive strategy by taking the following steps:

1. the resumptive pronoun is a definite description in the sense of Elbourne (2002), in that it has an NP-complement which is elided in the phonology. This copy of the elided NP is at the bottom of the derivation.

2. the copy of the elided-NP is interpreted as definite

Guilliot’s derivation of (6.7) given below for convenience as (6.19) is shown in (6.20):

JORDANIAN ARABIC (Guilliot 2006)

أية صورة إليه كل زلماه؟ (6.19)
ʔayya ʕura il=uh kull zalamih mazaʕa=ha
which photo.F of=him every man tore=her
‘Which photo of his did every man tear?’
Guilliot’s semantic derivation of the functional reading is shown in (6.21):

(6.21) \[ \lambda p \exists f. [f \in C \land p = \forall y. [\text{man}'(y) \rightarrow \text{tear}'(y, f(y))] \]

presupposition: \[ \forall y. [\text{man}'(y) \rightarrow \text{photo of } y' f(y)] \]

Gloss: Which is the function \( f \) so that every man \( y \) has torn the \( f(y) \) photo of \( y \)?

For the copies which are interpreted as indefinite, Guilliot uses a skolemized choice function (6.22):

(6.22) CONVERSION OF INDEFINITE TRACE

The movement of a DP [Det \( \alpha \)] leaves behind an indefinite copy \( [f^{\text{rel}} \alpha] \) and inserts the \( \lambda \alpha \) operator which will bind this skolemized choice function \( f \) (with \( m \) being an individual variable).

Note that the NP restriction is the one interpreted in this intermediate site by Guilliot, not the resumptive pronoun.

That in derivation of resumption there is no intermediate copy is crucial to his account, because the intermediate copy – had it existed – would have given rise to a pair-list reading; recall that Guilliot (2006) argues that the pair-list reading is not available with the resumptive strategy.
However, the findings from Jordanian Arabic (Malkawi 2009), Iraqi Arabic (Sterian 2011) and Romanian – as just presented –, where resumption gives rise to the pair-list reading as well, show that in fact Guilliot’s (2006) analysis cannot explain this pair-list reading and we need an analysis which will block the pair-list for the resumptive structure if – and only if – it is in “competition” with a gap structure (that is, where resumption is optional rather than obligatory), but allows it in contexts in which it is obligatory.

The analysis of resumption presented in the current study is one of full movement. The syntactic difference between the complex-DP proposed by Guilliot (2006) and the one proposed in this dissertation is that Guilliot’s (2006) resumptive pronoun is of category D and the copy of the antecedent NP exists as complement of the D by a special type of ellipsis, while in my complex-DP the resumptive pronoun is of category φ and the copy of the antecedent NP exists as a result of movement. If I adopted and adapted Guilliot’s (2006) analysis to my complex-DP, in its cyclic movement up to the final landing site, the copy of the antecedent-NP passing through SpecvP could be interpreted as indefinite in order to explain the pair-list reading. However, this would run into problems, because it would make the pair-list reading available also in the optional contexts where in fact it is blocked. In the following I show this in detail.

That there is an intermediate trace in the derivation can be easily tested with floating quantifiers. Sportiche (1988) argues that floating quantifiers indicate the movement path of a displaced constituent; this intuition is used by various authors to detect the Specv position through which a displaced constituent passes on its way to the left periphery (Lopez 2003; 2009). The same test can be used for Iraqi Arabic to show that under A’-movement there is a copy of the moved constituent in SpecvP (6.23):

IRAQI ARABIC

(6.23) FLOATING QUANTIFIER UNDER A’-MOVEMENT

الكتب العربي ممكن نشرتها كلها من المكتبة المركزية.

il=kutub il-ʕarabyi mumkin naʃlary=ha kull=ha mn=il=maktabat
the=books the=Arabic possible buy.1Pl=her all=her from=the=bookstore

iš markazyia
the central
‘The Arabic books we can buy them all from the central bookstore.’

يا هي الكتب التي قدرت تبيعها كلها البارحة

ya hyia il=kutub il-liiy gedaret etbi=ha kull=ha il=barha
which she the=books which.Rel could.2S sell.2S=her all=her yesterday
‘Which books could you sell all yesterday?’

in Arabic the agreement with plural non-human nouns is the feminine singular form of the pronoun
Continuing with Guilliot’s (2006) correlation between the interpretation of copies as either definite or indefinite and the functional and pair-list readings, we can conclude that the pair-list reading is possible with resumption because of the intermediate trace which the moved interrogative DP leaves behind when it passes through SpecvP. This would fit in well with the fact that resumption allows for both readings in contexts in which it is obligatory. Nevertheless, in contexts in which resumption is possible alongside the gap strategy, resumption allows only a functional reading. The problem this route runs into is that if the resumptive strategy has the same derivation in obligatory contexts as in optional contexts, namely if the intermediate copy exists in both derivations, the prediction would be that the pair-list reading should be available every-time the resumptive strategy is used. This however is not the correct prediction, because in optional contexts the pair-list reading is not available – though there is an intermediate copy of the antecedent in SpecvP.

For these reasons, Guilliot’s syntactic account for the different interpretive effects observed with gap and resumption cannot be used in my analysis, because the syntax of resumption is the same in both obligatory and optional contexts. I am therefore not adopting it in my analysis presented here.

6.4 An information structure account of interpretive effects

Abandoning a purely syntactic account of possible interpretations observed with resumption, I consider other places in syntax where interpretive effects are observed and how authors proposed to explain them. In the following I discuss in detail the proposal about pragmatics being “invasive”, because I will adopt this idea. This may be a better approach than a purely syntactic one since – as said earlier - the syntactic derivation of resumption in obligatory contexts is the same as in optional contexts; therefore a purely syntactic account would not be able to explain the interpretive effects, while the syntax-pragmatics interface one seems to offer a satisfactory explanation. Pragmatics is “invasive” when given the right trigger.

In order to explain certain interpretive effects observed with clitic-left dislocations or hanging topics, authors propose that the module pragmatics is “invasive” and assigns features to a syntactic object each time a phase is completed (Epstein et al. 1998; Lopez 2003; 2009). These authors implement this intuition differently, depending on their basic assumptions about the concept of phase, the domain for the application of rules (Chomsky 1995; Wojdak 2005; Hornstein 2008). As such, there are two closely related ways in which to explain how pragmatics intervenes in the syntactic derivation: (i) the computational system interprets the derivation as it proceeds: every maximal projection is a phase and every time a constituent is formed, pragmatics assigns it a feature (Epstein et al 1998) and (ii) there are only two phases: vP and CP; the module pragmatics intervenes in SpecvP where it assigns a feature to the constituent it finds in SpecCP (Lopez 2003; 2009). As far as my analysis here goes, either of these approaches
could be applied. Nevertheless, I will present the second approach in greater detail in the following.

Lopez (2003) proposes that the pragmatic values presupposition and contrast are linguistic features assigned to EPP features by a grammatical module called pragmatics, which is an invasive component in the sense of Epstein et al. (1998). Pragmatics assigns features each time a phase is completed and these features remain with the constituent even as it is involved in further syntactic operations. Lopez (2009) argues that the interface between syntax and pragmatics takes place at the phase level, more precisely the pragmatic rules apply at the phase edges. The locus of pragmatic features is Spec\(_vP\); \(v\) has an EPP-requirement and the module pragmatics places an interpretational feature here. The idea of Spec\(vP\) being the locus of pragmatic features dates back to the postulation of a D-feature for \(v\) (Chomsky 1995) and is used also by various authors to explain interpretive effects (Torrego 1998; Lopez 2003; 2009; Roberts 2010). Thus, Lopez (2003; 2009) explains the pragmatic effect observed with CLLD (i.e. clitic left dislocation), CLRD (clitic right dislocation) and focus fronting by arguing that they have a movement derivation and when the moved constituent passes through Spec\(vP\) it is assigned a pragmatic feature.

The structures I am discussing in this thesis – gap and resumption - all involve movement; the difference in interpretation is not given by the presence or absence of movement, but rather by the availability of more than one possible derivation. I want to keep from these authors the proposal that the module pragmatics is invasive and assigns a feature to a constituent. Given the right trigger, the module pragmatics interacts with the module syntax having as results the interpretive effects. I propose a global constraint by which pragmatics recognizes that the presence of the \(\varphi\) pronoun in optional contexts – in contexts in which it is not required by the syntax – is associated with a particular interpretative effect. I detail how this works in (§6.5.1).

6.5 A syntax-pragmatics account of the interpretive effects observed with clitic-doubling and resumption

6.5.1 Optional resumption and its interpretive effects

In this section I detail my analysis of how pragmatics intervenes in contexts of optional resumption to create the effect observed, namely that the resumptive strategy allows only a functional reading. I argue that, since the interpretive effects are quite different (i) the same structure – the resumptive - has different interpretive effects depending on whether the context is obligatory or optional and (ii) since the gap in optional contexts allows the same interpretive effects that resumption allows in obligatory contexts, then we might not want to pair up the syntactic structure with a particular interpretive effect. I argue that these effects observed with resumption in optional contexts are not syntactic in nature. When the \(\varphi\) pronoun is present in the
derivation though there is no syntactic need for it, then it is associated with a pragmatic effect.

In matching the syntax of the gap strategy and that of the resumptive strategy with their respective interpretations, a clear distinction has to be made between contexts in which either the gap strategy or the resumptive strategy are obligatory and contexts in which both the gap strategy and the resumptive strategy are possible (i.e. resumption is no longer obligatory, but optional). In contexts in which either gap or resumption are obligatory, they represent the unmarked case: resumption gets the same readings as the gap, namely both the functional and the pair-list. In contexts in which they are both possible, the gap represents the unmarked case, while the resumption represents the marked case.

I argue that the markedness is given by the presence of a feature – let’s call it $f$ – which is responsible for the functional reading and the blocking of the pair-list reading. I define this feature and show how it works later on in this section.

In the following I present the definitions I work with. The definition of the interpretive module pragmatics is given in (6.24) and of the invasiveness of pragmatics in (6.25):

(6.24) DEFINITION OF THE INTERPRETIVE MODULE PRAGMATICS (Lopez 2009; 1)

Pragmatics is the linguistic module that takes a syntactic object $\Sigma$ as input and yields an annotated structure $\Sigma_{[p]}$ as output. $\Sigma_{[p]}$ is a syntactic object in which constituents are tagged with features relevant for the integration of $\Sigma$ into a discourse. $\Sigma_{[p]}$ is the information structure of $\Sigma$.

(6.25) PRAGMATICS IS INVASIVE

The interpretive component called pragmatics is invasive and assigns features each time a phase is completed.

What exactly do these authors mean by pragmatics being “invasive”? “The interpretive systems interface ‘invasively’ with the syntactic derivation (...). CHL interfaces at different points with pragmatics (...) Pragmatics has the ability to inspect a syntactic structure and attach a feature to it.” (Lopez 2003; 194-195; 204). However, I adapt the notion of the module pragmatics being invasive: I postulate that when an element is present in the discourse though there is no need for it, then pragmatics invades the derivation to mark it (6.26):

(6.26) A derivation is marked when it contains an element not required by syntax.

I posit a binary pragmatic feature, let’s call it $f$, which induces different interpretive effects according to whether or not it is positive or negative. As stated in (6.25), this feature is introduced by pragmatics at a phase edge (Lopez 2003; 2009). When the complex-DP passes through SpecvP (§6.3), the module pragmatics assigns it
an interpretable feature. Derivations that allow for the functional reading and the pair-list reading\(^28\) receive an interpretation as given in (6.27):

(6.27) POSSIBLE READINGS OF \(f\)

<table>
<thead>
<tr>
<th>functional reading:</th>
<th>+f</th>
</tr>
</thead>
<tbody>
<tr>
<td>pair-list reading:</td>
<td>-f</td>
</tr>
</tbody>
</table>

Since the functional reading and the pair-list are available in both obligatory as well as optional resumption contexts, the value of the feature \(f\) has to be present in all relevant contexts. In other words, pragmatics is invasive in both obligatory and optional resumption. But the difference is that in optional contexts, pragmatics assigns \(+f\) to the derivation that contains the extra element not required by the syntax.

As such, in obligatory contexts \(+f\) renders the functional reading and \(-f\) renders the pair-list reading: whether there is obligatory gap or whether there is instead an obligatory pronoun is in a sense irrelevant, because it is the value of the feature that determines the interpretation freely. In obligatory resumption contexts \(\phi\) has to be present in the derivation anyway as required by the syntax and the interpretation is brought about by the value of the feature.

However, in optional contexts, the module pragmatics has a choice between two possible derivations: the one without \(\phi\) and one with \(\phi\). The one without \(\phi\) – the gap - is associated with either \(+f\) or \(-f\). But resumption represents the marked derivation, because it contains the extra element which is not required by the syntax. The module pragmatics assigns the feature \(+f\) to the derivation containing the extra element, which here is the \(\phi\) pronoun. This is how resumption has a functional reading and cannot have a pair-list reading.

Strict economy conditions ought to rule out the derivation containing the \(\phi\) pronoun, because it requires more than the gap strategy. However, it has long been recognised that economy conditions have to be in some sense weak as languages do allow genuine optionality. It is often the case that the use of a non-economy strategy gives rise to interpretive effects. We saw this in the case of indefinite human direct objects which in Spanish, where there is an extra specificity effect with the more marked construction in which the object is introduced by the preposition \(a\) (§3.2.2). The same holds here. Since the derivation that contains \(\phi\) is marked in terms of economy, it gives rise to a particular effect: that of the functional reading. In other words, the derivation is syntactically marked by the presence of the \(\phi\) pronoun and the pragmatics is marked by \(+f\) and the congruence of these two marked modules results in the availability of the functional reading, while the pair-list reading is blocked.

---

\(^{28}\) As mentioned earlier (§6.2), the individual reading is always available when the functional reading is available and vice-versa; there is no context in which one appears without the other. I conclude therefore that there must be a part of their interpretation that they have in common and the possible further difference between them is independent of the feature I propose.
Firstly, I show how this works in obligatory contexts. As noticed, in contexts where the gap is obligatory (6.28) or in contexts where resumption is obligatory (6.29), both the functional and the pair-list readings are possible:

**IRAQI ARABIC**

(6.28) **OBLIGATORY GAP**

وَيِّةٌ يَا مِرْيَةٌ رَقِصَ كُلُ رَجَالٍ؟

weia ya mraya regas kull ridżā:l

with which woman danced.3S all man

‘With which woman did every man dance?’

a. **Natural function answer**: his sister

b. **Pair-list answer**: Behjet, Suha; Ahmad, Iman, etc.

(6.29) **OBLIGATORY RESUMPTION**

يَا مِرْيَةٌ سَامِر يَسَألُ إِذَا كُلُ رَجَالٍ سَلمَ عَلَيْهَا؟

ya: mraya Samer ys?al i?a kull ridža:l sallæm

which woman Samer ask.3MS if every man greeted.3MS

\*\(\text{al} = \text{ha}/\)

\(\text{for} = \text{her}\)

‘Which woman did Samer wonder if every man greeted [her]?’

a. **Natural function answer**: his sister

b. **Pair-list answer**: Behjet, Suha; Ahmad, Iman, etc.

The question in (6.28) contains an obligatory gap. Two readings are possible: the functional and the pair-list. The question in (6.29) represents an obligatory resumptive context; here again both readings are possible: the functional and the pair-list. The fact that the gap is obligatory, or the fact that resumption is obligatory, is strictly required by the syntax; in either case, when \(+f\) is present, the structure will have a functional reading, \(-f\); then structure will have a pair-list reading.

Moving to optional contexts, consider the Iraqi Arabic question pair in (6.30)-(6.31) which shows how a D-linked content question with gap (6.30) and a D-linked content question with resumption (6.31) are both possible in this context. Thus, as shown in (6.30), with the gap strategy both readings are possible: natural function (6.30a) and pair-list (6.30b). But with the resumptive strategy, as shown in (6.31), only natural function reading is possible (6.31a); the pair-list reading isn’t available (6.31b).
(6.30) POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - GAP

"Which woman did every man invite?"

a. Natural function answer: his sister  →+f
b. Pair-list answer: Samer, Suha; Ahmad, Najwa; etc  →−f

(6.31) POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - RESUMPTION

"Which woman did every man invite [her]?"

a. Natural function answer: his sister  →+f
* *b. Pair-list answer: Samer, Suha; Ahmad, Najwa; etc

Syntactically, the difference between (6.30) and (6.31) is that direct object extraction in (6.30) leaves a gap in the extraction site, while direct object extraction in (6.31) leaves a resumptive pronoun in the extraction site; in other words, the derivation of (6.31) contains the φ pronoun. Semantically, the question with gap in (6.30) can have both a functional and a pair-list interpretation, while the question with resumption in (6.31) can only have a functional interpretation. The question with gap represents the unmarked case; pragmatics does not intervene to single out any particular reading, it assigns −f for the pair-list reading and +f for the functional reading. However, (6.31) represents the marked case, because an element is present in the derivation that is not required by the syntax and the module pragmatics intervenes and assigns the feature +f; hence the functional reading, while the pair-list is blocked.

I detail how exactly the derivation proceeds when +f is assigned by pragmatics in the following. Firstly, recall from (§6.4) that pragmatics invades syntax at the end of each phase, where phase can be understood as completed when vP or CP are formed (Lopez 2009). As shown in (6.23), the complex-DP passes through SpecvP on moving from its base position. Recall that SpecvP is the locus of pragmatic features (Chomsky 1995; Torrego 1998; Lopez 2003; 2009; Roberts 2010). With these details in mind, consider again the D-linked question in (6.31). The derivation of (6.31) is given in (6.32):
As can be seen, there is a copy of the clitic pronoun *ha* “her” in SpecvP; here it is assigned the feature \(+f\) by the module pragmatics.

In the next section I discuss interpretive effects with resumption in optional contexts in questions without quantifiers. In (§6.5.3) I present Relevance Theory to explain why the facts presented in my analysis are happening.
6.5.2 Optional resumption with bare interrogatives: Romanian and Iraqi Arabic

Moving on to the resumptive contexts without quantifiers, as I mentioned earlier (§4.3.3), there is a dichotomy between bare interrogatives and D-linked interrogatives with respect to the presence of resumptive pronouns. This was noticed for Hebrew (Sells 1984), Greek (Alexopoulou 2006) and Iraqi Arabic (Sterian 2011). Boeckx (2003) notes that in general all languages with resumptive pronouns have them in D-linked content questions and not in questions with bare interrogatives. Iraqi Arabic and Romanian fit this observed pattern: as seen from Table 21, in Iraqi Arabic resumption occurs with all local and long-distance direct object extraction and prepositional object extraction in D-linked questions, while with bare interrogatives resumption is possible only with long-distance direct object extraction.

| Subject | Direct Object | Prepositional Object%
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
<td>Long-distance</td>
</tr>
<tr>
<td>Bare</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>D-linked</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

Table 21. Distribution of resumption in questions with bare interrogatives versus D-linked ones in Iraqi Arabic

As can be seen from Table 22, in Romanian resumption occurs with both local and long-distance direct object and indirect object extraction in D-linked content questions. In questions with bare interrogatives, resumption is possible only with indirect object extraction.

<table>
<thead>
<tr>
<th>Subject</th>
<th>Direct Object</th>
<th>Indirect Object</th>
<th>Prepositional Object</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Local</td>
<td>Long-distance</td>
<td>Local</td>
</tr>
<tr>
<td>Bare</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>D-linked</td>
<td>x</td>
<td>x</td>
<td>√</td>
</tr>
</tbody>
</table>

Table 22. Distribution of resumption in questions with bare interrogatives versus D-linked ones in Romanian

As can be seen from Tables 20 and 21, the distribution of resumption in questions with bare interrogatives is a lot more restricted than the distribution of resumption in D-linked content questions.

29 Recall that the indirect object in Iraqi Arabic is prepositional, so I am not listing it separately from other prepositional objects.
Regarding the interpretive effects, recall that authors who worked on resumption distinguish between three possible readings in D-linked questions with quantifiers: individual reading, functional reading and pair-list reading (Guilliot 2006; Malkawi 2009). These readings are possible in questions with quantifiers or D-linked interrogatives because the presence of quantifiers or D-linked interrogatives gives rise to distributive readings. On the other hand, in questions with bare interrogatives the interpretive effect observed in questions with resumption is that of selecting an element from a given set.

Consider (6.33) which is a question with bare interrogative in Romanian showing indirect object extraction: (6.33a) has a gap in the extraction site and (6.33b) has a resumptive pronoun in the extraction site:

ROMANIAN
(6.33) INDIRECT OBJECT EXTRACTION WITH BARE INTERROGATIVES

a. gap
Cui ai dat cartea ?
who.Dat have.2S given book=the
‘To whom did you give the book ?’

b. resumption
Cui i-ai dat cartea ?
who.Dat him=have.2S given book=the
‘To whom did you give [him] the book ?’

The example in (6.33a) is a question with bare interrogative (i.e. cui “who.Dat”) with indirect object extraction; the extraction is a gap. The example (6.33b) is a question with bare interrogative (i.e. cui “who.Dat”) with indirect object extraction; here the clitic pronoun i- “him” is in an A’-dependency relation with the interrogative cui “who.Dat”. As was discussed in chapter 2, both in Romanian and in Arabic the resumptive pronoun is not found in its base position inside the VP, because (i) in both Romanian and Arabic the verb raises from V to I and the clitic pronoun also surfaces in the IP domain; (ii) clitic pronouns never appear overtly in their base position inside the VP, but always appear in a derived position (Cardinalletti and Starke 1999). Moving on to the interpretative effects of (6.33a) versus (6.33b), the utterer of (6.33a) is seeking for new information without having in mind a particular set of individuals as the range for “who”, while the utterer of (6.33b) has in mind a particular set of individuals to whom the book could have been given and the speaker wants to know which one of those actually got given the book to. These effects can be observed by the possible answers to these questions (6.34):
(6.34) POSSIBLE ANSWERS TO INDIRECT OBJECT EXTRACTION WITH BARE INTERROGATIVES

a. gap
Cui ai dat cartea ?
who.Dat have.2S given book=the
'To whom did you give the book ?'

i. to someone
ii. to Andrei

b. resumption
Cui i-ai dat cartea ?
who.Dat him=have.2S given book=the
'To whom did you give [him] the book ?'

#i. to a student
ii. to Andrei

While the question with gap (6.34a) can be answered with both a generic answer (6.34ai) and with a specific one (6.34ii), the question with resumption can only have a specific answer (6.34ii), while the generic one (6.34i) is infelicitous.

The same distinction can be observed in Iraqi Arabic content questions with bare interrogatives under long-distance direct object extraction; consider (6.35) which is such an example of optional resumption:

IRAQI ARABIC

(6.35) OBJECT EXTRACTION OF BARE INTERROGATIVE – OPTIONAL RESUMPTION

a. Direct object extraction with gap
Suha minnu: taʕatagid ra:H yaʕzim____ Ahmad ?
Suha who think.3FS will invite.3MS____ Ahmad
'Whom does Suha think that Ahmad will invite____ ?'

i. some people
ii. his girlfriend

---

30 Of the Romanian speakers I consulted, some preferred only the answer (i) to question (5.32a).
b. Direct object extraction with resumption

سَهِيَّةٌ منَوْ تَعْتَقَدُ رَاح يُعْزِمُهَا أَحْمَد؟
Suha minnu: taš'atagid ra:H yašzim=ha Ahmad?
Suha who think.3FS will invite.3MS=her Ahmad
'Whom does Suha think that Ahmad will invite [her]?'

#i. to a student
 ii. his girlfriend

Observe that while the question with gap (6.35a) can be answered with both a generic answer (6.35ai) and with a specific one (6.35ii), the question with resumption can only have a specific answer (6.35bi), while the generic one (6.35bi) is infelicitous.

By looking at the possible answers to questions with bare interrogatives which allow both gap and resumption, we notice a similar pattern as with D-linked content questions in which gap and resumption are possible, namely that the question with gap allows all possible answers, while the question with resumption is more restricted: it allows only a specific answer. According to (6.26), the question with gap (6.35a) is the unmarked case, while the question with resumption (6.35b) represents the marked case, because it contains the extra-element not required by the syntax, here the pronoun φ. For the interpretive effects observed with resumption in bare interrogatives, I posit a binary pragmatic feature, let’s call it s, which induces different interpretive effects according to whether or not it is positive or negative: +s is associated with a specific reading, while -s renders the non-specific reading. As before, when there is a choice between two derivations, pragmatics assigns +s to the derivation containing the extra element, resulting in the specific reading, with the ruling out of the non-specific reading.

6.5.2 Relevance Theory

As said before, I argue that in optional contexts resumption is a phenomenon at the syntax-pragmatics interface and it cannot be explained only on syntactic grounds, but rather on syntax-pragmatics ones. So far in this chapter I argued that the effects observed with resumption in optional contexts are not syntactic in nature, but rather when the φ pronoun is present in the derivation though there is no syntactic need for it, then it is associated with a pragmatic effect which is always similar in that an interpretive option that remains available to the gap strategy is removed by resumption. In obligatory contexts resumption can be explained solely based on syntactic requirements. For optional contexts, I proposed that pragmatics assigns +f (in D-linked questions) and +s (in questions with bare interrogatives) to the derivation that contains the extra element not required by syntax, namely to the derivation with φ. The motivation for this analysis finds support in Relevance Theory.

In this section I introduce Relevance Theory, which is the theoretic platform I use to explain the interpretive effects observed with resumption in optional contexts. In
this cognitive view of pragmatics, interpretive effects arise from a trade-off between effort and cognitive effects: if the effort is too great in relation to the information provided, then the utterance fails to be relevant. Therefore the increase in the processing load, for example by adding something that is not syntactically necessary, must give rise to greater inferential effect: “(...) human cognition is relevance-oriented, and as a result, someone who knows an individual’s cognitive environment can infer which assumptions he is actually likely to entertain.” (Sperber & Wilson 1995; 46). In the case of optional resumption this surplus of information is given by the φ-pronoun, which is not required by the syntax.

Taking as starting point Grice’s (1989) proposal that the expression and recognition of intentions is an essential feature of human communication, Wilson & Sperber (1995; 2006) argue that pragmatics explains how the hearer use the evidence provided by the speaker in order to assign meaning to the utterance. Thus, Relevance Theory is a cognitive theory which has a particular post-Griceian view of Pragmatics as inferential, in the sense that interpretation is taken to be a cognitive process. Two principles of relevance are the foundation of this approach: The Cognitive Principle of Relevance (6.36) and The Communicative Principle of Relevance (6.37):

(6.36) THE COGNITIVE PRINCIPLE (Sperber & Wilson 2006; 255)

*Human cognition tends to be geared to the maximisation of relevance.*

(6.37) THE COMMUNICATIVE PRINCIPLE (Sperber & Wilson 2006; 255)

*Every ostensive stimulus conveys a presumption of its own optimal relevance.*

Relevance Theory assumes that the search for relevance is a basic feature of human cognition and that there is a universal cognitive tendency to maximise relevance. Therefore hearers search for relevance when they hear an utterance. “The central claim of Relevance Theory is that expectations of relevance raised by an utterance are precise enough, and predictable enough, to guide the hearer towards the speaker’s meaning.” (Sperber & Wilson 2006; 250). A hearer interprets as relevant an input to his cognitive senses which can be either an external stimulus or an internal representation. An input is relevant when it creates a positive cognitive effect (6.38):

(6.38) POSITIVE COGNITIVE EFFECT (Sperber & Wilson 2006; 251)

*A positive cognitive effect is a worthwhile difference to the individual’s representation of the world – a true conclusion, for example.*

I propose that the increase in processing cost given by the presence of the pro-φ in optional contexts leads to the search for a positive cognitive effect. This pragmatic phenomenon has become grammaticalised in cases of optional resumption: the hearer has available an utterance with gap and an utterance with a resumptive pronoun: the utterance containing the resumptive pronoun triggers extra information – there is a reason that the speaker chooses to use a resumptive pronoun; this utterance is therefore
more marked, while the one without the resumptive pronoun does not lead the hearer to look for extra effects and therefore leaves the matter of interpretation open. In asking (6.39b) instead of (6.39a), the speaker introduced in the discourse an additional element, the φ pronoun ḥa “her”:

(6.39) QUESTION WITH GAP AND RESUMPTION

a. gap

\[ \text{يا مدیة كل رجال عزم؟} \]
\[ \text{ya: mraya kull ridža:la ʔazam__} \]
\[ \text{which woman every man invited.3MS} \]
\[ \text{‘Which woman did every man invite ___?’} \]

b. resumption

\[ \text{يا مدیة كل رجال عزمها؟} \]
\[ \text{ya: mraya kull ridža:la ʔazam=ha} \]
\[ \text{which woman every man invited.3MS=3FS} \]
\[ \text{‘Which woman did every man invite [her]?’} \]

The hearer of (6.39b) – aware that the speaker could just as well utter (6.39a) - assumes the utterance in (6.39b) to be optimally relevant to him and assigns an interpretation to the pronoun. In (6.39b) the φ pronoun acts as an ostensive stimulus which is used by the hearer to decode the speaker’s meaning: the hearer uses the contextual assumptions provided by the φ pronoun and derives cognitive effects.

6.6 Conclusion

In this chapter I argued that resumption in optional contexts is a syntax-pragmatics interface phenomenon. The module pragmatics intervenes to assign a feature associated to a particular reading to the derivation that contains an element not required by the syntax. This feature creates a pragmatic effect, such that only one interpretation is possible – the one given by the feature assigned by pragmatics.
7. CONCLUSION

This dissertation is intended as a contribution to the discussion about principles of Universal Grammar that underlie resumption and clitic-doubling. As I said earlier, these phenomena are relevant to the topic of Universal Grammar versus language acquisition because there seems to be a huge variation between languages with respect to these phenomena. The examples in (1.1. – 1.2) given below for convenience as (7.1-7.2) seemed to draw a distinct line between A’-movement in English and in Arabic:

ENGLISH
(7.1) The man whom I saw ____ in the library is a famous writer.

ARABIC (MODERN STANDARD)
(7.2) الرجل الذي شاهدته في المكتبة كاتب مشهور.

In this study I showed that (7.2) also involves A’-movement. In support of this conclusion I provided a detailed discussion of Arabic pronouns that are involved in resumption and showed that they behave like clitics in the sense of Cardinaletti and Starke (1999), in that they must move from their base position to a derived one. I also showed that these pronouns are of category φ (Déchaine & Wiltschko 2002; Roberts 2010): they are part of a complex DP having a D-φ-N structure which contains the relative pronoun al=laðyi and the antecedent noun al=radʒulu. This complex-DP starts at the base of the derivation and the resumptive pronoun moves to check features on v, while the relative pronoun and the antecedent move in an instance of wh-movement. English, on the other hand, does not have pronouns of category φ, but rather, the pronoun is of category D, and this is one aspect that account for the difference observed between these languages.

I extended this analysis to Romanian, a Romance language that behaves in a similar way to Arabic in establishing A’-dependencies, as seen in (1.3) given below as (7.3):

ROMANIAN
(7.3) Tipul pe care l-am văzut în bibliotecă este un scriitor celebru.

I showed that the analysis provided for the Arabic example in (7.2) can be extended to the Romanian one in (7.3). The Romanian pronouns that participate in resumption, just like the Arabic ones, behave like clitics in the sense of Cardinaletti and Starke (1999): they must move from their base position to a derived one. I analysed
them as pronouns of category \( \varphi \) (Déchaine & Wiltschko 2002; Roberts 2010) and I showed that they are part of a complex DP having a D-\( \varphi \)-N structure which contains the relative pronoun \textit{care} and the antecedent noun \textit{tipul}. Just as in the derivation of (7.2), this complex-DP starts at the base of the derivation and the resumptive pronoun moves to check features on \( \nu \), while the relative pronoun and the antecedent move in an instance of \textit{wh}-movement.

This analysis of Romanian resumption is novel, because up to now this phenomenon has been treated (Steriade 1980; Dobrovie-Sorin 1994) as a reflex of clitic-doubling (7.4):

\[
\text{ROMANIAN}
\]

\[
(7.4) \quad \text{L-am văzut pe tip în bibliotecă.}
\]

\[
\text{him}=\text{Aux.1S seen pe guy in library}
\]

‘I saw [him] the man in the library.’

I provided a detailed description of the environments in which clitic-doubling occurs in Romanian and of the environments where resumption occurs and I showed that clitic-doubling is restricted to direct objects that are both definite and human and to indirect objects which are human. In relativization all direct objects and indirect objects show resumption, irrespective of definiteness or of the feature human. I showed that clitic-doubling has similar characteristics as in other languages where it is attested: it occurs with human direct objects and it always has a designated preposition. I proposed that in Romanian human nouns have a selectional-requirement to be selected as complements of a pronoun of category \( \varphi \).

In this dissertation I also argued that when resumption or clitic-doubling are obligatory, they can be explained by syntactic principles only. However, in cases where resumption is optional and this optionality gives rise to interpretive effects (7.5-7.6), then this has to be treated as a phenomenon at the syntax-pragmatics interface.

\[
(7.5) \quad \text{POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - GAP}
\]

\[
\text{يا مرية كل رجال عزم ؟}
\]

\[
\text{ya: mraya kull ridʒdaːl ʕazam___}
\]

\[
\text{which woman every man invited.3MS}
\]

‘Which woman did every man invite ___ ?’

\[
a. \text{Natural function answer: his sister} \quad \rightarrow +f
\]

\[
b. \text{Pair-list answer: Samer, Suha; Ahmad, Najwa; etc} \quad \rightarrow -f
\]
(7.6) POSSIBLE ANSWERS TO QUESTIONS WITH QUANTIFIERS - RESUMPTION

يا مربية كل رجال عزمها؟

ya: mraya kull ridğda:la ñazam=ha

which woman every man invited.3MS=3FS

'Which woman did every man invite [her] ?'

a. Natural function answer: his sister

*b. Pair-list answer: Samer, Suha; Ahmad, Najwa; etc

I argued that the module pragmatics intervenes to assign the feature +f, which is associated with the functional reading, to the derivation that contains the element not required by the syntax, namely the resumptive pronoun. This feature +f creates a pragmatic effect, such that only one interpretation is possible.

Issues that remain for future research are whether this analysis can be extended to cases like Irish resumption, where the analysis provided so far (McCloskey 1979; 1990) considers that this language does not use relative pronouns in resumption. Another issue that remains for future research is an analysis of intrusive resumption as it occurs in languages that have true resumption (i.e. Arabic) or in languages that do not (i.e. English).
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