The subjects of impersonal passives in German and Spanish[*]

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1. Introduction

The subject of this paper is the analysis of impersonal passive constructions in German and Spanish. Both languages have two passive constructions which admit transitive verbs: a copular passive (formed with *werden*, 'become', in German and *ser*, 'be' in Spanish) and a reflexive passive. In both languages, the two passive constructions contrast with respect to the possibility of impersonal passive formation, i.e. the passivisation of intransitive verbs. In Spanish, only the reflexive passive may combine with intransitive verbs, while the *ser*-passive may not. In German, both the *werden*-passive and the reflexive passive (the *middle*) admit an impersonal variant; the two impersonal passives differ with respect to their surface subject, however. While the impersonal *werden*-passive contains no surface subject, the impersonal middle appears with an overt *es*, 'it' (see section 2).

In section 3, I defend a uniform analysis of personal and impersonal passivisation that takes object promotion to be the unifying feature of both variants (Perlmutter and Postal 1983, Dobrovie-Sorin 1986). Following Dobrovie-Sorin's implementation of this analysis within the GB-framework, I will argue that the subject of impersonal passives is a referentially deficient abstract cognate object that has to be licensed in the syntax. Departing from Dobrovie-Sorin's analysis, I show on the basis of German data that this abstract cognate object is not always null.

In section 4, I argue that the difference of surface subject between the impersonal *werden*-passive and the impersonal middle can be explained in terms of a syntactic difference between the two constructions: the subject of the *werden*-passive patterns with direct objects while the subject of the middle behaves as an underlying subject. More specifically, I argue that the *werden*-passive is an intransitive construction with the nominative subject originating in object position while the middle is a transitive construction. In section 4.1 I will give arguments that the nominative subject of the German middle construction behaves on a par with the subject of transitive verbs (complementing the arguments in Steinbach 2002). The difference between the subjects of the impersonal *werden*-passive and the impersonal middle is then linked to this syntactic difference (section 4.2). According to the analysis proposed here the subject of the impersonal *werden*-passive is not a case of pro-drop comparable to Italian null subjects which are licensed by rich agreement; in the case of the impersonal *werden*-passive. I propose that the possibility of the null subject in this construction is due to the combination of two independent properties: (i) the syntactic projection of a cognate object and (ii) nominative assignment to an NP remaining in direct object position. According to this analysis, German allows for null nominative subjects only if they are derived from an underlying cognate object and stay in situ. Since the nominative subject of the middle is syntactically an external subject, a lexical subject *es*, 'it', has to be inserted given that German does not allow subject pro-drop.

In section 5, I propose to derive the possibility of impersonal passivisation from the possibility of licensing the deficient semantics of the abstract cognate object taking Spanish as an example. I propose to reduce the difference between German and Spanish with respect to impersonal passivisation to an independent difference between German and Spanish concerning participle agreement.

Finally, I will argue that more generally the patterns of participle agreement and the type of subject inversion construction available in a language correlate with the possibility of licensing impersonal passives in a language (section 6).

## 2.	Two passivising constructions in German and Spanish

In what follows I will examine two passivising constructions that coexist in German and Spanish respectively. The constructions examined are *passive constructions* in the sense that: (i) they reduce the external argument of the underlying verb (*subject demotion)*, and (ii) in the personal variants, the nominative subject of both passive constructions is the logical object of the underlying verb (*object promotion)*.

Both German and Spanish have a copular passive and a reflexive passive. The copular passive relies on a passive copula constructed with the passive participle while the reflexive passive combines the active verb form with a reflexive marker.

The German copular passive (called *werden*-passive in what follows) is formed with the auxiliary *werden,* 'become', and the past participle of the lexical verb (1b); the reflexive passive, traditionally called *middle*, is formed with a reflexive and the active form of the lexical verb (1c). (1b) and (1c) illustrate the personal variants of the two constructions: the logical object of the transitive lexical verb (marked accusative in the active, see (1a)) appears as the grammatical subject bearing nominative and triggering agreement on the verb.

(1)	a.	Hans	fährt	den Wagen.	(German)
		Hans	drives.3SG	the car.ACC[1]
		'Hans drives the car.'	(active verb)
	b.	Der Wagen	wird	gefahren.
		the car.NOM	werden.3SG	driven
		'The car is driven.'	(*werden*-passive)
	c.	Der Wagen	fährt	sich	gut.
		the car.NOM	drives.3SG	REFL	well
		'The car drives well.'	(middle)

The Spanish copular passive (*ser*-passive in what follows) relies on the auxiliary *ser*, 'be', and the past participle of the lexical verb (2b), as in German, the reflexive passive combines the active form of the verb and the reflexive, as illustrated in (2c)

(2)	a.	Juan	conduce	el coche.	(Spanish)
		Juan	drives.3SG	the car
		'Juan drives the car. '	(active verb)
	b.	El coche	es	conducido.
		the car	is	driven.3MSG
		'The car is driven.'	(*ser*-passive)
	c.	El coche	se	conduce	bien
		the car	REFL	drives.3SG	well
		'The car drives well.'	(reflexive passive)

Concerning the possibility of impersonal passives, i.e. of combining the passive constructions with intransitive verbs, both German and Spanish show an asymmetry between the copular and the reflexive passive constructions.

In Spanish only the reflexive passive allows intransitive verbs (see (3b)); the combination of the *ser*-passive with an intransitive verb gives rise to a semantically

anomalous sentence as in (3a) in which the verb is interpreted as transitive (semantic anomaly is marked #).

(3)   a.   # Aquí   fue   trabajado.   (Spanish)
                  here   was   worked

'#It (= something previously mentioned) was worked.'

                                                       (*ser*-passive: not impersonal)

    b.   Aquí   se   trabajó.
             here   REFL worked
             'Here, working has been done.'   (impersonal reflexive passive)

In German, both passive constructions allow intransitive verbs, giving rise to the impersonal *werden*-passive (4a) and the impersonal middle (4b). However, the impersonal variants of the two constructions differ with respect to their surface subject: the impersonal *werden*-passive has no lexical subject (indicated by [] below), while the impersonal middle has to appear with *es,* 'it', as subject:

(4)   a.   Gestern   wurde   []   gearbeitet.   (German)
                  Gestern   wurde   *es   gearbeitet.
                  yesterday   werden.3SG   ES^2 worked
             'Yesterday, some work was done.'   (*werden*-passive)

    b.   In Köln   lebt   *[]   sich   gut.
                  In Köln   lebt   es   sich   gut.
                  in Cologne   live.3SG   ES   REFL well
             'Cologne is a good place to live.'   (middle)

As (4a) shows, the subject position of the impersonal *werden*-passive must remain empty: more specifically, a lexical subject *es* cannot be impersonal in this construction. When *es* is inserted it receives an argumental reading as the singular neuter pronoun where possible and results in ungrammaticality otherwise.

(5)   a.   Gestern   wurde   um sechs Uhr gegessen.   (German)
                  yesterday   werden.3SG   at six o'clock eaten
             'Yesterday dinner was eaten at six o'clock.'

    b.   Gestern   wurde   es   um sechs Uhr gegessen.
                  yesterday   werden.3SG   ES   at six o'clock eaten
             'Yesterday it (=something previously mentioned) was eaten at six o'clock.'

(6)   a.   Hier   wird   ab zehn Uhr   gearbeitet.   (German)
                  here   werden.3SG   from ten o'clock   worked
             'Here people work from ten o'clock.'

    b.   Hier   wird   es   ab zehn Uhr   gearbeitet.
                  here   werden.3SG   ES   from ten o'clock   worked
             # 'Here it (something previously mentioned) is worked from ten.'

Notice that the existence of a construction like (4a) that systematically rejects a surface subject is unexpected since German is not otherwise a pro-drop language, in particular, lexical subjects are obligatory in examples like (7).

(7)   a.   Gestern   kam   *(er) zu spät.   (German)

	yesterday	arrived.3SG	he	too late.	
	'Yesterday, he came too late.'				(active verb)
b.	Gestern	wurden	*(sie)	angerufen.	
	yesterday	werden.3PL	they	rung	
	'They were rung yesterday.'				(personal passive)
c.	Gestern	hat	*(es)	geregnet.	
	yesterday	has	ES	rained	
	'Yesterday, it rained.'				(weather verb)

The data presented here raise a number of questions concerning the analysis of impersonal passives:

(8)   (i)   What is the relationship between personal and impersonal passives?

   (ii)   What are the conditions that determine the possibility of combining intransitives with a passive construction yielding an impersonal passive?

   (ii)   Why can different passive constructions differ with respect to impersonal passivisation within a single language as in Spanish (see (3))?

   (iii)   What is the subject of the impersonal passive and why can its surface realisation vary in two passive constructions within the same language, as in German (see (4))?

Furthermore, given that in German, in the general case, the lexical subject may not be dropped, the German data raise the more specific question of whether German should be analysed as a pro-drop language limited to the subject of impersonal *werden*-passives.

In what follows I develop an analysis that addresses each of these questions.

3.   The analysis of personal and impersonal passives

Personal and impersonal passives have the same morphology in many languages (see Comrie 1977) and in particular in the languages considered here: in German both the *werden*-passive and the middle marked by the reflexive *sich* combine with transitive and intransitive verbs (see examples (1) and (4) above); in Spanish the reflexive passive marked by *se* allows transitive and intransitive verbs (see (2c) and (3b) above).

Given that personal and impersonal passives rely on the same morphology in the languages studied here, I will adopt the hypothesis that the personal passive and the impersonal passive are variants of a single passive construction that should be amenable to a unified analysis (unlike, e.g. Cardinaletti's 1990 analysis of the impersonal middle in German[3]).

The exact form of a unified analysis for personal and impersonal passives depends fundamentally on the general analysis of passivisation that is adopted. In the following section I will argue for a uniform object-promotion analysis of personal and impersonal passives.

3.1 Subject demotion and object promotion

As discussed in Comrie (1977), the passive in English involves two separate processes: object promotion and subject demotion. The question then arises whether both processes exist independently or whether one of these two processes is more fundamental to the characterisation of passivisation. In the literature, two types of analyses of passivisation have

been proposed, that may be termed *subject demotion analyses* and *object promotion analyses* respectively, depending on the property of passivisation that is taken to be fundamental.

(9)   a.   *Subject demotion analyses*:
            the defining property of the passive is the **demotion of the subject**
      b.   *Object promotion analyses*:
            the defining property of the passive is the **promotion of the object**.

In Relational Grammar, object promotion was originally considered the primary property of passives, subject demotion being analysed as a consequence of object promotion. Comrie (1977) argues that object promotion should not be considered the primary characteristic of passives since in impersonal passives subject demotion is "spontaneous" in that is not caused by the promotion of any visible object (see also Keenan 1975). If impersonal passives are examples of "spontaneous demotion", it is only subject demotion which links personal and impersonal passives (see Blevins 2003 for a recent analysis along these lines).

Within the Government-and-Binding-framework (GB), the predominant analyses of the passive follow the same guiding idea taking subject demotion as the central property of passives. In the analyses of passivisation proposed within GB by Jaeggli (1986), Baker (1988), Baker, Johnson and Roberts (1989), the common property of personal and impersonal passives is taken to be the absorption of the external theta-role by the passive morphology. A particularly clear example of this implementation of the subject demotion analysis is proposed in Baker (1988):

(10)   [...] the passive affix must receive a theta-role because it is a full-fledged nominal element and therefore subject to the Theta Criterion. It must receive an EXTERNAL theta-role because it is generated under the Infl node and therefore outside the maximal projection of the V. " (Baker 1988:306).

This analysis is explicitly meant to implement the intuition that the passive morpheme is an "[...] element semantically similar to 'someone' " (Baker 1988:306). Notice that since the passive morpheme is assigned the subject theta-role, the GB-analyses treat the passive morpheme as a nominal expression realising the subject argument in the syntax.

Since intransitives lack a surface object that may undergo promotion, the subject demotion analysis of passivisation seems to be supported by the fact that intransitives may passivise. This is not a necessary conclusion, however, as Perlmutter and Postal (1977) show: impersonal passivisation can be analysed as a more abstract instance of object promotion if the promotion of a dummy object is assumed.

Under an object promotion analysis of passivisation as proposed in Perlmutter and Postal (1977), Dobrovie-Sorin (1986), the unifying feature of personal and impersonal passivisation is the promotion of the underlying object. Furthermore, these two types of analyses share the assumption that the underlying subject of the passivised verb is not realised in the syntax (contra Jaeggli 1986, Baker 1988).

How can the choice of one type of analysis over the other be motivated? I adopt the object promotion analysis since it allows an account of the cross-linguistic variation with respect to impersonal passivisation.

The proposals put forward in the generative framework reduce the cross-linguistic (im)possibility of impersonal passives either to a parametric variation of the unergative verbs

in a language (see Jaeggli 1986), or to a parametric variation of the passive morpheme (see Marantz 1984, Baker 1988).

(11)   a.   Jaeggli (1986):
            In some languages but not in others unergatives assign accusative.
        b.   Baker (1988):
            Some passive morphemes but not others require Case.

As Dobrovie-Sorin (1994) points out, the parametrisation proposed by Jaeggli cannot account for the fact that different passive constructions within one language can vary with respect to impersonal passivisation, since the parametrisation (11a) targets the verbs of the language, and not the individual passive construction. As we have seen in (3) above, however, Spanish is an example of such a language: the reflexive passive admits intransitive verbs while the *ser*-passive does not.

      The parametrisation of the passive morpheme as in (11b) marks passive morphemes in the lexicon as allowing or rejecting an impersonal variant. This analysis does not have any predictive power since the possibiliy of impersonal passivisation for a particular passive construction is not linked to any other property of the language or of the particular passive construction.

      The alternative analysis proposed in Dobrovie-Sorin (1986, 1994, 1998) analyses passive constructions uniformly as applying to verbs that project a syntactically transitive structure. This author reduces the variation with respect to impersonal passivisation to the possibility of legitimating a null object in the particular passive configuration. This analysis further assumes that -- due to its semantically deficient nature – the null object in impersonal passives has to be licensed in situ.

      An analysis that relies on the projection of an object position allows for a more transparent syntactic analysis of the variation of passive constructions with respect to the possibility of impersonal passivisation. While the analysis summarised in (11b) parametrises passive morphemes in the lexicon, an analysis of impersonal passives in terms of a syntactically projected underlying dummy object reduces the possibility of impersonal passivisation to the syntactic and semantic legitimation of an object with particular semantic properties. As I show in sections 4-6, the possibility of passivising intransitive verbs can then be linked to the independently observable syntax of the passive construction and the syntax of NPs in a given language.

      I will therefore follow Perlmutter and Postal (1977) and Dobrovie-Sorin (1986,1994, 1998) and develop a uniform object promotion analysis of personal and impersonal passivisation.

3.2. Impersonal passivisation as projection of a cognate object argument

I will follow Dobrovie-Sorin (1986)'s analysis in the GB-framework and implement object promotion as the legitimation of a logical object in the syntax: in the case of personal passives this underlying object is realised as a full NP, for impersonal passives a referentially deficient object has to be licensed. This has implications for the analysis of the subject of impersonal passives (section 3.3). In section 3.4, I discuss the conditions under which the abstract cognate object is projected in the syntax (section 3.4.1) and I motivate the assumption that for semantic reasons, an abstract cognate object realised as a null object has to be licensed in situ (section 3.4.2).

In this section I first present the analysis of passivisation proposed here and show that this analysis makes correct empirical predictions.

As argued above, I analyse personal and impersonal passives that share the same morphology to be instances of a single passive construction. Furthermore, the present analysis takes object promotion to be the characteristic property of passivisation. More specifically, I propose that impersonal passives are comparable to personal passives in so far as they passivise an object with the semantics of an abstract cognate object that has to be licensed in the syntax. This analysis makes the following cross-linguistic prediction concerning the availability of an impersonal variant for a given passive construction:

(12)   A passive construction allows impersonal passivisation if the syntax of the passive construction (combined with the general properties of the language) permits the syntactic and semantic licensing of an abstract cognate object.

Consider the German passive constructions in this light. For the impersonal *werden*-passive I adopt the analysis proposed by Dobrovie-Sorin (1994) for French and Romanian passive constructions. I assume that in German the null subject in the *werden*-passive is a null cognate object (e_{cog}).

(13)   [CP   Hier   [C   wird   [IP   [VP **e_{cog}** gebaut.]]]   (German)
                here   *werden* 3SG   built
                'Here, there is building work being done.'

More precisely, according to the analysis proposed here, the impersonal *werden*-passive licenses a null cognate object **e_{cog}** in its base position inside the VP (see 14a). In parallel with the promoted object of the personal *werden*-passive, the underlying object is the grammatical subject the *werden*-passive (14b)[4] receiving nominative case and triggering verb agreement[5]

(14)   a.   [CP   Hier   wird   [IP   [VP **e_{cog} .NOM**   gebaut.]]] (German)
                        here   *werden*.3SG   built
                        'Here, building work is done.'
        b.   [CP   Hier   wird   [IP   [VP **ein Haus.NOM**   gebaut.]]]
                        here   *werden*.3SG   a house   built
                        'Here a house is being built.'

Departing from Dobrovie-Sorin (1986,1994), I argue that surface realisation of the abstract cognate object is not always null. In section 4.2 I show that for German the surface realisation of the abstract cognate object depends on the syntactic status of the promoted object in the passive construction and the array of subject pronouns in the language.

(15)   a.   [CP   Hier   fährt   [IP   **es**   [VP   sich   gut.]]] (German)
                        here   drives   ES.NOM   REFL   well
                        'Here is a good place to drive.'
        b.   [CP   Hier   fährt   [IP   **dieser Wagen**[VP   sich   gut.]]]
                        here   drives   this car.NOM   REFL   well
                        'This car drives well here.'

In German, the referentially deficient cognate object is realised as a phonologically null e_{cog} if it is generated in object position (14) (the complement position in the VP) while its realisation

is *es* if it is generated in subject position (15) (spec IP in this representation) (see section 4.2 for the complete argument).

The fact that the hypothesis of an abstract cognate object in impersonal passive constructions allows an analysis of the contrast between the impersonal *werden*-passive and the impersonal middle concerning their surface subject (see section 4.2) provides empirical motivation for an analysis of the subject of impersonal passives as a promoted cognate object.

Further empirical support comes from the Scandinavian languages. Since I follow Dobrovie-Sorin in assuming that the null cognate object has to be licensed in its base position, the analysis defended here treats impersonal passives with an unaccusative syntax in parallel with personal passives with a VP-internal subject. This implies in particular, that the expletive that may appear in an impersonal passive construction with an unaccusative syntax is not itself the subject of the impersonal passive corresponding to the grammatical subject NP in personal passives as in (16a); the expletive in the impersonal passive (16b) is analysed as an instance of the expletive that appears with VP-internal subjects (16c) as schematised in (16d).

(16)   a.   … at **et aeble**   blev   spist   (Danish)
               …that an apple   was   eaten   an apple
               '... that there was eaten an apple.'   (personal passive)
       b.   ... at **der**   er   blevet danset
               …that expl   is   been   danced
               '... that there was dancing going on.' (impersonal passive)
       c.   … at **der**   blev   spist   et aeble
               …that expl   was   eaten   an apple
               '... that there was eaten an apple.'   (personal passive+VP internal subject)
                                                                        (Vikner 1995:202,209)
       d. $[_{CP} [_{C'} [_{IP}$ **der** $[_{I'} [_{VP}$ V e_{cog} $]]]]]$ =(16b)
               $[_{CP} [_{C'} [_{IP}$ **der** $[_{I'} [_{VP}$ V   et aeble$]]]]]$ =(16c)

As pointed out by Dobrovie-Sorin (1994), this analysis of impersonal passivisation predicts that in languages where the spec IP position is necessarily filled, the expletive appearing in impersonal passives and the expletive appearing with VP-internal subjects of the personal passives should be the same. Inversely, if the VP-internal subjects of the personal passives do not require a lexical expletive to be inserted in the canonical subject position, the same should be true for impersonal passives. This prediction is borne out by the Scandinavian languages where the impersonal passives pattern like personal passives with the subject NP in VP-internal position with respect to the element that fills the canonical subject position.

In the Mainland Scandinavian languages both constructions display the same lexical expletive (illustrated in (17) by Danish). In Icelandic a personal passive with the nominative NP in object position does not allow a lexical expletive in spec IP (18b). As expected under the present analysis, the impersonal passive may not appear with a lexical expletive either (see (18a)).

(17)   a.   ..at **der**   er   blevet danset   (Danish)
               …that EXPL is   been   danced
               '... that there was dancing going on.' (impersonal passive)
       b.   … at **der**   blev   spist   et aeble
               …that EXPL was   eaten   an apple
               '... that there was eaten an apple.'   (personal passive+VP internal subject)
                                                                        (Vikner 1995:202,209)

(18) a. Ígaer   (*Tha∂)   hefur veri∂ dansa∂   (Icelandic)
         yesterday   EXPL is   been danced
         'Yesterday was dancing going on.' (impersonal passive)
     b. Ígaer   (*Tha∂)   var   bor∂a∂   epli
         yesterday   EXPL   was   eaten   an apple
         'Yesterday was eaten an apple.'   (personal passive+VP internal subject)
                                            (adapted from Vikner 1995:202,209)

According to the analysis proposed here – given in (19) -- the examples (17a/b) and (18a/b) are taken to be completely parallel: in both structures the promoted underlying object of the passive is realised in VP-internal position, while the expletive (if it appears) fills the spec IP position for independent reasons. In particular, according to this analysis, the lexical expletive in (17a) is the subject of the impersonal passive only in the same sense as it is the subject of the subject inversion construction (17b).

(19) a.   Present analysis of impersonal passives
           [$_{CP}$ [$_{C'}$ [$_{IP}$ **EXPL**   [$_{I'}$ [$_{VP}$ V   e$_{cog}$]]]]] (Danish)
           [$_{CP}$ [$_{C'}$ [$_{IP}$ [$_{I'}$ [$_{VP}$ V   e$_{cog}$]]]]] (Icelandic)

     b.   Present analysis of personal passives with VP-internal subject
           [$_{CP}$ [$_{C'}$ [$_{IP}$ **EXPL**   [$_{I'}$ [$_{VP}$ V   et aeble]]]]]] (Danish)
           [$_{CP}$ [$_{C'}$ [$_{IP}$ [$_{I'}$ [$_{VP}$ V   epli]]]]]]   (Icelandic)

This analysis has implications concerning the subject of impersonal passives that I will discuss in the following section.

3.3   The subject of the impersonal passive

Under subject demotion analyses, the passivised intransitive verb either has no syntactically realised arguments (e.g. following Comrie 1977) or realises the subject theta-role on the passive morpheme (as proposed in Jaeggli 1986). The lexical subject appearing with impersonal passives in some languages as in (20), is inserted for independent syntactic reasons: it is an *expletive* subject in that it does not have any relation with the thematic structure of the underlying verb.

(20) a.   ..at **der**   er   blevet danset   (Danish)
           …that **EXPL.LOC** is   been   danced
           '... that there was dancing going on.'   (Vikner 1995:202)

Under the object demotion analysis proposed here, impersonal passives realise a referentially deficient cognate object in the syntax. The abstract cognate objects postulated here are comparable to weather-subjects in that both are *quasi-arguments* (Chomsky 1981). Both abstract cognate objects and weather-subjects are argumental in that they occupy an argument position associated with the predicate but differ from full arguments in that they are non-referential (section 3.4.2).

To illustrate the different status of the subject of impersonal passives in the different analyses, consider the example of the German impersonal *werden*-passive. As we have seen in (4a) above, the German impersonal *werden*-passive has no lexically realised subject. Any

analysis of the impersonal *werden*-passive therefore has to choose between the following two hypotheses:

(21) a. Hypothesis 1: The impersonal *werden*-passive is subjectless.
      b. Hypothesis 2: The subject of the impersonal passive is phonologically null.

Adopting Hypothesis 1 would lead to an analysis that gives impersonal *werden*-passives a status apart in German. If the impersonal *werden*-passive were subjectless, this construction would be fundamentally different from the vast majority of predicates in German, which require a subject.

I will therefore adopt Hypothesis 2, according to which the impersonal *werden*-passive has a subject that is phonologically null. Assuming this, the question arises what kind of null element functions as the subject of the impersonal *werden*-passive.

According to Safir (1986), Grewendorf (1989) and Vikner (1995) the subject position of the German impersonal *werden*-passive is in fact an empty expletive pro_{exp} as shown in (22).

(22) [$_{CP}$ Hier [$_C$ wird   [$_{IP}$ **pro$_{expl}$**   [$_{VP}$ gebaut.]]]   (German)
           here   werden 3SG   built
           'Here, there is building work being done.'

This analysis is motivated by the parallel with languages like Danish (see (20)) where impersonal passives appear with a lexical expletive subject. As shown in Haider (1990), Cabredo Hofherr (2000), however, it is problematic to postulate an empty expletive for German, since there is no empirical evidence to support this hypothesis. An analysis of the German impersonal passive that dispenses with the hypothesis of a null expletive is therefore preferable.

According to the analysis proposed here, the null subject in the impersonal *werden*-passive is a null cognate object (e_{cog}) licensed in its base position inside the VP, where it receives nominative and triggers agreement on the verb.

(23) [$_{CP}$ Hier [$_C$ wird   [$_{IP}$ [$_{VP}$ **e$_{cog}$ .NOM** gebaut.]]]   (German)
           here   werden 3SG   built
           'Here, there is building work being done.'

The structure in (23) differs from the pro-drop analysis in (22) on two counts. The first difference is syntactic: the null element corresponding to the nominative subject is in object position inside the VP, not an element filling the external subject position spec IP as in (22)[6]. The second difference is semantic: the null element e_{cog} in (23) is an abstract cognate object linked to the verb by a (deficient) object theta-role, while the expletive in (22) is assumed to fill the spec IP position for some grammatical reason independent of the argument structure of the verb.

Vikner (1995) assumes a subject demotion analysis of passivisation following Jaeggli (1986), Baker, Johnson and Roberts (1989). In Vikner's analysis impersonal passives rely on an expletive-associate-chain between the expletive and the passive morpheme (Vikner assumes an expletive *pro* for Icelandic, see also Holmberg & Platzack 1995).

(24) a. Vikner's analysis of impersonal passives
          [$_{CP}$ [$_{C'}$ [$_{IP}$ **EXPL$_i$** [$_{I'}$ [$_{VP}$ V+**passive morpheme$_i$**]]]]]

b.	Vikner's analysis of personal passives with VP-internal subject
$[_{CP} [_{C'} [_{IP} \textbf{EXPL}_i [_{I'} [_{VP} V \textbf{NP}_i]]]]]$

In this analysis personal passives with VP-internal subjects and impersonal passives are analysed differently: while in impersonal passives like (17a/18a) the expletive forms a chain with the passive morphology and thereby with the logical *subject*, of the underlying verb, the personal passive in (17b/18b) relies on a chain between the expletive and.the logical *object* of the underlying verb.

(25)	a.	Present analysis of impersonal passives
$[_{CP} [_{C'} [_{IP} (EXPL) \quad [_{I'} [_{VP} V \quad\quad \textbf{e}_{\text{cog}}]]]]]$
	b.	Present analysis of personal passives with VP-internal subject
$[_{CP} [_{C'} [_{IP} (EXPL) \quad [_{I'} [_{VP} V \quad\quad \textbf{NP}_i]]]]]$

According to the present analysis, the structure of personal and impersonal passives is parallel: both project an underlying object in the syntax, the expletive (if any) being inserted for independent reasons.

In the following section I discuss the conditions under which the cognate object is projected in the syntax and I motivate the assumption that for interpretive reasons the null cognate object cannot undergo syntactic movement and has to be licensed in situ.

*3.4	The abstract cognate object*

An analysis of impersonal passives in terms of a null object as proposed in Dobrovie-Sorin (1994) raises the question under what circumstances the null object is projected in the syntax.
The languages examined in the following sections indicate that the syntactic structures relying on an unergative verb do not automatically project a null object position. There is clear syntactic evidence that the syntactic projection of the cognate object is not obligatory (see section 3.4.1).
This implies that projection of a null object for unergative intransitive verbs is possible but not necessary: in other words, unergative verbs are compatible in principle with the projection of a transitive structure but do not force such a structure uniformly.
In section 3.4.2 I motivate the assumption that due to their weak semantic content null cognate objects have to be licensed in their base position.

3.4.1 The syntactic projection of the cognate object
In what follows I present empirical evidence from the Mainland Scandinavian languages, Icelandic and French that unergative intransitive verbs do not uniformly project a transitive syntactic structure.
In the Mainland Scandinavian languages expletive constructions are possible with unergative intransitive verbs as in (26a), but excluded with transitive verbs as in (26b) (see Vikner 1995, examples from Danish).

(26)	a.	at	der	har	danset	nogen	i	haven (Danish)
		that	EXPL	has	danced	someone	in	the-garden
		'that someone danced in the garden.'
	b.	* at	der	har	spist	nogen	et aeble
		that	EXPL	has	eaten	someone	an apple
		'that someone ate an apple.'	(Vikner 1995:198, 203)

If intransitive verbs projected a null cognate object (e_{cog}) in this construction, as schematised in (27), we would expect the transitive construction to be grammatical (or conversely the intransitive construction to be ungrammatical) with the lexical object NP occupying the same position as the cognate object:

(27) a. [$_{CP}$ at [$_{IP}$ der [$_{I'}$ har [$_{VP}$ danset nogen **e_{cog}**   i haven]]]]   (=26a)
     b. [$_{CP}$ at [$_{IP}$ der [$_{I'}$ har [$_{VP}$ spist   nogen **et aeble**   ]]]]   (=26b)

Icelandic shows the same pattern for the post-verbal projection of subjects of unergative verbs. The subjects of unergative verbs can be projected in object position (post-verbally), while the subjects of syntactically transitive verbs cannot:

(28) a. a∂ Tha∂   hefur   dansa∂   **einhver**   í gar∂inum.   (Icelandic)
         that EXPL   has   danced   someone   in the garden
         'that someone has danced in the garden.'
     b. *a∂ Tha∂   hefur   bor∂a∂   **einhver**   epli.
         that EXPL   has   eaten   someone   an apple
         'that someone has eaten an apple.'   (Vikner 1995:198,203)

The fact that transitive and intransitive verbs contrast with respect to expletive constructions in the Scandinavian languages indicates that intransitive verbs do not project a transitive structure in these constructions.

    For French there are arguments that show that a null object is not projected in active sentences (see Dobrovie-Sorin 1994:132). With respect to the insertion of the grammatical preposition *à*, 'to', in causatives, unergative verbs and transitive verbs with prototypical object drop pattern alike differing from transitive verbs: *à* has to be inserted in front of the embedded subject if a lexical object is present and may not be inserted in the absence of a lexical object:

(29) a. Jean fait   manger   des pommes ***(à)**   Marie.   (French)
         Jean makes   eat   apples   to   Mary
         'Jean makes Mary eat apples.'   (transitive)
     b. Jean   fait   travailler   **(* à)**   Marie.
         Jean   makes work   to   Mary
         'Jean makes Mary work.'   (unergative)
     c. Jean fait manger   **(* à)**   Marie.
         Jean makes eat   to   Mary
         'Jean makes Mary eat.'   (prototypical object drop)

If the examples (29b/c) contained a null object position the insertion of *à* should be obligatory as is the case for transitive verbs (see 29a). The impossibility of *à* therefore suggests that the object position is not projected for unergative verbs. The example (29c) shows that a transitive verb with a null prototypical object behaves like an unergative, suggesting that even for verbs that have a transitive variant, the object need not be projected syntactically.

    The examples from French, the Mainland Scandinavian languages and Icelandic show a clear syntactic asymmetry between transitive and unergative verbs. This suggests that unergative verbs need not project a null object.

    Furthermore, even if the unergative verb does project an object position, this object position need not be filled by a cognate object.

Take the example of the Mainland Scandinavian languages, exemplified here by Danish: in the expletive construction the logical subject of the intransitive verb *follows* the verb, appearing in the position normally occupied by the direct object (30a). A subject placed before the participle is ungrammatical in the Mainland Scandinavian expletive construction (30b):

(30) a. | at | der | har | | danset | **nogen** | i haven (Danish)
| that | EXPL | has | | danced | someone | in the garden

'that someone has danced in the garden.'

(30) b. | * at | der | har | **nogen** danset | | | i haven
| that | EXPL | has | someone danced | | | in the garden

'that someone has danced in the garden.' (Vikner 1995:189)

The following German example illustrates a similar point: *trinken* is a transitive verb taking the agent and the patient as nominative and accusative arguments respectively. When *trinken* is projected in a resultative construction, the object position receives accusative case but need not be assigned an interpretation corresponding to the object of the active verb:

(31) a. | Hans | trinkt | ein Glas Wein. | (German)
| Hans | drinks | a glass.ACC wine |

'Hans is drinking a glass of wine.'

(31) b. | Hans | trinkt | sich | ins Koma.
| Hans | drinks | REFL.ACC | into+DEF coma

'Hans drinks himself into a coma.'

The examples (30/31) suggest that unergative verbs allow the projection of an object *position*. The content of this position depends on its lexical content or the identification by the syntactic environment. Once the position is projected it can be filled by an NP (like in the French causative or in the Scandinavian expletive constructions) or, depending on the syntactic construction, be identified as a null cognate object.

3.4.2   The semantics of the cognate object

The distribution of the cognate object corresponding to impersonal passives is further constrained by the semantic interpretation characteristic of an impersonal passive.

Following Dobrovie-Sorin (1994), I assume that the null object can be characterised as a null cognate object. Lexical cognate objects also occupy object positions that may but need not be projected. It has been observed that cognate objects are restricted in their choice of determiners. In particular they cannot combine with strong determiners (Mittwoch 1998):

(32) a.   He gave the table a wipe.

(33) a. | Er schläft | den Schlaf der Gerechten/ | Siesta. | (German)
| he sleeps | the sleep of the just/ | siesta

'He sleeps soundly/ he takes an afternoon nap.'

(33) b. | # | Er | schläft den Schlaf/ | jeden Schlaf.
| | he | sleeps the sleep/ | every sleep

'He sleeps the sleep/ every sleep.'

The restricted choice of determiner suggests that cognate objects are not fully referential. This is further confirmed by the fact, discussed by Mittwoch, that cognate objects are used to express adverbial modification as in *He sleeps a peaceful sleep* vs *He sleeps peacefully*.

If lexical cognate objects are non-referential it is plausible to assume the same for the abstract cognate object postulated here. The abstract cognate object of impersonal passives is then a quasi-argument comparable to the subject of weather verbs: both fill an argument position of the verb, both are non-referential and have no descriptive content.

Following the proposals in Rizzi (1986) for null arbitrary objects, I will assume that the null object has to be licensed in situ. A null category that enters into an A-type relation would then be either ill-formed (if the language does not have referential null pronouns) or interpreted as a referential null pronoun (if the language allows referential null pronouns). In other words: a null object cannot move out of its base-position without losing its non-referential character.

This hypothesis draws a parallel with other phenomena where syntactic movement of indefinites out of the VP entails a change in interpretation.

A first example of this type of phenomenon is provided by bare nouns in German: bare nouns that move out of the VP receive a strong reading, as generic or as specific indefinite, (see Diesing 1992); this reading would be incompatible with the weak semantics of the null cognate object.

A second example are wh-indefinites: as discussed in Postma (1994) the indefinite reading is only available for a unstressed wh-word in situ, higher positions are associated with the wh-reading:

(34) a. Gestern   hat   Hans was   gekauft.   (German)
          yesterday   has   Hans what bought
          'Yesterday, Hans bought something.'   (indefinite reading)
      b. Was   hat   Hans   gekauft.?
          what   has   Hans   bought
          'What did Hans buy?'   (interrogative reading)

To sum up, the data in this section have shown that for unergatives a null object cannot be taken to be present uniformly in the syntax. I have argued that the projection of the object position may be licensed with unergatives and that this position can be filled by a non-object argument. I have argued that the interpretation of the null object is similar to the interpretation of cognate objects in that it is not referential. The null object position cannot enter a movement-chain without losing its indefinite meaning, it has to be licensed in situ.

Given these assumptions the possibility of passivising intransitives depends on the syntax of the particular passivising structure and on the licensing mechanisms that are available for the abstract cognate object. Passivisation of intransitives is not a parametric option fixed in the lexical entry of the passive morpheme or for unergative verbs. The possibility of passivising intransitives is the result of the architecture of the language and the passive construction interacting to license a referentially deficient cognate object. I will come back to this in the final section where I propose an analysis for the cross-linguistic variation concerning impersonal passivisation.

In the following two sections I give the details of the proposed analysis of passivisation for German (section 4) and apply the analysis to Spanish (section 5).

4. An analysis of *werden*-passives and middles in German

In the previous section I have developed an analysis according to which impersonal passivisation is a variant of personal passivisation that relies on the projection of an abstract cognate object in the syntax. I have proposed the following structures for the *werden*-passive and the middle in German (repeated from (14) and (15)).

(35) a. [CP Hier wird [IP [VP **e_{cog}** gebaut.]]] (German)
here *werden*.3SG built
'Building work is being done here.

b. [CP Hier wird [IP [VP **ein Haus** gebaut.]]]
here *werden*.3SG a house.NOM built
'A house is being built here. (*werden*-passive)

(36) a. [CP Hier fährt [IP **es** [VP sich gut.]]] (German)
here drives.3SG ES.NOM REFL well
'Here is a good place to drive.'

b. [CP Hier fährt [IP **dieser Wagen** [VP sich gut.]]]
here drives.3SG this car.NOM REFL well
'This car dives well here.' (middle)

The structures proposed for the *werden*-passive and the middle differ on two counts. First, the nominative subject of the *werden*-passive is licensed in the position occupied by the accusative object of the transitive verb (complement of V in (35a/b)), while the nominative subject of the middle is licensed in the position occupied by the nominative subject of the transitive verb (spec IP in (36a/b)). Secondly, the subject of the impersonal *werden*-passive is null while the subject of the impersonal middle is a lexical *es*, 'it'.

In the present section I motivate the details of this analysis. I first show that the nominative NP in the *werden*-passive differs in its syntactic status from the nominative NP of the middle (section 4.1): while the nominative NP of the *werden*-passive patterns with the object of transitive verbs, the nominative NP of the middle patterns with the subject of transitive verbs. I then use this syntactic difference to account for the fact that the impersonal *werden*-passive and the impersonal middle in German differ with respect to their surface subject (section 4.2).

4.1. Middles and werden-passives: the syntax of the subject NP

As has been argued extensively in the literature, the *werden*-passive is an unaccusative construction (see e.g. Grewendorf 1989, Haider 1993, Sabel 1999): according to this analysis, the subject of the *werden*-passive patterns syntactically with underlying direct objects.

In particular, as argued in Sabel (1999), the nominative subject NP of the *werden*-passive not only patterns with accusative objects with respect to a number of tests but –unlike in English -- it need not undergo A-movement to a canonical subject position and may remain in its base position, i.e. the position occupied by the accusative object in the active. The most convincing evidence for this comes from double object passives. Sabel shows that in double object passives the basic word-order is dative-nominative. This is supported by the fact that example (37b) is only possible if the dative NP is focalised (indicated by capitals below), while no such restrictions apply to the example in (37a) (Lenerz 1977). As Sabel points out, this suggests that (37a), which is not subject to the additional restriction, is the basic word-order.

(37) a.   ... weil dem Mann   das Foto   gezeigt   wurde. (German)
             ... since the man.DAT the photo.NOM   shown *werden*.PAST 3SG
             '... since the photo was shown to the man'   (basic word order)
     b.   ... weil   das Foto   dem Mann   gezeigt   wurde.
             ... since   the photo.NOM   the man DAT shown *werden*.PAST 3SG
             '... since the photo was shown TO THE MAN.'   (marked order)

Since in the active the dative object precedes the accusative object in the unmarked case (38a), the word order facts in (37) suggest that the nominative subject of the double object passive in (38b) remains in the same position as the accusative object of the active. It is therefore plausible to assume that this is also the case for the nominative subject of the simple passive as schematised in (38c).

(38) a.   [CP weil [IP Hans   [VP dem Mann [VP ein Foto   gezeigt hat.]]] (German)
             since Hans.NOM the man.DAT   a photo.ACC   shown has
     b.   [CP weil [IP   [VP dem Mann [VP ein Foto   gezeigt wurde.]]] (=37a)
     c.   [CP weil [IP   [VP   [VP ein Foto   gezeigt wurde.]]]
             since   (the man.DAT) a photo.NOM shown *werden*.PAST 3SG

The argument based on double object passives provides overt evidence from word-order for an analysis that takes the nominative subject of the werden-passive to be generated in direct object position.

   In what follows I will apply some other syntactic diagnostics for unaccusativity in German proposed by Grewendorf (1989) to the middle construction and the *werden*-passive. As pointed out by Levin and Rappaport-Hovav (1995) such diagnostics may only provide sufficient conditions for unaccusativity or unergativity. This situation arises when the status of a verb as unaccusative or unergative is only one factor among others allowing a verb to appear in a certain construction. I have therefore excluded diagnostics such as the possibility of impersonal passivisation and prenominal adjectival participles that are incompatible with middle constructions for independent reasons (in this case a more general ban on multiple advancement in passives, the 1-advancement exclusiveness law of Perlmutter and Postal 1984).

   The tests proposed by Grewendorf show that the nominative NP of the *werden*-passive patterns with the direct object of transitive verbs, unlike the nominative NP in the middle which patterns with the subjects of transitive verbs. I will consider three constructions given by Grewendorf that show an asymmetry between objects and subjects of transitive verbs: two partial extraction phenomena (*was-für*-split and discontinuous phrases) and topicalisation of the NP with the past participle.

4.1.1 Partial extraction
Grewendorf (1989) examines two partial extraction phenomena which he claims show a subject--object asymmetry: the *was-für*-split construction (see (39a)) and discontinuous phrases (see (39b)).

(39) a.   Was sind damals für Leute gekommen?   (German)
             what are in.those.days for people come.PP
             'What kind of people came in those days?'   (*was-für*-split)
     b.   Kleider hat er immer so komische an.
             clothes has he always such strange on

'As for clothes, he always wears such strange (ones).'(discontinuous phrases)

I will use the two partial extraction phenomena as tests for the syntactic status of the nominative subject in *werden*-passives and in middles, with one modification. Contrary to Grewendorf's claims, the *was-für*-split does not reliably distinguish between unergative and unaccusative intransitive verbs. Vikner (1995:199ff) shows that *was-für*-split is well-formed with intransitive verbs in general. As Vikner (1995) demonstrates, however, partial extraction from transitive subjects is ill-formed.

     As Grewendorf (1990: 296) points out for the extraction from untensed subject sentences, extraction is better if the element occupying the V2-position is an auxiliary or a modal rather than an inflected full verb[7] In the case of *was-für*-split and discontinuous phrases a similar preference for composite verb structures holds as illustrated in (40) and (41). In the following discussion I will therefore use test sentences with composite tenses to control for this effect.

(40)   a.   ? Was_i kommen   für $Leute_i$?   (German)
                  what come.3PL   for   people
                  'What kind of people are coming?'
       b. Was_i dürfen   für $Leute_i$ kommen?
                  what   may.3PL   for people   come.INF
                  'What kind of people are allowed to come?'

(41)   a.   ? $Gäste_i$ kamen   nur $angemeldete_i$.   (German)
                  guests   came.3PL   only   announced
                  'As for guests: only announced (ones) came.'
       b. $Gäste_i$ sind   nur $angemeldete_i$ gekommen.
                  guests are.3PL   only   announced   come.PP
                  'As for guests: only announced (ones) came.'

In what follows I will consider these two partial extraction constructions in turn.

4.1.1.1 Was-für-split. The wh-phrase introduced by *was-für* can always be preposed as a whole (see (42a)); in the *was-für*-split the partial extraction of the *was* alone is possible as well (see (42b))[8]:

(42)   a.   Was für Leute   sind   gestern   gekommen? (German)
       b. Was_i sind   gestern [für $Leute]_i$ gekommen?
                  what (for people) are.3PL yesterday (for people)   come.PP
                  'What kind of people came yesterday?'

According to Grewendorf the partial extraction of *was* is better from an underlying object position. If partial extraction from a nominative subject is possible he takes this an indication that the subject occupies the object position at a relevant stage in the derivation. The data of the *was-für*-split construction do not necessarily support this conclusion. As observed by den Besten (1985) the *was-für*-split with unaccusative subjects improves with some lexical material intervening between the extracted element in sentence initial position and the stranded remnant:

(43)   a.   ? Was_i sind   für $Sachen_i$ passiert?   (German)
       b. Was_i sind   da   für $Sachen_i$ passiert?

c.   Was$_i$ sind   da   gestern   für Sachen$_i$ passiert?
what are.3PL   there   yesterday   for things   happened.PP
'What kind of things have happened (there (yesterday))?'

The same pattern can be observed for unergative verbs and for partial extraction with inherent reflexives:

(44)   a.   ?? Was$_i$ haben   für Leute$_i$ gearbeitet?   (German)
       b.   Was$_i$ haben   hier   früher   für Leute$_i$ gearbeitet?
what   have.3PL   here   before   for people   worked.PP
'What kind of people/ which people has worked (here before)?'   (unergative)
       c.   Was$_i$ haben   sich   für Leute$_i$ gemeldet?
       d.   Was$_i$ haben   sich   damals   für Leute$_i$ gemeldet?
what have.3PL REFL in.those.days   for people   come.forward.PP
'What kind of people came forward (in those days)?'   (inherent reflexive)

The examples in (43b) and (44b-d) were judged to be well-formed by all my informants. My informants judged *was-für*-split in combination with a middle verb to be markedly worse than extraction with an inherent reflexive. The latter extraction was judged acceptable by 10 of 11 informants:

(45)   a.   Was$_i$ haben   sich   für Leute$_i$ gemeldet?   (German)
what have.3PL   REFL   for people   come.forward.PP
'What kind of people came forward?'   (inherent reflexive)
       b.   ?? Was$_i$ haben sich für Wagen$_i$ gut gefahren?
'What kind of cars drove well?'   (middle)

The evaluation of partial extraction with middle verbs is further complicated by the presence of the modifier. When asked to compare the pairs in (46)/(47), my informants uniformly preferred the examples, without modification of the participle (46a/47a).

(46)   a.   Was$_i$ haben   sich   für Leute$_i$ gemeldet? (German)
       b.   Was$_i$ haben   sich   für Leute$_i$ schnell   gemeldet?
what   have.3PL   REFL   for people   quickly   come.forward.PP
'What kind of people came forward (quickly)?'

(47)   a.   Was$_i$ haben   für Behörden$_i$ geantwortet?   (German)
       b.   Was$_i$ haben   für Behörden$_i$ schnell   geantwortet?
what have.3PL for administrations   quickly   answered.PP
'What kind of administrations replied (quickly)?'

As most German middles appear with a modifier, this element has to be partly responsible for the deviance of middles combined with the *was für*-split construction.

      The fact that the surface subject of middles does not allow *was-für* partial extraction groups the subjects of middles together with the subject of transitive verbs. As the effect of the modifier cannot be controlled for, however, this evidence is not conclusive on its own.

4.1.1.2. Discontinuous phrases. Grewendorf (1989:27) gives discontinuous phrases as a further construction where a subject/object asymmetry can be observed. Partial extraction from object position (as in (48)) was judged grammatical by all my informants.

(48) a.   Kleider hat er immer so komische an.   (German)
               clothes has he always such strange on
               'As for clothes, he always wears such strange (ones).'(discontinuous phrases)
      b.   Bücher$_i$ liest   er   am.liebsten   französische$_i$.
               books   reads he   the.most.preferred   French
               'As for books, he prefers to read French (ones).'

Even informants that judged the sentences in (48) to be less than fully acceptable consistently judged them to be better than example (49) with extraction from the subject position.

(49)   ?? Studenten$_i$ haben   fleissige$_i$ das Seminar   besucht.   (German)
         students   have.3PL   hard-working the seminar   attended.PP
         'As for students, hardworking (ones) have attended the seminar.'

Grewendorf points out that unaccusative subjects pattern with transitive objects with respect to this construction (examples from Grewendorf 1989):

(50) a.   Fehler$_i$ sind   dem Hans   vermeidbare$_i$ unterlaufen. (German)
               mistakes are.3PL the Hans.DAT   avoidable   happened.to.PP
               'As for mistakes, Hans made avoidable (ones).'
      b.   Widersprüche$_i$ sind   dem Richter   mehrere$_i$ aufgefallen.
               contradicitons are.3PL   the judge.DAT several   become.obvious
               'As for contradictions, the judge noticed several (ones).'

While (50b) was consistently judged to be better than (50a) all informants agreed that both are better than (49).
        In sentences that contain a middle, partial extraction from the surface subject was judged to be deviant on a par with subject extraction[9].

(51) a.   *Autos$_i$ fahren   sich   am.besten   neue$_i$ (German)
               cars   drive.3PL   REFL the.best   new
               'As for cars, new (ones) drive best.'
      b.   *Autos$_i$ haben   sich   schon.immer am besten neue$_i$ gefahren.
               cars   have.3PL   REFL always   the.best   new driven
               'As for cars, new (ones) have always driven best.'

With respect to discontinuous phrases, the nominative subject of middles therefore behaves on a par with the nominative subject of transitive sentences, while the subject of werden-passive behaves on a par with the accusative object of transitive sentences.

4.1.2. Topicalisation of surface subject + past participle
Another test distinguishing underlying syntactic objects from syntactic subjects given by Grewendorf (1989:23) relies on topicalisation of the NP with the past participle. Topicalisation of the subject of transitive verbs with the past participle is ungrammatical while topicalisation of the direct object and the past participle (PP) is significantly better[10]:

(52) a.   * [Ein Fachmann   gebaut] hat   dieses Haus.   (German)
               an expert.NOM   built.PP has   this house .ACC
               'An expert has built this house.'   (PP + subject)

(compare without topicalisation of the PP:

Dieses Haus hat ein Fachmann gebaut.
this house.ACC has an expert.NOM built
'An expert built this house.'

b. [Eine Brücke gebaut] hat dieser Ingenieur.
A bridge.ACC built.PP has this engineer.NOM
'This engineer has built a bridge.' (PP + object)
(compare without topicalisation of the PP:

Dieser Ingenieur hat eine Brücke gebaut.
this engineer.NOM has a bridge.ACC built
'This engineer has built a bridge.')

As Grewendorf observes, the nominative subjects of some intransitive verbs pattern with objects of transitive verbs in allowing topicalisation with the past participle:

(53) [Ein Fehler unterlaufen] ist Hans noch nie. (German)
a mistake.NOM happened is Hans.DAT never yet.
'Hans has never made a mistake.'

The contrasts in (52/53) were all confirmed by my informants. Sentence (52a) was judged ungrammatical by all eleven informants; example (53) was uniformly judged to be acceptable. Topicalisation of the nominative subject of the *werden*-passive with the past participle (as in (54)) was judged to be slightly worse than (52b) but clearly better than (52a).

(54) [Ein Buch geschenkt] wurde der Studentin zu Weihnachten. (German)
a book.NOM given *werden*.past3SG the student.DAT for Christmas.
'A book was given to the student for Christmas.'

In all of the above examples topicalisation degrades if the topicalised NP is definite[11] In the examples involving middles I will therefore only use indefinite surface subjects.

As observed by Haider (1985) (cited following Grewendorf 1989) topicalisation also degrades if no argument is left behind in the middle field[12]

(55) [Eine Tanne gewachsen] ist früher an dieser Stelle. (German)
a pine.tree.NOM grown is before at this spot.
'On this spot a pine tree used to grow.'

This is confirmed by the judgements of my informants who uniformly judged (55) to be worse than (54).

Now consider the examples involving middle constructions: (56a) was found to be marginally acceptable by six of eleven informants; only three informants found (56b) to be marginally acceptable:

(56) a. ? [Sich schnell gelesen] hat eine Kurzgeschichte schon.immer. (German)
REFL quickly read.PP has a short.story always
b. ?? [Eine Kurzgeschichte gelesen] hat sich schon.immer schnell.
a short.story read.PP hasREFL always quickly
'A short story has always read quickly.'

When asked to compare (56a) with (52a) my informants did not have a preference for either sentence. All informants agreed, however, that topicalisation of reflexives with the past participle is better for inherent reflexives and argumental reflexives in (57) than for the middle reflexive in (56a):

(57)   a.   Sich geschämt   hat Hans schon.immer   leicht.   (German)
             REFL shamed.PP   has Hans always   easily
             'Hans has always felt ashamed easily.'   (inherent reflexive)
       b.   Sich   gewaschen   hat   Hans schon.immer   ungern.
             REFL washed.PP   has   Hans always   without.pleasure.
             'Hans has always disliked washing himself.'   (argumental reflexive)

The topicalisation of the surface subject in middles with the past participle in (56a) is unacceptable on a par with topicalisation of a transitive subject with the participle in (52a). The reflexive in middles did not pattern with other non-argumental reflexives though: topicalisation of the middle reflexive with the past participle was judged more degraded.

4.1.3. Auxiliary selection
Middles also pattern with transitive verbs with respect to perfect auxiliary selection: both take the perfect auxiliary *haben*, 'have'. In German, transitive verbs generally select the auxiliary *haben*, 'have'[13] while intransitive verbs may select either *haben* or *sein*, 'be'. The *werden*-passive contrasts with the middle taking the auxiliary *sein*, 'be'.

(58)   a.   Der Wagen   hat   sich   schon.immer gut   gefahren.   (German)
             the car.NOM has   REFL always   well   driven
             'The car has always been good to drive.'   (personal middle)
       b.   Hier hat es   sich   schon.immer gut   getanzt.
             here has ES   REFL always   well   danced.PP
             'This has always been a good place to dance.'   (impersonal middle)
       c.   Das Kind   ist   gesehen   worden.
             the child.NOM   is   seen   *werden*.PP
             'The child has been seen.'   (*werden*-passive)

4.1.4. Summary
Summarising, we have seen that the subject of the middle patterns with the subject of transitive verbs with respect to topicalisation together with the past participle and the possibility of *was-für*-split and discontinuous phrases. The middle construction also behaves as a transitive construction with respect to the choice of the perfect auxiliary *haben*, 'have'. The data discussed here are complementary to the arguments in Steinbach (2002) who shows convincingly that the reflexive in middles behaves syntactically as a direct object.

     The data discussed here and in Steinbach (2002) converge on an analysis of middles in German as transitive syntactic structures with the nominative NP in subject position and the reflexive occupying the object position, as proposed in (35). The syntactic behaviour of the nominative subject of the *werden*-passive, on the other hand, patterns with the accusative object of transitive verbs; this is reflected in the analysis in (36) by the fact that the nominative NP is generated in the position of the underlying object.

     In the following section I show how the proposed analysis can account for the fact that the impersonal variants of the *werden*-passive and the middle differ with respect to their surface subject.

As we have seen in example (4), the impersonal variants of the impersonal *werden*-passive and the impersonal middle differ with respect to their surface subject. In what follows I will argue that the analysis of impersonal passivisation proposed above allows an account that links this difference to the syntactic properties of the two constructions (for an analysis of the surface subject of the impersonal *sein*-passive along these lines see Cabredo Hofherr 1999).

More specifically, I propose that the difference between the impersonal middle and the impersonal *werden*-passive can be linked to the syntactic difference that I have argued for in section 4.1:

(59)   a.   The *werden*-passive has a derived subject:
               the nominative NP behaves syntactically as an underlying object
       b.   The middle behaves like a transitive structure:
               the nominative NP behaves syntactically as an underlying subject

Let us first consider the *werden*-passive. According to the analysis proposed here, the impersonal passive has the same structure as a personal passive with the nominative NP in the base-position of accusative objects:

(60)   a. [$_{CP}$ Hier   wird   [$_{IP}$ [$_{VP}$ e$_{cog}$ gebaut.]]]   impersonal passive
       b. [$_{CP}$ Hier   wird   [$_{IP}$ [$_{VP}$ ein Haus   gebaut.]]]   personal passive
               here *werden*.3SG   a house   built.PP

In the structure in (61a) the insertion of *es* in subject position (spec IP) is impossible since independently a subject *es* cannot appear with a nominative NP in object position as shown by (61b):

(61)   a. * [$_{CP}$ Hier wird   [$_{IP}$ es [$_{VP}$ e$_{cog}$ gebaut.]]] impersonal passive
       b. * [$_{CP}$ Hier wird   [$_{IP}$ es [$_{VP}$ ein Haus   gebaut.]]] personal passive
               here *werden*.3SG   ES   (a house.NOM)built.PP

As a lexical NP is excluded in (61b) the cognate object cannot be licensed either and the impersonal passive reading is impossible.

Now consider the insertion of *es* in object position as in (62): this gives rise to the surface string *Hier wird es gebaut*:

(62)   [$_{CP}$ Hier wird   [$_{IP}$ [$_{VP}$ es   gebaut.]]]   (German)
               here *werden*.3SG   ES   built.PP
               'Here it (=something previously mentioned) is being built.'

The *es* in this structure cannot be interpreted as referentially deficient, however, since it can be observed independently that a lexical *es* linked to the direct object position cannot be indefinite:

(63)   a.   Ich   baue   es.   (German)
               I   build   it
               'I am building it (=something previously mentioned)'.
       b.   Ich   baue.
               I   build

'I am building (something prototypical). I am doing building work'.

Since the *es* in (61) cannot be interpreted as a referentially deficient cognate object, the overall structure cannot be interpreted as an impersonal *werden*-passive, which according to the analysis defended here relies on the syntactic realisation of a non-referential cognate object.

Since the subject *es* cannot be inserted in subject nor object position of the impersonal *werden*-passive, this construction can only appear with a null subject corresponding to a null cognate object licensed in situ.

As we have seen above, the impersonal middle differs from the impersonal *werden*-passive in that it requires a subject *es*:

(64) a. *In Köln   lebt   []   sich   gut.   (German)
     b. In Köln   lebt   es   sich   gut.
        in Cologne lives (ES) REFL well
        'Cologne is a good place to live.'

As I have shown above, the logical object of the impersonal middle in German is projected in the position of the external argument. It then depends on the particular properties of the language (i) whether this element can be interpreted as a non-referential quasi-argument, giving rise to an impersonal passive, and (ii) whether this subject has to be lexicalised (as in German) or not.

Under the present analysis the cognate object in the impersonal middle is realised as *es* for two reasons. First, German does not license null external subjects, and consequently the structure in (65a) with a null external subject *pro* would be ill-formed. Secondly, this construction is possible with an *es* subject as in (65b), since *es* can have an impersonal interpretation in subject position (as witnessed by the examples in (66)).

(65) a. *[IP   *pro*   [VP   sich   lebt]   (German)
     b. [IP   es   [VP   sich   lebt]
              (ES)   REFL lives

(66) a. ... dass   es   knistert .   (German)
        ... that   ES   rustles
        'that there is a rustling noise.'   (impersonal use of sound emission verb)
     b. ... dass   es   regnet.
        ... that   ES   rains
        'that it is raining'.   (weather verb)

According to the analysis defended here, the lexical items available in German (availability of an impersonal interpretation for *es* inserted in subject position) and the syntactic properties of nominative subject of the two passives interact to give rise to two impersonal passive constructions that differ with respect to their surface subject.

5.   Agreement in Spanish and the possibility of impersonal passivisation

In the preceding section I have argued that the different syntactic properties of the two passivising constructions in German result in two impersonal passive constructions with different surface subjects.

As discussed above, Spanish illustrates the fact that two passive constructions in the same language can differ with respect to the availability of impersonal passivisation (see Dobrovie-Sorin 1994 for Romanian and French). In Spanish the *ser*-passive with *ser*, 'to be', does not allow an impersonal variant (67b) while the reflexive passive with *se* can combine with unergative verbs (67a).

(67)   a.   Aquí   se   trabaja   duro.   (Spanish)
                    here   REFL. works   hard
                    'Here, people work hard.'   (reflexive passive + intransitive verb)
      b.   * fue   trabajado   duro   aquí.
                    was   worked.3MSG hard   here
                    'It (something previously mentioned) was worked hard here.' (not impersonal)
                                              (*ser*-passive + intransitive verb)

I propose that this contrast can also be analysed in terms of the independently observable syntactic properties of the two passive constructions.

More specifically, the two passive constructions differ with respect to their agreement pattern: in the reflexive passive the verb agrees in person and number with the NP subject (68a) while in the *ser*-passive the finite form of *ser* agrees in person and number and furthermore the participle agrees with the NP subject in number and gender (68b).

(68)   a.   Estas   iglesias   se   construyeron en 1750.   (Spanish)
                    these.FPL   churches.FPL REFL built.**3PL**   in 1750
                    'These churches were built in 1750.'
      b.   Estas   iglesias   fueron   construidas en 1750.
                    these.**FPL**   churches.**FPL** were.**3PL**   built.**FPL**   in 1750
                    'These churches were built in 1750.'

I propose that the *ser*-passive cannot be impersonal since the 3rd person masculine singular participle agreement in combination with the copula *ser* cannot be default agreement in (68b); full agreement, however, is incompatible with the defective referential status of the cognate object.

This analysis relies on the additional hypothesis that a participial agreeing construction and an impersonal interpretation are incompatible. This assumption is supported by independent evidence from participial adjuncts introduced by *una vez,* 'once'. In these adjuncts the participle agrees with the lexical object (69a) and null non-referential objects are not possible (69b). A verb without lexical object under *una vez* is only possible if the object is co-referent with an argument of the matrix clause as in (69c) or the complement under *una vez,* 'once' is finite as in (69d):

(69)   a.   Una vez terminada   la casa,   nos   vamos de viaje.   (Spanish)
                    once   finished.FSG, the house,   us   go.1PL of travel
                    'Once the house is finished, we will go on a journey.'
      b.   *Una vez terminado, se   fue   a.casa.
                    once finished .3MSG REFL went   home
                    Not: 'Once everything was finished he went home.'
      c.   Una vez terminado [e$_i$],   [el bote]$_i$ fue vendido.
                    once finished.3MSG   the boat was sold.
                    'Once it was finished, the boat was sold.'
      d.   Una vez   que había   terminado   se   fue   a casa.

	once	that had.3SG finished	REFL went home

'Once he had finished, he went home.'

In contrast, the 3MSG participle agreement can be default in constructions that do not transmit agreement, like the perfect formed with the auxiliary *haber* 'have'. Consider the example in (70a): the perfect auxiliary *haber*, does not combine with an agreeing participle – the feminine plural subject and object combine with masculine singular agreement on the participle. This configuration also allows non-referential null subjects as illustrated by (70b).

(70) a.   Las mujeres   han cantad**o**   dos canciones. (Spanish)
           the.**3FPL** women.FPL   have sung.**3MSG**   two songs.**3FPL**
           'The women have sung two songs.'
      b.   Hoy   ya   ha   llovid**o**.
           today already   has.3SG   rained.**3MSG**
           'It has already rained today.'

As (70b) shows, verbal 3SG agreement can be default in Spanish, confirming the above hypothesis that in the reflexive passive the verbal agreement does not force a referential reading of the null cognate object.

      According to the present analysis the difference between the *ser*-passive and the reflexive passive with respect to impersonal passivisation is reduced to the agreement properties of the two constructions: in the *ser*-passive the participial agreement cannot be default agreement since the agreement is shared with the subject NP, in the reflexive passives the non-referential cognate object can be licensed since verbal agreement can be default agreement.

      Data discussed by Contreras (1986) further support a distinction with respect to the postverbal position of the *ser*-passive and the reflexive passive. While the reflexive passive allows bare singulars, this possibility is not available for the *ser*-passive:

(71) a.   * Fue traído   café   (Spanish)
           was   brought.PP   coffee
           'Coffee was brought.'   (*ser*-passive)
      b.   Se   trajo   café
           REFL brought.3SG coffee   (reflexive passive)
           'Coffee was brought.'

In keeping with the analysis of the passives proposed here, I attribute this contrast to the fact that the agreement on the participle in the *ser*-passive cannot be default agreement and that full agreement is incompatible with the indefinite semantics of the bare singular in (71a), while the verbal agreement relevant for the reflexive passive can be default agreement in (71b).

      In this section, I have argued that for the reflexive passive and the *ser*-passive in Spanish the contrast concerning the availability of impersonal passivisation can be traced back to a difference in the agreement properties of the two constructions. In the following section I give additional evidence that the agreement properties of passive constructions are one factor in the cross-linguistics variation concerning the possibility of impersonal passivisation for a given passive construction.

6. Factors in the cross-linguistic variation of impersonal passivisation

The analysis proposed here views the possibility of impersonal passives as a consequence of the licensing of an abstract cognate object in the syntax; this licensing is the result of a complex interaction between different grammatical properties of a language. For German I have proposed that different surface realisations of the subject of impersonal passives depend on the syntactic status of the subject NP of the passive construction (derived subject vs. deep subject). In the discussion of the Spanish *ser*-passive and reflexive passive I have argued that the pattern of agreement involved in a passive construction is crucial for the licensing of the non-referential cognate object, and therefore for the availability of an impersonal variant of the passive construction . In section 6.1. I give further cross-linguistic evidence corroborating the correlation between default agreement and the licensing of impersonal passivisation.

I have further argued that the null cognate object cannot undergo syntactic movement for its syntactic licensing (section 3.4.2). For passive constructions with a grammatical subject generated in object position, this predicts that the availability of an impersonal variant depends on the availability of a subject inversion construction that allows licensing of the subject NP in its base position. I argue that the English passive does not allow an impersonal variant since English does not provide a subject inversion construction that licenses the grammatical subject NP of the passive in its base position (see section 6.2).

6.1. Agreement

As I have argued above for Spanish, the agreement properties of a passive construction within a language may render a passive construction incompatible with the weak semantic properties of the cognate object. Grewendorf (1989) suggests that the possibility of an impersonal passive in a language may be linked to the presence of a neuter form of the participle:

(72) a. È   stato   lavorat**o**.   (Italian)
          is   been   worked.**MSG**
          #'He (referential) has been worked.'
          not: 'It (non-referential) has been worked.'
      b. By**lo**   nakuren**o**.   (Russian)
          was.PST.NTR   smoke.NTR
          'It was smoked.'   (Grewendorf 1989:161)

This correlation between a non-agreeing form of the participle and impersonal passivisation is confirmed by Icelandic. In Icelandic the passive auxiliaries are *vera*, 'be', and *verða*, 'become' (see Sigurðsson 1989:308). The impersonal passive is formed with the default agreement that has the shape of the singular neuter nominative/accusative (3SG.NTR.NOM/ACC) (see Sigurðsson 1990). This default agreement form appears with the impersonal passive (73a) as well as with the non-agreeing passive of oblique subjects (73b):

(73) a. THa∂ var [e] sungi∂   hátt.   (Icelandic)
          expl   was3SG   sung.3SG.NTR.NOM/ACC loud
          'It was sung loudly.'
      b. Ykkur   var   bo∂i∂
          you.dat   was3SG   invited3SG.NTR.NOM/ACC
          'You have been invited.'   (Sigurðsson 1989:308)

As pointed out by Dobrovie-Sorin (1994) the lack of agreement necessary for the licensing of the cognate object may be induced by the properties of the impersonal construction rather than by the pattern of participle agreement as such. French, for example has agreeing participles and a passive copula *être* 'be' that transmits agreement between the participle and the NP. The impersonal *être*-passive is an instance of the impersonal construction with the expletive il, that allows the licensing of the NP in situ. In the French impersonal construction the agreement is with the expletive, not with the cognate object, shielding the null cognate object from full agreement that would force a referential reading:

(74) a. Il   a   été   tiré [e]   sur le bateau.   (French)
          EXPL.**3SG**   has   been   shot.**3SG**   at the boat
          The boat has been shot at.
      b. Il   est   arrivé   trois filles.
          EXPL.**3SG**   is   arrived.PP.**MSG**   three girls.**3FPL**
          There arrived three girls.

The example of French shows that it is not so much the availability of a default agreement form of the participle but more generally the possibility of lack of participle agreement with the underlying object in a passive construction that makes an impersonal variant of a passive possible.

In section 3.2 I have given evidence that in the Germanic languages the expletive in the impersonal passive coincides with the expletive found in subject inversion constructions with personal passives. There are exceptions to this correlation in languages that have participle agreement in the subject inversion constructions with personal passives as the Norwegian dialect illustrated in (75).

(75) a. Der   vart   nett   skotne nokre bjørnar.   (Norwegian dialect)
          EXPL.LOC   was   just   shot   some bears
          'There have been shot some bears.'
      b. * Der   vart   nett   skotne pa   nokre bjørnar.
          EXPL.LOC   was   just   shot   at   some bears
          'There has been shot at some bears.'
                                                              (cited from Afarli 1992:96)

Afarli (1992:99) notes that in certain dialects of Norwegian with a locative expletive *der*, 'there', this expletive is only used for non-passive impersonal constructions while the impersonal passive appears with the pronominal expletive *det*, 'it'. Since pronominal expletives systematically block participle agreement (see Christensen and Taraldsen 1989), these facts support the analysis defended here that the agreement of the participle interferes with the licensing of a non-referential object position necessary for an impersonal passive.

The evidence form Germanic and Romance presented here supports an analysis that correlates the possibility of a non-agreeing participle in the passive construction and the availability of impersonal passivisation.

6.2. Type of subject inversion constructions

I have already given the example of French where the type of subject inversion construction provides a means of leaving the participle in the *être*-passive agreement-less: in this case the

type of subject inversion construction available contributes indirectly to the possibility of licensing a null cognate object that is necessary for the impersonal *être*-passive.

Under the present analysis of impersonal passivisation, the type of subject inversion available in English can be taken to be the source of the impossibility of having an impersonal passive in English. More specifically, I propose to link the fact that in English an impersonal passive is impossible to the fact that there is no subject inversion construction with personal passives that allows the subject NPs to stay in situ.

(76) a. * It was killed a man.
      b. * It was killed e_{cog}.

The expletive *it* is incompatible with a lexical NP-associate (76a), and by analogy it should also be incompatible with the null cognate object as in (76b), so that (76b) is not a possible source for an impersonal passive. Now consider the expletive there. The expletive *there* does not license the NP of the passive in object position (77a) but in pre-participle position (77b).

(77) a. * There was killed a man.
          --> * There was killed e_{cog}
      b. There was [a man]$_i$ killed t_i.

Since (77a) is ungrammatical with a lexical NP, the parallel structure with a null cognate object as in (78b) is expected to be ungrammatical as well. The grammatical construction (77b), however, cannot give rise to an impersonal variant, according to the analysis proposed here since I have argued that the abstract cognate object e_{cog} has to be licensed in its base position: (78b) is not a possible structure for an impersonal passive, since e_{cog} is not in its post-participial base position.

(78) a. * There was killed e_{cog}
      b. * There was e_{cog} killed.

If this reasoning is correct, English does not have a subject inversion construction that could give rise to an impersonal variant.

7. Conclusion

I have argued for an analysis of passivisation that crucially relies on object promotion: personal and impersonal passives that share the same morphology are analysed as variants of a single passive construction, where the difference between personal and impersonal passivisation is due to the different nature of the promoted object in each case. The promoted object that appears in impersonal passives is taken to be an abstract cognate object. This cognate object can be classified as a quasi-argument comparable to weather subjects (see Chomsky 1981) since (i) it is an argument of the predicate, and (ii) it is not referential.

Given this analysis of passivisation, an impersonal passive has to license the syntactic projection of the logical object (as external or internal argument depending on the passive construction) and the syntactic environment has to be compatible with the referentially deficient content of the cognate object. I have argued in particular that the quasi-existential semantics of null variants of the cognate object are only available if the cognate object is licensed in situ.

For German I have proposed that the surface subject *es*, 'it', in impersonal middles and the null surface subject in impersonal *werden*-passives have the same semantic properties:

they realise the abstract cognate object. The difference in surface realisation can be derived from the different syntactic properties of the syntactically transitive middle, where the nominative NP behaves as an underlying subject, and the unaccusative *werden*-passive.

Under the analysis proposed here, the subject of the impersonal *werden*-passive in German is not an empty expletive subject *pro* but a cognate object position that can be assigned nominative in situ due to the syntax of the German *werden*-passive. The null cognate object e_{cog} differs from subject *pro* in that it is not necessarily licensed by agreement but by the fact that an object position can be projected and syntactically licensed in a particular context.

Based on data from Spanish and other languages, I have argued that given an analysis of impersonal passivisation based on a cognate object the possibility of an impersonal variant for a passive construction need not be taken as an arbitrary parameter in the lexicon. The possibility of an impersonal variant can be linked to independent properties of the language such as the agreement properties of the construction, and the properties of the impersonal construction in a given language.

References

Åfarli, T.A. 1992. *The Syntax of Norwegian Passive Constructions*. Amsterdam: Benjamins.

Baker, Mark 1988. *Incorporation: a theory of grammatical function changing*. Chicago: Univ. of Chicago Press.

Baker, M., Johnson, K and Roberts, I. 1989. "Passive arguments raised". *Linguistic Inquiry* 20: 219-251.

Besten, H. den 1985 "The Ergative Hypothesis and Free Word Order". In Toman, J. (ed.) *Studies in German Grammar*, 23-64. Dordrecht: Foris.

Blevins, J. (2003) "Passives and impersonals". *Journal of Linguistics* 39: 473-520.

Cabredo Hofherr, P. 1999. "Two German impersonal passives and expletive pro", *Catalan Working Papers in Linguistics* 7: 47-57.

Cabredo Hofherr, P. 2000. *La passivation des intransitifs et le statut des explétifs*. PhD, Université Paris 7.

Cardinaletti, A. 1990. *Impersonal Constructions and Sentential Arguments in German*. Padova: Unipress.

Christensen, K. and Taraldsen, T. 1989. "Expletive chain formation and past participle agreement in Scandinavian dialects". In *Dialect Variation in the Theory of Grammar*, P. Benincà (ed), 53-83. Dordrecht: Foris.

Chomsky, N. 1981. *Lectures on Government and Binding*. Dordrecht: Foris.

Comrie, B. 1977. "In defense of spontaneous demotion: The impersonal passive". In *Grammatical Relations*, P. Cole and J.M. Sadock (eds.), 47-58. New York: Academic Press.

Contreras, H.. 1986. "Spanish bare NPs and the ECP". In *Generative studies in Spanish syntax,* ed. I. Bordelois, H. Contreras, and K. Zagona, 25-49. Dordrecht: Foris

Diesing, M. 1992. *Indefinites*. Cambridge, MA: MIT Press

Dobrovie-Sorin, C. 1986. "A propos du contraste entre le passif morphologique et *se* "moyen" dans les tours impersonnels". *Lingvisticæ Investigationes* X: 289-330.

Dobrovie-Sorin, C. 1994. *The Syntax of Romanian*. Berlin: Mouton de Gruyter.

Dobrovie-Sorin, C. 1998. "Impersonal *se* Constructions in Romance and the Passivization of Unergatives". *Linguistic Inquiry* 29: 399-439.

Grewendorf, G. 1989. *Ergativity in German*. Dordrecht: Foris.

Grewendorf, G. 1990. "Small pro in German". In *Scrambling and Barriers*, G. Grewendorf and W. Sternefeld (eds.), 295-315. Amsterdam: Benjamins.

Haider, H. 1990. "Null subjects and expletives in Romance and Germanic languages". In *Issues in Germanic Syntax*. W. Abraham et al., 49-66. Berlin: Mouton de Gruyter.

Haider, H. 1993. *Deutsche Syntax -- generativ*. Tübingen: Niemeyer.

Holmberg, A. and Platzack, C. 1995.*The role of inflection in Scandinavian syntax*. Oxford: Oxford University Press.

Jaeggli, O. 1986 "Passive". *Linguistic Inquiry* 17: 587-622.

Keenan, E. 1975 "Some universals of passive in Relational Grammar". *Papers from the eleventh regional meeting of the Chicago Linguistic Society*.

Lenerz, J. 1977. *Zur Abfolge nominaler Satzglieder im Deutschen*. Tübingen: Narr.

Levin, B. and Rappaport Hovav, M. (1995 *Unaccusativity*. Cambridge, MA: MIT Press.

Marantz, A. 1984. *On The Nature of Grammatical Relations*. Cambridge, MA: MIT Press.

Mittwoch, A. 1998 "Cognate objects as reflections of Davidsonian event arguments". In *Events and Grammar*, S. Rothstein (ed.), 309-332. Dordrecht: Kluwer.

Müller, G. 1998 *Incomplete Category Fronting: A Derivational Approach to Remnant Movement in German*. Dordrecht: Kluwer.

Perlmutter, D.M. 1978 "Impersonal Passives and the Unaccusativity Hypothesis". *Proceedings of the Fourth Annual Meeting of the Berkeley Linguistics Society*:157-189.

Perlmutter, D.M. and Postal, P.M. 1977 "Toward a universal characterization of passive" *Proceedings of the Third Annual Meeting of the Berkeley Linguistics Society* (reprinted in *Studies in Relational Grammar 1*, D. Perlmutter (ed.), 3-29. Chicago: Univ. of Chicago Press, 1983).

Perlmutter, D.M. and Postal, P.M. 1984 "The 1-Advancement Exclusiveness Law" In *Studies in Relational Grammar*. P. Postal and C. Rosen (eds.) Chicago: Univ of Chicago Press.

Postma, G.. 1994. "The indefinite reading of WH". In *Linguistics in the Netherlands 1994,* R. Bok-Bennema and C. Cremers, eds., 187-198. Amsterdam: John Benjamins.

Rizzi, L. 1986. "Null objects in Italian and the theory of *pro*". *Linguistic Inquiry*, 17: 501-557.

Sabel, J. 1999. "Das Passiv im Deutschen. Derivationale Ökonomie vs. optionale Bewegung." *Linguistische Berichte* 187: 87-112.

Steinbach, M. 2002. *Middle Voice: A comparative study in the syntax-semantics interface of German*. Amsterdam: Benjamins.

Sigur∂sson, H.Á. 1989. *Verbal syntax and case in Icelandic*. PhD dissertation, University of Iceland, Reykjavik.

Sigur∂sson, H.Á. 1990. "V1 declaratives and verb raising in Icelandic". In *Modern Icelandic Syntax*. J. Maling and A. Zaenen (eds). [Syntax and Semantics, Vol. 24], 41-69. San Diego: Academic Press.

Vikner, S. 1995. *Verb Movement and Expletive Subjects in the Germanic Languages*. Oxford University Press.

Endnotes

[1] Abbreviations in the glosses: NOM: nominative, DAT: dative, ACC: accusative, MSG: masculine singular, MPL: masculine plural, FSG: feminine singular, FPL: feminine plural, NTR: neuter, PP: past participle, PST: past, REFL: reflexive, DEF: definite determiner, EXPL: expletive, LOC: locative, PRON: pronominal, PL: plural, SG: singular, INF: infinitive.

[2] I will gloss the 3SG neuter pronoun es with ES; traditionally, *es* is considered an expletive. I will avoid the gloss EXPL, however, since according to the analysis developed below *es* is a quasi-argument, corresponding to an argument of the predicate, albeit a referentially deficient one.

[3] According to Cardinaletti (1990), the impersonal middle has a syntactically active agent while the personal middle does not. In Cardinaletti's analysis this is reflected by the fact that the impersonal middle syntactically licenses a null arbitrary agent while no such element is present in the personal middle.

[4] For a detailed argument that the nominative NP stays in the same position as the object of the transitive verb see section 4.1 below.

[5] The hypothesis of such a null cognate object that may be assigned nominative in situ also allows to account for the gaps in the distribution of the lexical expletive *es* with the impersonal *sein*-passive in German, a stative passive (see Cabredo Hofherr 1999).

[6] A null object in object position implies a further difference with the structure in pro-drop analysis in (22): the canonical subject position (spec IP in the structure given in (22)) is not filled. Since in German there is evidence indicating that nominative can be assigned to noun phrases that remain lower in the structure than the subject of a transitive verb, I assume that in German the canonical subject position is not necessarily filled.

[7] The following examples illustrated the fact that a composite verb form (here with the auxiliary haben 'have') improves extraction from an untensed clause:

(i) a. ? Was gehört zu beanstanden sich nicht?
         What befits (a person) to complain of not?
     b. Was hat zu beanstanden sich nicht gehört?
         What has to complain of not befitted (a person)?(Grewendorf's 1a./b.)

[8] I will remain neutral as to the exact analysis of the partial extraction constructions as movement or base-generated constructions (for detailed discussion of these constructions see Müller 1998). The arguments here use partial extraction exclusively as a test that exploits the fact that subjects and objects of transitive verbs pattern differently with respect to these constructions.

[9] When asked to compare sentences (51a) and (51b) the informants were evenly split: three preferred the first version, five preferred the second version and three found both sentences equally unacceptable. I take this as an indication that there is no principled difference in acceptability between the two sentences.

[10] Some German speakers find examples like (52b) marginal; even these speakers agree, however, that (52b) is clearly better than (52a).

[11] This may be related to the fact that definites generally occupy a higher position than the corresponding indefinites (Lenerz 1977): fronting a past participle with an indefinite accusative object therefore involves the movement of a smaller XP than the fronting of the participle with a definite accusative object.

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[12] The middle field of the German sentence is the part between the inflected verb to the left and base position of the participle to the right in independent propositions, and between the complementiser and the participle in subordinate clauses.

[13] Exceptions are some of the verbs with cognate objects such as *einen qualvollen Tod sterben* 'to die a gruesome death' and *einen Marathon laufen* 'run a marathon'.