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Structure and Morphosyntax of Czech, English and Spanish Nominal Projections

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Declaration of Originality

I herewith declare that the material contained in my dissertation entitled Structure and Morphosyntax of Czech, English and Spanish Nominal Projections is original work performed by me under the guidance and advice of my faculty supervisor. The literature and sources are all properly cited according to the Chicago Manual of Style 2017.

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Anotace

Disertační práce se zaměřuje na strukturu české, anglické a španělské nominální fráze a snaží se ukázat, že základní struktura těchto frází je společná všem třem jazykům. Tato podobnost vyplývá z přítomnosti stejných syntakticko-sémantických rysů a syntaktických pozic v těchto jazycích. Syntakticko-sémantické rysy mají obvykle tři hodnoty, což je zásadní teoretický předpoklad, který je potvrzen empirickými důkazy. U všech tří jazyků nalézáme velmi podobnou škálu funkčních modifikátorů podstatných jmen, které podléhají všeobecně platným principům. Tyto modifikátory jsou ve struktuře řazeny podle neměnné sekvence hodnot rysu Univerzality. Zdánlivě chaotické rozdíly v distribuci či souběžném výskytu těchto modifikátorů jsou způsobeny parametrickým nastavením některých pravidel, tj. nastavením specifickým pro jednotlivé jazyky. Za hlavu jmenných frází je považován rys Číslo, který je morfologicky reflektován jak v rámci nominální fráze, tak mimo ni. Společně s rysem Rod a v češtině i Pád se jedná o jeden z rysů, které jsou obvykle sdíleny podstatným jménem se všemi členy nominální fráze. Posledním typem rysů jsou rysy především sémantické, které jednotlivé modifikátory rozlišují jeden od druhého a určují mimo jiné, zda se mohou v jedné nominální frázi objevovat společně. Kromě systému funkčních modifikátorů jsou zavedeny pro všechny tři jazyky i tři pozice pro přídavná jména v rámci nominální fráze, které se odlišují svými morfo-syntaktickými vlastnostmi.

Annotation

This dissertation focuses on the structure of Czech, English and Spanish Extended Nominal Phrases and aims to show that there is an underlying structure common to all three languages. The similarities are derivable form the presence of the same syntactic-semantic features and syntactic positions in these languages. These features usually have three values which is an empirically confirmed hypothesis. All three languages offer a very similar range of functional modifiers within Extended Nominal Phrases, which are subject to the same universal principles. These modifiers are organized in a functional sequence of the values of a Universality feature. Seemingly contradictory distributions or co-occurrence of these modifiers are caused by parametric settings, i.e. language- specific settings. The Number feature is argued to be the head of the Extended Nominal Phrases as it is morphologically reflected both outside and inside the nominal domain. The head Noun usually overtly shares the Number feature value, as well as the Gender feature and in Czech the Case feature, with the other members of the Extended Nominal Phrases. The semantic features are the last type of features and they not only distinguish individual functional modifiers but also have an impact on their co-occurrence. In addition to the system of functional modifiers, this thesis provides three Adjectival positions within the Extended Nominal Phrases, which have different morphosyntactic characteristics and are universal for all three languages discussed.

Obsah

1. The comparable structure of Czech, English and Spanish Nominal Projections and determiner properties

If we stand back and make the familiar strange, the **cross-linguistically fully comparable array** of functional elements in Extended Nominal Projections (Extended NPs) of Czech, English and Spanish comes as a bit of surprise.

These elements are comparable despite many differences in the three languages, for illustration: the pro-drop parameter (active in Czech and Spanish but not in English); obligatory determiner (active in English and Spanish but not in Czech); or, regular synthetic adjectival grading (active in Czech and English but not in Spanish).

In this chapter I provide descriptions of the Extended Projections of Nominal Phrases in Czech, English and Spanish to get the reader familiar with the issues any linguist encounters when analyzing their NPs. The Extended Projections reflect the structural properties of different languages – whereas Czech is highly inflectional, English is a highly analytic language. As a consequence, **the same features** are **realized** in Czech highly inflected nominal phrases and English analytic phrases by **radically different constructions** (see e.g. Section (2.3.5) for the comparison of Case and Prepositional Phrases).

Spanish is an intermediate language type. Pre-theoretically, that means it employs a number of morphemes which are bound, but it also employs prepositional phrases where Czech uses Case, or it obligatorily employs articles which are not required in Czech.

The first example shows that whereas Czech and Spanish can use a diminutive suffix to express the meaning of *baby* (in bold), English uses a separate word, more specifically a nominal Adjective. **Czech**, as opposed to English and Spanish, **does not employ determiners obligatorily** (determiners are underlined in the examples).

1. a. (Cz) *(Ø) Opravdu krásná$_{A2}$ holč-**ička** hrdá$_{A3}$ na své šaty se zhlížela v (Ø) zrcadle.*[1]

    b. (En) *A really beautiful$_{A2}$ **baby** girl proud$_{A3}$ of her dress was looking at herself in the mirror.*

    c. (Sp) *Una niñ-**ita** realmente bonita$_{A2}$ orgullosa$_{A3}$ de su vestido se miraba en el espejo.*

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[1] If not indicated otherwise, the a and c variants of an example are my renderings of the English one. The glosses are provided only when necessary for clarity. The order of languages depends on the matter being discussed.

In (1), the Adjectives *beautiful* and *proud* (as well as their counterparts in Czech and Spanish) are subscripted to mark their position. In Chapter 5 I argue in detail that there are three cross-linguistically comparable Adjectival positions.

The absence of articles in Czech does not mean that Determiner positions are not available in the Czech Extended NP. Currently, there are two possible analyses of the Extended Projection above N, discussed especially for languages which do not employ Determiners obligatorily, i.e. Czech. They are the **Universal DP hypothesis** and **Parametrized DP hypothesis**. For convincing argumentation in favor of the Universal DP hypothesis accepted here, see Veselovská 2018, and for the opposite view for Slavic languages see Bošković 2008.

As a matter of fact, in spite of such surface distinctions, Czech, English and Spanish NPs have many properties in common. Several shared properties of these three languages are listed under the following points in (2).

2. Shared properties of Nominal Phrases in Czech, English and Spanish

   a.   The number of positions for Noun modifiers is limited and the ordered structure of the Extended Nominal Projection is D(eterminer)-Q(uantifier)-N(oun).

   b.   "Phi-features" of the Noun, namely Number and Gender, are shared by D and in some cases Q position.[2]

   c.   I claim in this thesis that these features regularly have three values.

   d.   Demonstratives exhibit spatial and/ or temporal deixis.

   e.   Each nominal domain can contain three Adjectival positions with differing properties.

   f.   Grammatical and extra-linguistic Genders often do not coincide.

For now, I define as a "determiner" any functional category modifier placed above the lexical projection NP of N in an "Extended Projection" of N. Jackendoff 1977 proposed two positions for such functional elements in English - SPEC(N´´) and SPEC(N´´´). These positions were identified with Quantifiers and Determiners respectively. Later,

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[2] Throughout this thesis I differentiate two kinds Number features. The phi-feature Number value is labeled as Q and it is reflected in Agreement with the N. The element-internal (or semantic) Number feature value is labeled Pl and differentiates e.g. possessives *my* (-Pl) and *our* (+Pl).

Abney (1987) labels the respective positions as SPEC(NP) and D^0 and thus adds one extra position into the Extended NP. I illustrate this development in (3).

3. Extended Nominal Projection according to Jackendoff 1977 in (a) and Abney 1987 in (b)

a. N‴
       SPEC(N″)   N″
       those
           SPEC(N′)   N′
           three   N
                  boys

b. DP
       SPEC(D) D′
       Mary
           D^0 NP
           's
             SPEC (N) N
             three *boys*
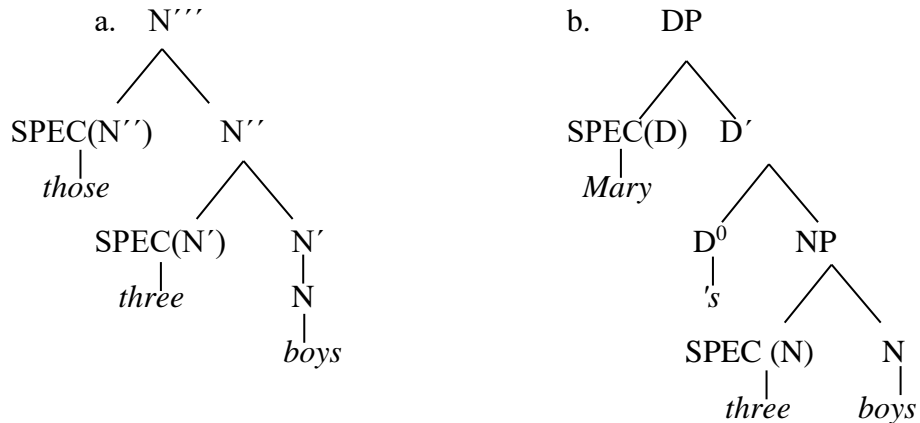
These positions are connected with specific features – the higher position D with definiteness and lower position SPEC(N) with quantification. For Abney, SPEC(D) is a position for phrasal possessives. I use this sequence for all three languages but later, following Emonds 2012, I adapt the labels to D-Q-NP where Abney´s D becomes SPEC(QP) and Abney´s SPEC(NP) becomes simply Q. The SPEC(D) position is preserved but its function differs from the one stated in Abney. Instead of a phrasal possessive, it is occupied by emphasizing Universal Quantifiers *all* and *both* (see Section (1.6.2)).

4. Preliminary structure of extended nominal projection

DP
  D   QP
     Q   N

    a. (Cz) *ti čtyři chlapci*
    b. (En) *the four boys*
    c. (Sp) *los cuatro chicos*
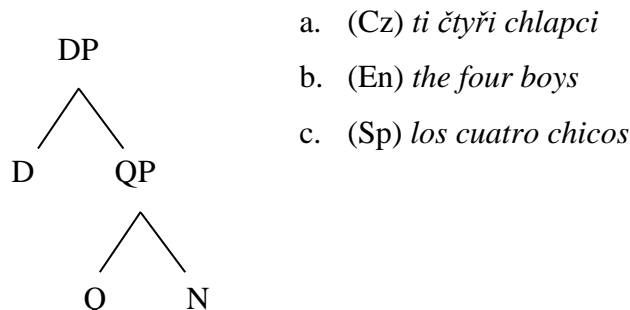
In all these models, the D and Q categories differ in their syntactic position, morphology and function in the Nominal Phrase. They are not always in one-to-one

cross-linguistic correspondence, and furthermore their semantic-syntactic characteristics differ as well. As phrases are assumed to have one head, **only D or Q** can accommodate **the head of the Extended Nominal Projection**. In spite of a lively discussion in the literature (Abney, 1987; Ritter, 1991; Veselovská, 2001; Brugé, Cardinaletti, Giusti and Munaro, 2012), there is no consensus about which of these two positions is definitely the head.

In Chapter 2 I argue that **head** can be expressed as the **Number feature** with **values ±Q and 0Q** as this feature is involved in selection and its Interpretable version is generated in the Extended NP, and the reader should keep this in mind through this first Chapter.

In Abney (1987: 64f), functional heads are claimed to have the following properties:

5. **General properties of functional heads**
    i. They constitute closed lexical classes.
    ii. They are generally phonologically and morphologically dependent.
    iii. They can be sisters of only one kind of category.
    iv. They are usually inseparable from their sister projection.
    v. They lack substantive content.

These characteristics are discussed for the three languages in respective Sections (1.1)-(1.5). The evidence presented in these sections sets the path to the conclusion that **Existential Quantifiers in Q position** are the best candidates for the **overtly expressed independent head feature Q** of the Extended Nominal Projection of all three languages.[3]

If the head of NP is Q feature and not D(efiniteness) feature in all three languages, then there are consequences for Principles of Universal Grammar.

1.1 Determiners and Quantifiers constitute closed lexical classes (Abney´s 5i)

There are a limited number of determiners in every language and new determiners are not created by adult language users, i.e. they constitute closed lexical classes. Below

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[3] See Section (2.6) for Czech bare Ns with their inflection as the overt expression of the head feature Q (and other phi features).

you can find determiners, which specifically combine with **singular Nouns** in Czech, English and Spanish.

6. Preliminary list of functional modifiers in masculine gender in the Extended Nominal Projections of singular nouns

Label	Czech	English	Spanish
weak definite	*ten/ Ø*	*the*	*el*
proximal definite	*tento*	*this*	*esto*
distal definite[4]	*tamten*	*that*	*aquel/ ese*
indefinite	*Ø*[5]	*a(n)*	*un*
single numeral	*jeden*	*one*	*uno*
distributive Universal Quantifier	*každý*	*every/ each*	*cada*

The fact that determiners constitute a closed class and the individual members of this class can be identified with their counterparts across all three languages indicates that they are a **morpho-syntactic realization of a cross-linguistically shared structure**.

The **Determiners** combined with a Noun **can be sorted by the Number feature** value of the modified noun and in extension the whole phrase; i.e. **+Q for plural Ns, -Q for singular Ns** and **0Q for mass Ns** as exemplified in (7), (8), (9) respectively and discussed in more detail below. You can see this with indefinite articles and even more clearly with the quantifier *many,* which is listed with its Czech and Spanish counterparts in the table (21).

7. a. (Cz)*[Mnoho$_{+Q}$ lidí]$_{PL}$ nemá auto.*
   b. (En) *[Many$_{+Q}$ people]$_{PL}$ don´t have a car.*
   c. (Sp) *[Muchas$_{+Q}$ personas]$_{PL}$ no tienen un coche.*

8. a. (Cz) *[Jeden$_{-Q}$člověk]$_{SG}$ nestačí.*
   b. (En) *[One$_{-Q}$ person]$_{SG}$ is not enough.*
   c. (Sp) *[Una$_{-Q}$ persona]$_{SG}$ no basta.*

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[4] These labels for demonstratives in Czech and Spanish are used e.g. in Dušková 2009 or *Real Academia Española* 2009.
[5] The absence of independent indefinite article is discussed in Section (2.6).

9. a. (Cz) *Nepije [moc$_{0Q}$ vody]$_{MASS}$.*

   b. (En) *He doesn´t drink [much$_{0Q}$ water]$_{MASS}$.*

   c. (Sp) *No bebe [mucha$_{0Q}$ agua]$_{MASS}$.*

Several determiners listed below combine with Ns independently of their Number feature, i.e. they always obligatorily Agree with the lexical Noun they modify. I discuss the process of Agreement in Chapter 4 and I consider this obligatory presence of Number in all determiners a supporting argument for the hypothesis of **the Q feature being the head of the Extended NP**.

The first line of the next table features only *my* and its counterparts in Czech and Spanish as the representatives of the group of the possessive pronouns. All the forms and their counterparts are discussed in Chapter 3 where I treat possessives, as well as the Germanic genitive with respect to their position in the structure and their morpho-syntactic properties.

10. Preliminary list of functional modifiers in extended nominal projection independent on the Number feature

Label	Czech	English	Spanish
possessives	*můj, ...*	*my, ...*	*mi, ...*
indefinite Qs	*nějaký*	*some*	*algún*
	jakýkoli	*any*	*cualquier*
	žádný	*no*	*ningún*
interrogative distributive	*který*	*which*	*cual*
interrogative qualitative	*jaký*	*what*	*qué*
qualitative	*takový*	*such*	*tal*

The elements in Table (10) can combine with any value Q of the Number phi-feature. Phi-features of the N are overtly reflected in their inflection only in Czech and Spanish, as illustrated in (11) - (13). Notice that the agreement with Mass Nouns is singular both in Czech and Spanish. That is, only +Q and not 0Q has overt morphology.

11. a. (Cz) *[Můj syn]~SG~.pečehousky.*

   b. (En) *[My son]~SG.~ bakes buns.*

   c. (Sp) *[Mi hijo]~SG.~ hornea bollos.*

12. a. (Cz) *[Moji synové]~PL~.pečou housky.*

   b. (En) *[My sons]~PL.~ bake buns.*

   c. (Sp) *[Mis hijos]~PL.~ hornean bollos.*

13. a. (Cz) *[Moje voda]~MASS.~ je teplá.*

   b. (En) *[My water]~MASS.~ is warm.*

   c. (Sp) *[Mi agua]~MASS.~ está caliente.*

The **feature value** in generative grammar is a notion coming from Chomsky and Halle (1968) used for the phonetic description of sounds in English. Since then, features have been used to describe also morpho-syntactic properties of words, and there are a number of analyses which use features in slightly modified ways (e.g. Pesetsky and Torrego, 2007 which is used in this thesis). The features used here have **three values**, e.g. ±Q and 0Q.[6] I justify in more generality this three-way distinction in Section (2.1).

As suggested and illustrated just above, the three values of the Number feature are +Q for Nouns in the plural, -Q for the Nouns in the singular or 0Q for the mass Nouns. These three groups of Nouns combine with different determiners, **semantically though not always morpho-syntactically related,** which agree with their Number feature value which you can compare in (14) and (15) below.

14. a. (Cz) *[Tento~-Q~/ *Tito~+Q~ kluk~-Q~]~SG~ má psa.*

   b. (En) *[This~-Q~ / *These~+Q~ boy~-Q~]~SG~ has a dog.*

   c. (Sp) *[Este~-Q~ / *Estos~+Q~ chico~-Q~]~SG~ tiene un perro.*

15. a. (Cz) *[Tito~+Q~ / *Tento~-Q~ chlapci~+Q~]~PL~ mají psi.*

   b. (En) *[These~+Q~ / *This~-Q~ boys~+Q~]~PL~ have dogs.*

   c. (Sp) *[Estos~+Q~ / *Este~-Q~ chicos~+Q~]~PL~ tienen perros.*

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[6] For *every,* an additional option of feature-impoverishment is involved. See Chapter 6.

The difference between the two examples lies in morpho-syntax, i.e. the Number feature, otherwise they are semantically identical.[7] Though different feature values widen the range of determiners, the determiner class is still closed and therefore complies with the general properties of functional heads as described in Abney (1987: 64f) in all three languages.

1.2 Determiners and Quantifiers are phonologically and morphologically dependent (Abney 5ii)

The phonological and morphological dependency of determiners on Nouns manifests itself in different ways, the most general being the **placement of stress** on the modified **N,** but not on the non-contrastive functional elements in the Extended Projection, as proposed and discussed in detail by Selkirk 1984. This is a general property in Czech, English and Spanish.

The grammatical Gender is not always parallel to semantic gender of the Noun. The morphological form of determiners is not co-incidental, but within the boundaries of an Extended NP, it always reflects the grammatical Gender of the N. In other words, their morphological form of Q and D is dependent on the N they modify, as in (16) and (17). Outside of the Extended NP a pronoun replacing the NP can reflect either the grammatical Gender or the semantic gender of the N they share extralinguistic reference with.

16. a. (Cz) [*To děvče$_{0G}$*]NEUTR *je milé.* [*Ono$_{0G}$*]NEUTR/ [*Ona$_{-G}$*] *je tu nové/á.*
    b. (En) [*The girl$_{-G}$*]FEM *is nice.* [*She$_{-G}$*]FEM *is new here.*
    c. (Sp) [*La chica$_{-G}$*]FEM *es agradable.* [*Ella$_{-G}$*]FEM *es nueva aquí.*
    d. (Cz) *[*Ta děvče*]NEUTR *je milé.* [*Ona$_{-G}$*]FEM *je tu nová.*
17. a. (Cz) [*Ten stůl$_{+G}$*]MASC *je nový. Umyj* [*ho$_{+G}$*]MASC/ [*to$_{0G}$*]NEUTR.
    b. (En) [*The table$_{0G}$*]NEUTR *is new. Wash* [*it$_{0G}$*]NEUTR/ [*him$_{+G}$*]MASC.
    c. (Sp) [*La mesa$_{-G}$*]FEM *es nueva. Láva*[*la$_{-G}$*]FEM/ [*lo$_{+G}$*]MASC.
    d. (Sp) *[*El mesa$_{-G}$*]FEM *es nueva. Láva*[*la$_{-G}$*]FEM.

The bracketed NPs refer to the same extra-linguistic entity, but their grammatical Gender can change cross-linguistically, as in (16a), or does not coincide with extra-

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[7] As to the determiner-noun relation, the grammatical and referential number may not always coincide as *more than one dog* refers to a plural.

linguistic gender, as in (17), where the extra-linguistic gender is simply non-existent. The Gender feature thus exemplifies the morpho-syntactic dependence of functional modifiers on N rather clearly in the languages where it is overt.

As emphasized in the Introduction of the present Chapter, the form of determiners is cross-linguistically directly dependent on the Noun, i.e. any phi-features of a Noun (though the features themselves do not have to be generated directly on the N, as discussed in Chapter 4) are shared by some elements in the Extended Projection, usually Adjectives, and their functional heads. This is illustrated in (18) - (20).

18. a. (Cz) *[Tato$_{-Q+G}$ /*Tito$_{+Q+G}$ holčička$_{-Q-G}$]*SG.FEM. *má modré oči.*

　　b. (En) *[This$_{-Q+G}$/*These$_{+Q+G}$ girl$_{-Q-G}$]*SG.FEM. *has blue eyes.*

　　c. (Sp) *[Esta$_{-Q+G}$ /*Estas$_{+Q+G}$ chica$_{-Q-G}$]*SG.FEM. *tiene ojos azules.*

19. a. (Cz) *[Tito$_{+Q+G}$ /*Tento$_{-Q+G}$ chlapci$_{+Q+G}$]*PL.MASC. *mají zelené oči.*

　　b. (En) *[These$_{+Q+G}$ /*This$_{-Q+G}$ boys$_{+Q+G}$]*PL.MASC. *have green eyes.*

　　c. (Sp) *[Estos$_{+Q+G}$ /*Este$_{-Q+G}$ chicos$_{+Q+G}$]*PL.MASC. *tienen ojos verdes.*

20. a. (Cz) *[Vysocí$_{+Q+G}$ /*Vysoká$_{-Q+G}$ chlapci$_{+Q+G}$]*PL.MASC. *mají zelené kalhoty.*

　　b. (En) *[Tall$_{+Q+G}$ boys$_{+Q+G}$]*PL.MASC. *have green pants.*

　　c. (Sp) *[Altos$_{+Q+G}$ /*Alta$_{-Q+G}$ chicos$_{+Q+G}$]*PL.MASC. *tienen pantalones verdes.*

In the examples above we can see that Czech and Spanish determiners and Adjectives directly reflect the Number and Gender of modified Ns. On the other hand, English, as a more analytic language, does not employ agreeing inflection in most constructions. However, as noted in the previous Section (1.1) some determiners modify only Ns with a certain value of the Number feature, which is the case of the demonstratives used in the examples (18) and (19). They do not show inflectional agreement, but they have different forms while carrying very similar, if not the same meaning.[8]

In other words, if we classify plural and singular forms of Nouns as one Noun, e.g. *cat - cats*, then the same might be applied to determiners, i.e. the value of the Number feature influences the form of determiners. Comparison with Ns offers an interesting insight. Just like with the class of Ns, there are determiners which appear to have both singular and plural forms (e.g. English *this* and *these* or Czech *tento* and *tito,*

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[8] In any case, this does not mean that the nominal phi features are not present in the Extended NP structure of English (which is reflected also in some Adjectives that only appear with Ns in feminine or masculine Gender; e.g. *handsome* or *beautiful*).

Spanish *este* and *estos*) or forms which appear only with plural or singular Nouns (e.g. English *both* or Czech *oba,* Spanish *ambos*). And indeed, these items are **comparable featurally**, but they exhibit different behavior. However, this should not be surprising.

If we consider independent functional elements in a V(erb) P(hrase), e.g. modals or auxiliary verbs, they exhibit behavior similar, but not identical, to the lexical Verbs. Therefore, there is no reason to expect that determiners will exhibit behavior identical to lexical Ns as they are functional elements as well.

As I have listed only determiners which appear with singular Nouns or independently on the Number feature in (6) and (10) respectively, I supply two additional tables listing the determiners which occur with **plural Nouns** (21) and **mass Nouns** (22).[9]

21. Preliminary list of functional modifiers in extended nominal projections of plural Nouns

Label	Czech	English	Spanish
universal	*všechny*	*all*	*todos*
dual universal	*oba*	*both*	*ambos*
existential	*několik*	*several*	*varios*
existential	*málo*	*few*	*pocos*
existential	*mnoho*	*many*	*muchos*
existential	*pár*	*a few*	*un par de*
proximal demonstrative	*tito*	*these*	*estos*
distal demonstrative	*tamti*	*those*	*aquellos*

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[9] Bale and Barner (2009) argue that there is no such category as mass nouns. In their approach the mass nouns are underspecified for the countability feature. I discuss this hypothesis as well as contrasting hypotheses of Chierchia (1998) and Borer (2005) in Section (2.3.2).

22. Preliminary list of functional modifiers in extended nominal projections of mass Nouns

Label	Czech	English	Spanish
uncountable existential	*trochu*	*a little*	*un poco*
uncountable existential	*málo*	*little*	*poco*

The four tables presented so far in (6), (10), (21) and (22) provide a cross-linguistic overview of functional modifiers treated here and will be used and modified throughout the thesis as individual determiners get discussed in more detail.

Finally, the morpho-phonological dependency of determiners can be reflected in their pronunciation where special combinations are salient, especially in English (23) and Spanish (24).

23. a. (Cz) *Dala bych si jablko/ banán.*
    b. (En) I would like **an a**pple/ **a b**anana.
    c. (Sp) *Me gustaría una manzana/ un plátano.*
24. a. (Cz) *Dám si skleničku studené vody.*
    b. (En) I will have a glass of cold water.
    c. (Sp) *Tomaré un vaso **del a**gua frí**a**.*

The English indefinite article reflects the phonological form of the modified N (or the following word) - if the latter´s first sound belongs to the vowel group, the indefinite article surfaces as *an* as illustrated in (23). Another example can be found in Spanish, where feminine Ns beginning with the "*a*" sound and stressed on the first syllable take the masculine definite article *el* as illustrated in (24). The feminine agreement of *fría* shows that the masculine definite article is used for phonological reasons only, and therefore indirectly supports the claim that **determiners are phonologically and morphologically dependent**.[10]

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[10] For analyses of this phenomenon which is not in the focus of this thesis, see e.g. Zwicky 1985; Eddington and Hualde 2008 and *Real Academia Española* 2009.

1.3 Determiners and Quantifiers can be sisters only of one kind of category (Abney´s 5iii)

When discussing functional elements in the Extended Nominal Projection, it need not be stipulated separately that they modify an N. On the other hand, the category which is a sister to determiners requires a further discussion and a more refined division of determiners. So far, I worked with a schematic model of D-Q-N structure in (4), which is repeated here as (25).

25. Preliminary structure of extended nominal projection

   a. *(Cz) ti čtyři chlapci*
   b. *(En) the four boys*
   c. *(Sp) los cuatro chicos*
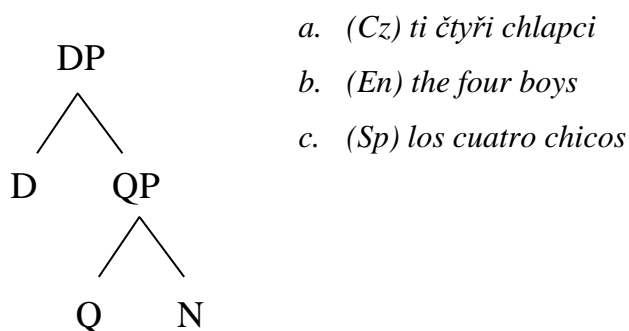
These structural positions are occupied by the elements listed in tables (6), (10), (21), (22). More complex classifications of these elements can be found e.g. in:

- *Grammar of Czech language* (1986), Rusínová, Karlík and Nekula (2012), Štícha (2013) for Czech;
- Leech and Svartvik (1975), Jackendoff (1977), Huddleston (1984), Greenbaum and Quirk (1990), Swan (1996), Haegeman (1997), Giusti and Cardinaletti (1992, 2006) for English; and
- Trujillo (1987), Sarmiento (1993), Juliá (2006, 2007), *Real Academia Española* (2009), Zavadil and Čermák (2008, 2010), Leonetti (2013) for Spanish.

These works and many others, to some extent successfully, describe the linear sequences and characteristics of elements in Extended Nominal Projections, but none of them provides either a systematic or a cross-linguistic analysis, or theoretical perspective, or fully specifies these modification systems in Czech, English and Spanish.

In the determiner classification used here, I use several features to define their contents and, as a matter of fact, positions in the structure. Each element and its characteristics will be further discussed in Chapters 2 and 3, from different points of view in the sections indicated in the table (26).

26. Features used to classify Determiners and Quantifiers [11]

Determiners	Quantifiers
Number (2.3.1)	
Universality (2.4 and 2.5)	
Definiteness (3.1)	Dual (3.4)
Demonstrative (3.2)	Polarity (3.5)
Person and Possessive (3.3)	Expectative (3.7)
Quality and Distributivity (3.6)	

In the next list (27) I provide the so far listed **English** Extended NP elements divided into two groups - Determiners and Quantifiers. This division is based on their position in the structure as well as their semantic content expressed by the features above. Both matters are discussed in detail in the following chapters and in the literature cited throughout this thesis. Significantly, their counterparts in **Czech** and **Spanish fall into the same groups**. It is an important cross-linguistic theoretical property that the **basic categories of Extended NPs are the same cross-linguistically.**

27. Basic division of elements in the extended nominal projection

Determiners	*the, this, these, that, those, which, what, a, such,* possessives
Quantifiers	numerals*, many, much, few, a few, little, a little, several, some, any, no, all, every, each, both*

Whereas Ds define the reference of the N in a universe of discourse, Qs state the quantity of the referents described by the Noun being referred to in that universe. Supposing that the two groups are based on different structural positions, and that all are

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[11] Notice that Gender is not present in the table as it is a defining feature for Nouns though it is reflected in some of the elements of the Extended NP through Agreement.

heads of phrases, Qs are sisters to NPs and Ds are sisters to QPs as suggested by Abney 1987, Giusti 1997 and many others. I illustrate this for the three languages in (28) and (29).

28. a. (Cz) *[kteří [tři [vysocí chlapci]$_{NP}$]$_{QP}$]$_{DP}$*
    b. (En) *[which [three [tall boys]$_{NP}$]$_{QP}$]$_{DP}$*
    c. (Sp) *[cuales [tres [chicos altos]$_{NP}$]$_{QP}$]$_{DP}$*
29. a. (Cz) *[těch [několik [děvčat]$_{NP}$]$_{QP}$]$_{DP}$*
    b. (En) *[the [several [girls]$_{NP}$]$_{QP}$]$_{DP}$*
    c. (Sp) *[las [varias [chicas]$_{NP}$]$_{QP}$]$_{DP}$*

The next examples (30) and (31) show that in all three languages it is ungrammatical to place DP as the sister of Q.[12]

30. a. (Cz) *[tři [kteří vysocí chlapci]$_{DP}$]$_{QP}$*
    b. (En) *[three [which tall boys]$_{DP}$]$_{QP}$*
    c. (Sp) *[tres [cuales chicos altos]$_{DP}$]$_{QP}$*
31. a. (Cz) *[několik [těch vysokých chlapců]$_{DP}$]$_{QP}$*
    b. (En) *[few [the tall boys]$_{DP}$]$_{QP}$*
    c. (Sp) *[par de [los chicos altos]$_{DP}$]$_{QP}$*

It is also ungrammatical to use an NP which does not have the correct Number feature value, i.e. which is not in an appropriate QP a sister to D, as illustrated in (32).

32. a. (Cz) *[tito$_{+Q}$ [chlapec$_{-Q}$]$_{NP}$]$_{DP}$*
    b. (En) *[these$_{+Q}$ [boy$_{-Q}$]$_{NP}$]$_{DP}$*
    c. (Sp) *[estos$_{+Q}$ [chico$_{-Q}$]$_{NP}$]$_{DP}$*

Though now I assume the structure in (25), I will argue in the next Section (1.4) that it is only partly correct for at least two reasons. First, the Q category needs to be further divided into Existential and Universal Quantifiers. Second, these two subgroups do not

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[12] (31a) is attested in Czech. However as discussed in Section (1.6), the structure of this phrase goes beyond a simple Nominal Phrase, and both heads have different reference, akin to the complex *three of which tall boys* in English.

always share the same position, which is reflected in their sometimes sharply different morpho-syntactic behavior across the three languages.

1.4 Determiners and Quantifier heads are inseparable from their phrasal sister projections (Abney´s 5iv)

Abney (1987:64f) lists this property together with the others in (5); however, he does not discuss it any further. The inseparability can be read either as a "stand-alone" property, which is discussed here, or, as separation by other embedded phrases. When a structure is divided into two parts by another embedded phrase, a number of phenomena need to be accounted for, e.g. to which part of NP is the structure embedded, how is it connected (by what features), how is the continuity of the original NP kept. Since a cross-linguistic comparison of the NP structure is enough for more than one thesis, I leave this to further research.

In the previous Section (1.3) I simplified a little and stated that the sister to D is QP and the sister to Q is NP. The two categories, the simple division into Ds and Qs, are not able to account for all the behavior of determiners in all three languages and furthermore since Abney 1987, there are three structural positions for all the noun-modifying elements.

Leech and Svartvik 1975, Huddleston 1984 and Greenbaum and Quirk 1990 all use **a three-slot system** which is based on and in part accurately describes the various sequences of English nominal modifiers. These are thus divided into pre-determiners, central determiners (here these latter correspond to Ds) and post-determiners. I will use this three-slot system to sub-divide Quantifiers into Universal Quantifiers (henceforth UQs) and Existential Quantifiers (EQs) for all three languages. This further classification of elements is a generalization and extension of analysis of Czech functional elements developed by Veselovská 2001, who gives a detailed account of the system of Czech Extended NPs.

According to Veselovská, low numerals *2, 3* and *4* in Czech are syntactically Universal Quantifiers, even though semantically, they are existential Quantifiers. I reflect this view in classification in (33), but I keep the numerals in UQ parenthesized.

33. Elements of Extended NPs divided into Universal Quantifiers, Determiners and Existential Quantifiers

Universal Quantifiers	*all, every, each, both* (+ the numerals 2, 3, 4)
Determiners	*the, this, these, that, those, which, what, a,* possessives*, such*
Existential Quantifiers	numerals (higher than 4)*, many, much, some, any, no, few, a few, little, a little, one*

The groups listed top-to-bottom appear in a left-to-right linear order in structures, and I will discuss their properties in detail in appropriate sections. As in the previous table which presents a division of determiners into two groups in (27), I only list English elements since their **Czech and Spanish counterparts, again significantly from a Universal Grammar perspective, fall into the same groups**. As illustrated below in (34) and (35), the order of these elements is fixed in the same way in all three languages.

34. a. (Cz) *Všech$_{UQ}$ těch$_D$ pět$_{EQ}$ chlapců chodilo o holi.*
    b. (En) *All$_{UQ}$ those$_D$ five$_{EQ}$ boys walked with a stick.*
    c. (Sp) *Todos$_{UQ}$ los$_D$ cinco$_{EQ}$ chicos caminó con un bastón.*
35. a. (Cz) **Všech$_{UQ}$ pět$_{EQ}$ těch$_D$ chlapců chodilo o holi.*
    b. (En) **All$_{UQ}$ five$_{EQ}$ those$_D$ boys walked with a stick.*
    c. (Sp) **Todos$_{UQ}$ cinco$_{EQ}$ los$_D$ chicos caminó con un bastón.*

Each of the classes listed in Table (33) appears in one syntactic position and exhibits distinct semantic and syntactic characteristics. The structure of Extended NP is then as follows in (36):[13]

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[13] The labels SPEC(DP), D^0 and SPEC(NP) and UQ, D and EQ refer to the same respective positions and they indicate whether I focus on purely syntactic, in the case of the former ones, or semantic aspect, in the case of the latter ones, of the position in question.

36. Revised semantic and syntactic structure of Extended NPs in Czech, English and Spanish

```
                          DP¹⁴
                        /      \
              SPEC(DP): UQ      DP
                              /     \
                          D⁰: D      QP
                                   /     \
                          SPEC(NP): EQ    NP
```
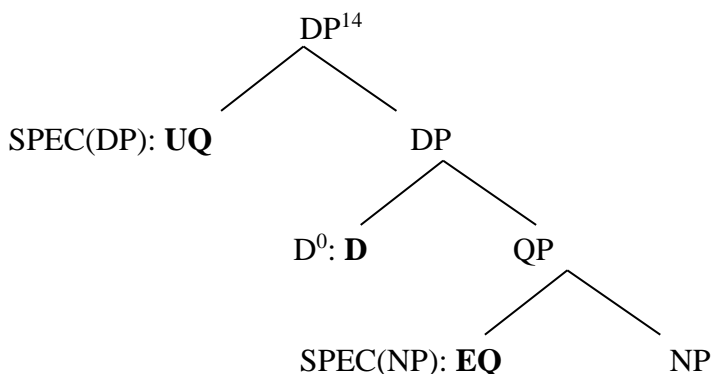
It should be noted that the stand-alone property is not attributable to one of the three positions. All three positions, i.e. UQ, D and EQ, in all three languages accommodate elements which cannot stand alone, as well as several which can. The stand-alone property seems to be distributed rather unsystematically, as illustrated in (37) – (42).

37. a. (Cz) *Vidím [ten_D *(zámek)].*

    b. (En) *I see [the_D *(lock)].*

    c. (Sp) *Veo [la_D *(cerradura)].*

38. a. (Cz) *Mám chuť na nějaké jablko. Dej mi [toto_D (jablko)], prosím.*

    b. (En) **I am hungry for an apple. Give me [this_D *(apple)], please.*

    c. (Sp) *Comería algunas manzanas. Da me [esta_D (manzana)], por favor.*

39. a. (Cz) *Chtěla bych nějaká jablka. Dejte mi [tato_D (jablka)], prosím.*

    b. (En) *I would like some apples. Give me [these_D (apples)], please.*

    c. (Sp) *Quería algunas manzanas. Da me [estas_D (manzanas)], por favor.*

40. a. (Cz)*Mám ráda psy, protože [každý_UQ (pes)] má ocas.*

    b. (En) *I like dogs because [every_UQ *(dog)] has a tail.*

    c. (Sp) *Me gustan los perros porque [cada_UQ (perro)] tiene una cola.*

41. a. (Cz) *[Nějací_EQ (muži)] jedli tady.*

    b. (En) *[Some_EQ (men)] ate here.*

    c. (Sp) *[Algunos_EQ (hombres)] comieron aquí.*

---

[14] The labeling of the maximal projection is tentative.

42. a. (Cz) *[Nějaký_{EQ} (muž)] jedl tady.*

    b. (En) *[Some_{EQ} *(man)] ate here.*

    c. (Sp) *[Algún_{EQ} *(hombre)] comió aquí.*

In light of this illustration, I next discuss the nature of the system which is based on the value of Q feature. Since the discussion operates with the Number feature, there is a need to recall two types of the Number feature of the Nominal Phrase.

As noted in previous Sections (1.1) and (1.2) there are determiners which only modify Ns with a specific value of the Number feature. They were listed in tables (6), (21) and (22)[15]. These groups are present in all three languages and the **value of their Number feature is intrinsic** to these determiners, i.e. the determiners combine only with the "right value". Thus intrinsically **"±Pl" elements look for ±Q Nouns** respectively. Some of these determiners could be seen as **allomorphs** of one element. On the other hand, a different group of determiners combines with Ns independently of the value of their Number feature, i.e. **their number value ±Pl is not morpho-syntactically relevant but it adapts to the Q value on N**. This second group is listed in table (10) and reflects the value of the Number feature on the N in Czech and Spanish.

In the previous subsections, I have discussed possible parallels between Ns and Determiners. A closer look reveals that as opposed to the singular and plural form of Nouns, the English demonstratives *this* and *these* do not exhibit the same properties as to their morpho-syntactic behavior. English *this* referring to a linguistic antecedent cannot stand by itself and requires the support of *one* but *these* can, as illustrated in (38) and (39).

As a matter of fact, to my knowledge it has not been noticed that all the other **English Ds and Qs** referring to a specific set[16] (both UQs and EQs) actually follow the same pattern – whereas **in the singular** they **cannot stand without an N or *one*-support, in the plural they can stand alone**.

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[15]As discussed in Chapter 3, with demonstratives which are listed among these elements the situation is a bit more complicated. However, this is not relevant for the present discussion.

[16] See Section (3.5) for a discussion of *no* and *any* which do not fit into this group.

43. a. (Cz) *Mají červenou a modrou sukni a vezmu si **obě**.*

    b. (En) *They have a red and a blue skirt and I will take **both**.*

    c. (Sp) *Tienen una falda roja y azul y tomaré **ambas**.*

44. a. (Cz) *Chlapci jsou připraveni. **Jeden** už je tady.*

    b. (En) *The boys are ready. ***Some** is already here.*

    c. (Sp) *Los chicos están listos. ***Algún** ya está aquí.*

45. a. (Cz) *Chlapci jsou připraveni. **Někteří** už jsou tady.*

    b. (En*) The boys are ready. **Some** are already here.*

    c. (Sp) *Los chicos están listos. **Algunos** ya están aquí.*

On the other hand, some (but not all) Czech and Spanish Ds and Qs can stand alone independently of Number, i.e. whether they are singular or plural. If the division of determiners into UQs, Ds and EQs cannot account for the variation of stand-alone property in Czech and Spanish phrase, then what else must be taken into account?

If we compare English NPs to Czech and Spanish NPs, the most salient differences are the **phi-features** which are **overtly reflected in Czech and Spanish** Extended NPs but not in English Extended NPs, i.e. Gender, Number (with values "±Q" and "0Q") and in Czech Case. This morpho-phonological difference **influences the determiners ability to stand alone**. The nominal features overtly present on functional elements seem to provide enough content for ellipsis, at least in some cases (Lobeck 1995).

Therefore, we find quite a regular pattern of the stand-alone property in English, as a language which does not show agreement with phi features in Extended NPs, and, on the other hand, an apparently missing possibility in Czech which has rich agreement patterns. I summarize this rule in (46).

46. Inflectionless languages limit of stand-alone property

    In a language X with zero concord inside the nominal domain, grammatically singular Extended NP elements E cannot stand alone.

To sum up, the separation of functional heads in Czech, English and Spanish is thus a result of a combination of two factors. First, the value of the inherent Number feature in

the functional elements; and second, the presence or absence of an overt concord within the nominal domain of the discussed languages.

1.5 Determiners and Quantifiers lack substantive content (Abney´s 5v)

The semantic content of Extended NP elements is connected with the functional features they contain (for an overview see table (79) and for a discussion see Chapter 3) but also with their structural positions, which were introduced in the previous Section (1.4). Both Determiners and Quantifiers define the reference of the Noun, but it cannot be said that these grammatical items have any substantive content in Czech, English or Spanish. Therefore, as opposed to Ns, they can be combined in one Nominal Phrase, as shown in some examples above and here in (47) and (48).

47. a. (Cz) *Všichni ti chlapci pijí vodu.*
    b. (En) *All those boys drink water.*
    c. (Sp) *Todos los chicos beben agua.*
48. a. (Cz) **Kočky psi pijí vodu.*
    b. (En) **Cats dogs drink water.*
    c. (Sp) **Gatos perros beben agua.*

However, the following tables show that the combinations are in the majority not of two Ds or two Qs as pointed out already by Jackendoff for English (1977: Chapter 5).[17]

In all the tables illustrating the co-occurrence of elements in the Extended NP, which can be found in (49), (53), (56) and (61), the leftmost column lists the first element in the surface order. The upper row lists the second element in the surface order. The repetition of the same element is excluded by logic and therefore marked in black. The impossibility or ungrammaticality of co-occurrence in any of the three languages is marked in grey.

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[17] I do not take into account the combinations of three elements, e.g. *all the many* where UQs and EQs co-occur for reasons explained in Section (1.6).

49. Possible co-occurrence of Determiners in Czech (C), English (E) and Spanish (S)

	the	*this*	*that*	*these*	*those*	*a/an*	*my, ...*	*which*	*what*	*such*
the							C			
this							C			
that							C			
these							C			
those							C			
a/an										
my, ...										
which	C	C	C	C	C		C			
what	C	C	C	C	C	E	C			
such	C					E				

The co-occurrence of two Determiners in Czech is possible only in the case of possessives, interrogatives and qualitatives in specific and limited contexts, some of which are illustrated in (50).

50. a. (Cz) *Ten tvůj pes nikdy nespí.*

    the your dog never sleeps

    'The dog of yours never sleeps.'

  b. (Cz) *Kterou tu skleničku ti mám podat?*

    which the glass you should hand

    'Which of the glasses should I hand to you?'

  c. (Cz) *Hledám takový svůj deníček.*

    look for such my diary

    'I am looking for such a diary of mine.'

English allows only the combinations *what a* and *such a* as illustrated in (51).

51. a. (En) *Such a clever young man shouldn´t work in a factory.*

   b. (En) *Is this for me? What a beautiful pencil!*

   c. (En) **Which a jumper will you buy?*

Spanish does not allow any co-occurrence between determiners.[18] The above listed exceptions as well as those which are listed below in (53) are properly analyzed and described in Sections (1.6) and (1.7) under appropriate headings, but it is already possible to state a general principle concerning all co-occurrence cases within one Extended NP:

52. **Single reference of Extended NP**

   Each Extended NP tolerates only one functional head with referential content.

In other words, if there is a co-occurrence within one Extended NP, only one of the functional words will be a head directly referring to the extra-linguistic object while the other will refine its reference.

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[18] *Real Academia Española* (2009: 1360) states it is only a coincidence that the possessives are in complementary distribution with determiners and quantifiers. I disagree with this analysis though. Whereas present day Spanish does not allow this co-occurrence, it was possible in the history of Spanish. Maré (2009: 91) notes that this is a separation of expression of definiteness and possession.

   1. *aquella su navegación*   (Medieval Spanish)
      that   his navigation
      'that navigation of his'
            (Diario Colón; *Real Academia Española*; 2009: 1346)

53. Possible co-occurrence of Quantifiers in Czech (C), English (E) and Spanish (S)

	one	every	each	some	any	no	all	both	several	(a) few	much	(a) little	numeral
one	■												
every	C	■											C, E, S
each			■										C, E, S
some				■									C, E, S
any					■								C, E, S
no						■							C, E, S
all							■						C, E, S
both								■					C, E, S[19]
several									■				
(a) few										■			
much											■		
a little												■	
numeral													■

The co-occurrence of Quantifiers is possible in all three languages but it is limited to numerals, as illustrated in (54) and (55).

54. a. (Cz) *Všechny tři týdny byly skvělé.*
    b. (En) *All three weeks were great.*
    c. (Sp) *Todas tres semanas fueron perfectas.*
55. a. (Cz)*Nějaké několik týdnů pršelo.*
    b. (En) *Some several weeks rained.*
    c. (Sp) *Algunas varias semanas llovía.*

The general ungrammaticality of co-occurrence in these groups illustrated by the tables (49) and (53) above led Jackendoff 1977 to assume two structural positions D and Q for English (which he labeled differently) as already suggested above. This thesis puts emphasis on the cross-linguistic generality of such co-occurrence and thus **cross-**

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[19] Only with the numeral 2.

linguistic existence of same Extended NP positions in Czech, English and Spanish. Having illustrated the **lack of co-occurrence of** elements generated in **the same position** I turn to co-occurrence of two elements which are placed in different positions.

The tables (56) and (61) illustrate the difference between singular and plural context. Both contain six D elements and six Q elements which can appear in singular and plural respectively. Whereas in a **plural context** (61), **we can see co-occurrence** in all three languages, the Ds and Qs **in a singular context** (56) **do not co-occur** in English and Spanish NPs with the exception of **possessives** with *each* and *every* in English and *cada* 'which' in Spanish. These are discussed in Section (1.6), as well as the interrogative *který* 'which' and its co-occurrence with Ds. **This is a striking difference.**

56. Possible combinations in the Extended NP in Czech (C), English (E) and Spanish (S) singular nouns

	the	*this*	*that*	*my, ...*	*which*	*a*	*one*	*any*	*some*	*no*	*every*	*each*
the	■			C			C					
this		■		C								
that			■	C								
my, ...				■							E	E
which	C	C	C	C	■							
a						■						
one	C			C			■					
any				C				■				
some				C					■			
no				C						■		
every				C, S							■	
each				C								■

The co-occurrence of **singular** Noun modifiers is thus is **highly limited**. Note the exception of **Czech possessives** which have **strikingly general patterns of co-occurrence** in singular. In plural, this is true for all three languages. For a discussion of

their featural content and consequentially of their ability to co-occur see Chapters 2 and 3.

The following examples illustrate this difference between singular and plural phrases in all three languages. Whereas (57) and (58) show that most combinations are ungrammatical in the singular context, (59) and (60) show that in the **plural** all three languages **allow co-occurrence.**

57. a. (Cz) *Chci sníst **ten můj** oběd.*
    b. (En) *I want to eat *__the my__ lunch.*
    c. (Sp) *Quiero comer *__la mi__ comida.*

58. a. (Cz) ***Žádný tvůj** kamarád není doma.*
    b. (En)*__No your__ *friend is at home.*
    c. (Sp)*__Ningún tu__ *amigo está en casa.*

59. a. (Cz) *Vídám **mých pár** kamarádů velmi zřídka.*
    b. (En) *I meet **my few** friends very rarely.*
    c. (Sp) *Veo **mis pocos** amigos muy pocas veces.*

60. a. (Cz) ***Všichni tvoji** kamarádi už jsou doma.*
    b. (En) ***All your** friends are at home.*
    c. (Sp) ***Todos tus** amigos están en casa.*

Below in (61) there is a table which is an overview of the co-occurrence of plural Extended Projection functional category modifiers in the three languages.

61. Possible combinations in the ENP in Czech (C), English (E) and Spanish (S) plural nouns

	many	*much*	*two*	*five*	*some*	*any*	*no*	*all*	*both*	*a few*	*several*
the	C, E, S	C, S	C, E, S		C	C	C	C, E, S	C, E	C	C
these	C, E, S	C, S	C, E, S		C	C	C	C, E, S	C	C	C
those	C, E, S	C, S	C, E, S		C	C	C	C, E, S	C, S	C	C
my	C, E, S	C	C, E, S		C	C	C	C, E, S	C	C	C
which			C, E, S							C	C
what			C, E, S							C	C
such			C, E, S								

I next need to resolve one cross-linguistic discrepancy. Czech Ds and Qs seem to be able to combine without limits which are present in English and Spanish. This fact can be analyzed in three ways. Either Czech elements differ from English and Spanish elements by their featural content, or the Czech system allows combination of different features, or as I show in the following Section (1.6), these seemingly same combinations represent different structures and have to be divided at least into two groups one of which does not fall into the D-Q-NP structure.

1.6 When NPs are not just NPs

In the Introduction I have set the focus of my analysis to the internal structure of single maximal NPs. A binary-branching structure in the relatively simple Extended NPs influences the reference of the elements inside, i.e. all the functional elements refer to the same extra-linguistic object(s) and they specify the characteristics of such object as in the following examples (62) and (63).

62. a. (Cz) *ti tři chlapci*
   b. (En) *the three boys*
   c. (Sp) *los tres chicos*
63. a. (Cz) *těchto pár chlapců*
   b. (En) *these few boys*
   c. (Sp) *este par de chicos*

On the other hand, if the structure is more complicated, i.e. exhibits different order than D-Q(-NP), the reference of individual elements is not the same. Compare (62) and (63) with the following examples (64) and (65):

64. a. (Cz) **Dva ti chlapci** *stojí na zemi.*
   b. (En) **Two of the boys** *are standing on the ground.*
   c. (Sp) **Dos de los chicos** *están parados en el suelo.*
65. a. (Cz) **Oba tito chlapci** *podpírají třetího.*
   b. (En) **Both these boys** *are supporting the third one.*
   c. (Sp) **Ambos estos chicos** *están apoyando al tercero.*

In this section I advocate the exclusion of the following structure from the current study:

66. **Extended NP structures excluded from the study** [20]
   a. partitive-reference structures as in (64)
   b. emphasizing structures as in (65)

If these phrases are excluded, the co-occurrence illustrated in tables (49), (53), (56) and (61) will be more limited. Therefore, in the end of this Chapter I offer a complete overview of co-occurrence of the presently discussed elements in the Extended NP with the structure D-Q-NP.

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[20] The structures containing adjectival *all*, e.g. *all day*, are excluded as well, but I discuss these in Chapter 6, which focuses on the Universal Quantifiers.

Though the combinations of some elements are excluded, the individual elements which are part of these structures are still analyzed and described in the latter sections.

1.6.1 Partitive-reference structures

According to the tables (49), (53), (56) and (61), it seems that there are Czech phrases which violate the order D-Q-NP and instead exhibit the order Q-D-NP. They are exemplified in (64) and here in (67) and (68):

67. a. (Cz) ***Mnoho tamtěch děvčat*** *má dlouhé vlasy.*

    b. (En) ***Many of those girls*** *have long hair.*

    c. (Sp) ***Muchas de aquellas chicas*** *tienen el pelo largo.*

68. a. (Cz) ***Pár mých kamarádů*** *bydlí v Londýně.*

    b. (En) ***A few of my friends*** *live in London.*

    c. (Sp) ***Un par de mis amigos*** *vive en Londres.*

In their English and Spanish counterparts, we find that Prepositional Phrase fulfills the function of the non-prototypical Czech sequences. Whereas in English and Spanish, there is no doubt that the structure is more articulated than D-Q-NP and therefore is out of the scope of this thesis, in Czech we need to prove it.[21] Compare (64), (67) and (68) with the following examples (69) – (71), which are their variants with D-Q-NP patterns.

69. a. (Cz) ***Ti dva chlapci*** *stojí na zemi.*

    b. (En) ***The two boys*** *are standing on the ground.*

    c. (Sp) *?****Los dos chicos*** *están parados en el suelo.*

70. a. (Cz) *?****Tamtěch mnoho děvčat*** *má dlouhé vlasy.*

    b. (En) ***Those many girls*** *have long hair.*

    c. (Sp) *?****Aquellas muchas chicas*** *tienen el pelo largo.*

71. a. (Cz) ***Mých pár kamarádů*** *bydlí v Londýně.*

    b. (En) ***My few friends*** *live in London.*

    c. (Sp) ***Mi par de amigos*** *vive en Londres.*

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[21]For the discussion of the function of prepositional phrases with *of* in English and *de* in Spanish see Section (2.3.5).

Some of these orders have questionable acceptability, which does not undermine this discussion. Whereas the phrases in (67) and (68) with the non-canonical order Q-D-NP are partitive, i.e. the Q in fact refers only to a part of the extra-linguistic referential set; all the elements in the phrases (69), (70) and (71) with prototypical D-Q-NP order refer to the same referential sets. In other words, if D and Q are not in the order established as canonical, they form more than one NP and therefore have different reference. These constructions are thus excluded for their structure.

1.6.2 Emphatic structures

Following Emonds 2012, I exclude the structures which contain three co-occurring functional heads. I analyze UQs *all, both* and their respective Czech and Spanish counterparts as emphasizers of the whole phrase which occur in SPEC(DP).

72. a. (Cz) *(Všech) těch dvanáct slečen* by mohlo být tady.
    b. (En) *(All) the twelve beautiful misses* could be here.
    c. (Sp) *(Todas) las doce señoritas bonitas* podrían estar aquí.

In line with Emonds' discussion, these elements do not bring any new information or quantification to the phrases, as illustrated above in (72) and so they should not be considered independent Quantifiers. Whether this analysis of UQ elements is right or not, I do not consider them heads in Extended NPs but rather **modifiers of the whole phrase**, as suggested above.

73. a. (Cz) *Všechny z nich/ těch dvanácti slečen jsou krásné.*
    b. (En) *All of them/ the twelve misses are beautiful.*
    c. (Sp) *Todas de ellas/ de las doce señoritas son bonitas.*
74. a. (Cz) **Ty z nich/ všech dvanácti slečen jsou krásné.*
    b. (En) **The of them/ all twelve misses are beautiful.*
    c. (Sp) **Las de ellas/ de todas doce señoritas son bonitas.*

Whereas UQs can be preposed to the NP and modify the NP even with a preposition in English and Spanish, the Ds cannot do this, which I consider a supporting argument for

this analysis. For a further analysis of these elements which are grouped with *every*, *each* and their respective counterparts, see Chapter 6.

1.7 Co-occurrence of elements placed in the same position

Tables (49) and (53) provide an overview of co-occurrence of elements generated in the same positions, i.e. two Ds and two Qs. These elements should be in complementary distribution, i.e. they should not co-occur, as these functional positions are not recursive. However, there are exceptions which seem to break this rule – **qualitative determiners** with an indefinite article in English, with possessive pronouns and definite determiners in Czech, and with **numerals** which combine with other quantifiers in all three languages. They are exemplified in (75) - (77).

75. a. (En) <u>*Such **a** girl does not need a new dress.*</u>

   b. (En) <u>*What **a** joy!*</u>

76. a. (Cz) **_Který_** <u>*ten/ tvůj* </u>*stůl je čistý?*

          which the your table is clean

          'Which of the/ your tables is clean?'

   b. (Cz) **_Jakou_** <u>*tu/ jeho* </u>*písničku máš rád?*

          what the his song like

          'What song/ song of his do you like?'

   c. (Cz) *Viděla jsem* **takovou** <u>*tu/ jejich* </u>*pohádku.*

          saw   such   the his fairytale

        'I saw such a fairytale/ such a fairytale of theirs.'

   d. (Cz) *Je tu* **ten/ tento/ tamten** <u>*můj* </u>*klíč.*

          is here the this that my key

        'There is the/ this/ that key of mine.'

77. a. (Cz) <u>*Nějací* </u>**_tři_** *muži tě hledají.*

   b. (En) <u>*Some* </u>**_three_** *men are looking for you.*

   c. (Sp) <u>*Algunos* </u>**_tres_** *hombres te están buscando.*

As in the case of partitive-reference structures discussed in the previous Section (1.6.1), (75) and (76) represent more complicated cases of NP. *Such* and *what* in (75) refer to the whole concept described by *a girl* and *a joy,* i.e. they do not modify the N but all the

phrase. The Czech phrases in (76) are either the partitive-reference structures (76a) and (76b), as it is clear from the English translation; or are the same as the phrases in (75).

As to the numerals, the fact they combine with other quantifiers supports the hypothesis that a **structural position can be filled with more than one element** if the **featural content** of the relevant elements **does not clash**. The numerals have such a specific featural content that they cross-linguistically allow complementation by other quantifiers.

1.8 Summary of Chapter 1

As idiosyncratic as they are, elements in Czech, English and Spanish Extended NPs can be defined by the five claims stated in Abney (1987) as discussed in the present Chapter 1. Each claim opened the way for further discussion which is continued in the following chapters.

Chapter 1 started with a list of elements which occupy the D and Q positions and though it was suggested that there might be more than two positions available, I concluded that there are only two heads within the Extended NP and that the UQs are emphasizers rather than Quantifying elements. I discuss them further in Chapter 6.

The elements in the Extended NP lack substantive content. Their co-occurrence is limited by the features they contain (which is virtually connected with their position) and the parameters of each language. The table (78) below will be therefore also useful when describing properties and features of individual elements in Chapter 3.

As in the previous tables mapping co-occurrence, the element in the first column is the first one in surface ordering and higher one in the structure, i.e. D. On the other hand, the element in the first line is EQ, i.e. the second element in the structure.

I have stated that the head of the nominal phrase is the feature Q generated in the EQ position, though I have not argued yet in support of this statement. The argument is carried on in the following chapters. For the moment, we can say that the fact that three languages from three different languages families have conserved for probably 3,000 years the same basic categories and restrictions on their co-occurrence, as summarized in (78), is a striking proof of Universal Grammar.

78. Possible combinations of Ds and Qs within ENPs in Czech (C), English (E) and Spanish (S) [22]

	many	much	one	two	five	some	any	no	few	little	a few	a little	several
the	C, E, S	C, S	C	C, E, S					C, S	C	C, E, S	E, S	C
this			C, E									C, S	
these	C, E, S			C, E, S					C		C, E		C, E, S
that			C, E							C		C, E, S	
those	C, E, S			C, E, S							C, E		C
my	C, E, S		C	C, E, S							C, E, S		C, S
which				C, E, S							C, E, S		
what				C, E, S							C, E, S	C, E, S	
such			C	C, E									

---

[22] Appendix lists examples to each of these co-occurrences.

2. Phi features and other morpho-syntactic features of Extended NPs

Having introduced all the basic elements of Czech, English and Spanish Extended NP in Chapter 1, this chapter focuses on features which define and determine the morphological form and the syntactic properties of these elements. Their morphological form, especially suffixes in Czech and Spanish, is determined by "phi-features". On the other hand, the syntactic properties of these elements relate to their position in the structure (syntax) and to their semantic content.

What is not discussed in this Chapter, but left for Chapter 3, is the semantic content of Extended NP elements, which is defined by the rest of features in the table (26) modified here as (79) with added phi-features of the NPs. All the features in this chapter except for Case are formally treated differently here than in other widely used current systems.

Chapter 2 is thus divided into six sections. I argue for features with the **three values** in Section (2.1). I discuss the interface relevance of these features in Section (2.2). Section (2.3) focuses on the phi features which include **Number, Gender** and **in Czech Case.**

79. Cross-linguistic features used to classify Determiners and Quantifiers

Chapter	Label	Determiners	Quantifiers
Chapter 2	Phi features	Number (2.3.1)	
		Gender (2.3.2)	
		Case (2.3.3)	
	Positional features	Universality (2.4) and (2.5)	
Chapter 3	Lexical-semantic Features	Definite (3.1) Demonstrative (3.2) Person and Possessive (3.3)	Dual (3.4) Polarity (3.5) Qualitative and Distributive (3.6) Expectative (3.7)

Sections (2.4) and (2.5) discuss the status of definiteness in the context of the nominal domain and the **Definiteness/ Universality** feature, which is intrinsically connected with the UQ, D and EQ positions which, as I have proposed, form the structure of the Extended NP in Chapter 1. I summarize the findings in Section (2.6).

2.1 Three feature values as a standard

In this section I present arguments in favor of **three values** of **phi-features Number and Gender and a Universality feature**.[23] The other features discussed in Chapter 3 are not subject to syntactic processes inside NPs (see Section (2.2) for a summary of interface relevance) and therefore they are not a part of this argument. However, based on e.g. the Polarity feature discussed in Section (3.5), it is probable that even semantic features have three values, though these values may not be all active in the three studied languages. That can be seen with the Demonstrative feature, which has three values in Spanish, and, for example Japanese, but only two in Czech and English as discussed in Section (3.2).

As mentioned in Section (1.1), the notion of feature value comes from the phonology in Chomsky and Halle (1968), more concretely from their description of vowels. Vowels in many languages have three heights (high, middle, low) and three degrees of backness (front, central, back). Therefore, in the beginnings, the features could have been considered as three-valued units but that was not the case. As the popularity and usage of features grew, not only in the syntactic field, they were kept as a two valued tool to express contrary characteristics of a word.[24] With passing time, the empirical coverage of features expressing different properties grew, but the concept of two values stayed.[25]

One of the original and still valid goals of feature systems in any of the linguistic fields has been to **predict** how principles and parameters **affect values**, e.g. the combinatory properties of segmental sequences as well as differentiation of the exponents.[26] In this thesis, I argue that **three values of only three** distinct morpho-syntactic **features** (combined with semantic features) in the modification system of

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[23] Different cases in Czech might be results of combination of 3-valued features as well, but I leave this matter to further research. For example, the oblique cases, Dative, Locative and Instrumental, may all be +P.

[24] This was partly caused by disappointment from lack of interesting theory-based confirmation of three-way features.

[25] Two-value systems were often expanded by underspecification, which is defined in various ways in different frameworks and could be considered a third value.

[26] For example, the process of raising vowels within a dialect – a solid theory should predict which vowels will be subject to raising when it happens and which will not, and should formulate this prediction in terms of features. Or the realization of individual features – a solid theory should predict whether the realizations of different features are the same or different on the surface, or, in a less extreme version, whether two different underlying values have common realizations or not.

Extended NPs **are enough to account for the general structure building rules** of the nominal domain in all of Czech, English and Spanish.

For a more complete view, let´s compare general possibilities of a two-valued feature system to those of a three-valued feature system. Logically, with **two feature values** we have **two possible combinations**: +F and -F. On the other hand, with **three feature values** we have **six possible combinations** for general rules for a given feature: +F, -F, 0F, +F and 0F, -F and 0F, +F and –F, not counting the combination of all three features. Note that in this thesis the third **0F value is not underspecification** of a feature or a lesser type of value, but **a fully equal partner to +F and -F**.

If we apply binary division to phi features, i.e. Number and Gender, we immediately face puzzles. How do we account for Mass Nouns? How do we account for Neuter Gender? Which combinations can be subject to a principle or parameter and which cannot? The possibilities of binary features are either very limited and therefore other instruments are required, or too many combinations are allowed, both of which I consider superfluous and stipulative. For example, in phonology, which vowels are +High, +Low? Which are +Front, +Back?

On the other hand, the three-way division yields not only three positions in the Extended NP, and by definition third values of Mass Nouns and Neuter Gender, but we will see that it also renders the entire system more predictive, as desirable. In Subsections (2.1.1) - (2.1.3), I show that the three-way feature system not only systematically predicts how rules affect individual elements, but also generally and correctly **excludes the grouping +F and -F being affected when 0F is not**.

2.1.1   Three values of Number

As suggested in the previous Section (2.1), the three-valued features should be able to better account for the range of elements we see in the Extended NP. The Number feature has three values which are rendered as follows: +Q as Plural, -Q as Singular and 0Q as Mass. In Chapter 1, we have seen that several elements modify Ns of more than one value (see Table (10) in Chapter 1), i.e. they can combine with various combinations Singular, Plural or Mass Ns.

What we are interested in are elements which are used with two values e.g. +Q and 0Q but ungrammatical with -Q, or vice versa. These combinations can be limited to those listed in (80), and I remind the reader that as stated in the previous section, there is no element which can be used with both +Q and -Q Ns, but is ungrammatical with a 0Q

N. As this overview serves for illustration, I do not list Czech and Spanish examples which would yield the same effect.

80. **Possible combinations of Number values**

+Q (ungrammatical with -Q and 0Q): *both, many, few, several*

-Q (ungrammatical with +Q and 0Q): *every, each*

0Q (ungrammatical with +Q and -Q): *much, little*

+Q/0Q (ungrammatical with -Q): *all*

-Q/0Q (ungrammatical with +Q): *this, that*

+Q/-Q (ungrammatical with 0Q): *no items*

The elements which can appear with +Q/0Q and –Q/0Q are **fewer in number** than those which are limited only to one value or combine with Ns independently on the Q value they represent. This is true for all features and properties. I summarize it together with the principle of "never +F/-F, but no 0F" in (81).

81. **Systematic limitation of Parameter Effects ("SLOPE")**

a.   The effect of a Parameter on a feature F having three values +F, -F and 0F is never limited to +F and –F, with 0F being left out.

b.   The number of items when a Parameter affects two values instead of one or all of them will be lower than the former case.

This Principle is proposed as holding not only for all three-valued features in English but also in Czech and Spanish. Having discussed the Number feature, let us move on to Gender and Universality features.

2.1.2   Three values of Gender

The manifestation of the three-way feature system is obviously different in the context of each feature. Whereas in the previous Section (2.1.1), the value of a number feature impacted a Determiner or Quantifier, in the case of Gender, the focus is on the Noun and agreeing suffixes. This difference is caused by the placement of these two features. As discussed in Chapter 4, Interpretable Gender is generated on N, whereas Interpretable Number is generated on Q.

The Value +G is rendered as Masculine, -G as Feminine and 0G as Neuter. Among those studied here, the language which overtly manifests the presence of a three-way feature is Czech, as the most inflectional language. Therefore, a brief overview in (82) presents Czech elements in different grammatical Cases which represent the combination of features.

82. Suffixes and Case on Czech Extended NPs

+G (ungrammatical with -G and 0G): Nominative singular

tento krásný den 'this beautiful day'

-G (ungrammatical with +G and 0G): Nominative singular

tato krásná lavička 'this beautiful bench'

0G (ungrammatical with +G and -G): Nominative singular

toto krásné auto 'this beautiful car'

+G/0G (ungrammatical with -G): All oblique (P-marked) cases

s tímto krásným dnem/ autem 'with this beautiful day/ car'$_{\text{INSTR.SG.}}$

tomuto krásnému dnu/ autu 'this beautiful day/ car'$_{\text{DAT.SG.}}$

-G/0G (ungrammatical with +G): not in the same case of modified NP, but the same suffix *–a/-á* in agreeing elements is used for both Neuter and Feminine Genders

+G/-G (ungrammatical with 0G): *no items*

Identical suffixes modifying all three Genders, i.e. syncretism, can be found throughout the plural Ns. However, as in case of Number, the combination of +F and –F is not attested, i.e. we do not find an N or an agreeing suffix which would be the same for Masculine and Feminine but different for Neuter Gender.[27]

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[27] The Plural Accussative suffix *-y* in (1a) seems to be an exception, as it appears only on +G/-G but never 0G.

1. a. (Cz) *Viděl jsem ženy$_{-G}$/ pány$_{+G.ANIM}$/ lesy$_{+G.INAM.}$.*
       'I saw women/ sirs/ forests.'
   b. (Cz) *Viděl jsem muže$_{+G.ANIM}$/ růže$_{-G}$/ more$_{0G}$/ stroje$_{+G.INAM.}$.*
      'I saw men/ roses/ seas/ machines.'
   c. (Cz) *Viděl jsem města$_{0G}$/ kuřata$_{0G}$/ stavení$_{0G}$.*
      'I saw towns/ chickens/ buildings.'

However, Czech Ns are divided into several classes within the three Genders. Each class employs different suffixes and all the other suffixes follow the rule. I will suppose

Before I move to Universality, I want to briefly address the special status of Neuter Gender in all three studied languages to support the status of 0F as a full-fledged value with its own characteristics. Standard Czech differentiates the three Genders by three different agreeing suffix patterns, as illustrated in (83).[28]

83. a. (Cz) *Je to dobré auto*$_{NEUT}$.

   'It is a good car.'

   b. (Cz) *Je to dobrý muž*$_{MASC}$.

   'He is a good man.'

   c. (Cz) *Je to dobrá žena*$_{FEM}$.

   'She is a good woman.'

In the West Bohemian Czech dialect, the agreeing suffixes show irregularities illustrated in (84).[29] The Neuter N, i.e. the 0G value, allows the modification by the Masculine suffix. This relation is not reciprocal; the Masculine N can never be modified by the Neuter suffix.

84. a. (Cz) *Je to dobrý auto*$_{NEUT}$/ *muž*$_{MASC}$. (West Bohemian)

   'It is a good car/ he is a good man.'

   b. (Cz) *Je to dobré auto*$_{NEUT}$/*muž*$_{MASC}$.

This data set suggests that the 0G value has a special status in the same sense as 0Q valued Mass Ns and by extension 0Uni elements which are discussed in the following Section (2.1.3), i.e. 0G shares properties of +G like 0Q shares properties of -Q.

In all three language systems, i.e. Czech, English and Spanish, a Neuter Gender pronoun can be used in reference to abstract situations as illustrated in (85). This is true in spite of the otherwise general absence of Neuter Gender in the Spanish nominal system. The capital letters followed by colons represent different speakers.

that the missing *-y* suffix for 0G is caused by the presence of more prominent Neuter suffixes listed in (1c).

[28] This is true for most cases in singular; in plural, the suffixes on agreeing elements for Masculine and Neuter differ only in structural cases, i.e. Nominative and Accusative as pointed out by Veselovská 2018. For a theoretical discussion of these syncretic forms see Caha 2013.

[29] I use West Bohemian as an example because it is my native dialect and therefore, I am familiar with it. These changes may be found in other dialects of Czech as well.

85. a. (Cz) A: *Umíš **vařit**$_i$? B: Chci se **to**$_i$/ ***ho**$_i$/ ***ji**$_i$ naučit. A: **Vaření**$_i$ je jednoduché.*

b. (En) A: *Can you **cook**$_i$? B: I want to learn **it**$_i$/ ***him**$_i$/ ***her**$_i$. A: **Cooking**$_i$ is simple.*

c. (Sp) A: *Sabes **cocinar**$_i$? B: Quiero aprender**lo**$_i$/ ***le**$_i$/ ***la**$_i$. A: **Cocinar**$_i$ es simple.*

The activity of cooking is expressed by a verb and an action-event N in Czech and English by Speaker A. The verbal form obviously does not carry the Gender feature; however, it is ungrammatical to replace it by a pronoun other than the one in Neuter Gender. As intuitive as this may seem, there is no logical reason why this should be the case. Furthermore, Czech action-event Ns are always Neuter.

The third value seems to be an elegant solution not only for these nominalized phrases but also for English Nominal Phrases with an inanimate head N, which do not have extra-linguistic Feminine or Masculine Gender as an intrinsic characteristic.

To sum up, the Gender feature follows the prediction that there will not be a rule for +F and –F together but not 0F. Furthermore, 0F does not seem to be an underspecification but rather a default value when there is a lack of evidence for the other two.

2.1.3   Three values of Universality

As opposed to Sections (2.1.1) and (2.1.2), which discussed phi features and therefore were focused on morpho-syntactic phenomena, this section focuses on Universality, which is a positional feature. Therefore, this section deals with syntactic co-occurrence rather than with agreement morphology or the semantic reference of elements.

The value +Uni is connected with the SPEC(DP) position of UQ, 0Uni with the D position and –UNI with the SPEC(NP) position of EQ (see Tree (36) and Table (33) for an overview of elements in these positions). The co-occurrence of elements is not just a matter of the Universal feature value, as illustrated in Chapter 1 and further discussed in Chapter 3.[30] There is one general prediction which is strikingly right. According to the SLOPE Principle in (81), **+Uni never co-occur with –Uni** unless the 0Uni is present as well. The general rule of no co-occurrence of +F and –F also predicts

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[30] See Table (78) for a complete overview of co-occurrence.

the rule of "One quantifier per NP" stipulated by Jackendoff 1977 (Chapter 5). There is no need to stipulate this separately, as it is automatically excluded in the theory here.

The summary in (86) presents possible co-occurrences of elements in the English Extended NP. As in the previous two cases, I exemplify in only one language but the claim should be extended to all three studied languages. As opposed to the previous two cases, the examples do not state that the presence of the other values creates an ungrammatical utterance.

86. **Co-occurrence of different Universality Values**

+Uni (not co-occurring with -Uni and 0Uni): *every*

-Uni (not co-occurring with +Uni and 0Uni): *few*

0Uni (not co-occurring with +Uni and -Uni): *a*

+Uni/ 0Uni (not co-occurring with -Uni): *all the*

-Uni/ 0Uni (not co-occurring with +Uni): *these three*

+Uni/ -Uni (not co-occurring with 0Uni): *no items*

In previous Sections (2.1.1) and (2.1.2) I started to discuss the special status of 0F. Now I conclude this discussion with the claim that the Universality feature confirms this hypothesis as the elements in D, i.e. **0Uni elements**, **are semantically the least marked** ones in the Extended NP but in any case 0Uni is not a less specified value than ±Uni.

2.2 Interface relevance of features

The generative framework distinguishes at least **three interface components**: **phonological, semantic and syntactic**. Only **the latter two are relevant** for the present discussion.

Svenonius 2007 argues that features which are relevant for one interface component do not have to be necessarily relevant for other components. I adopt this conclusion.

Interface relevance is considered to be cross-linguistically general, i.e. it applies to Czech, English and Spanish. Thus, the features are divided into three cross-linguistically corresponding groups: those relevant for syntactic, semantic or the syn(tactic) + sem(antic) interface. This principle is summarized in (87).

87. **Universal featural relevance at interfaces**

Feature X "relevant for interface I" is valid for I and only I in all languages where it is employed, even when this relevance is not overtly reflected.

In case a feature is relevant for both interface components, it carries semantic content and furthermore, it influences the syntactic operations, e.g. Agreement or the syntactic form of other members of the sentence. The relevance of a feature influences whether and how the feature is checked or valued, as discussed in more detail in Chapter 4. At the same time, all the phi features keep the characteristics of (Un)Interpretability.

As opposed to interface relevance, the range of Values is language specific. This parameter is summarized in (88).

88. **Parameter for feature Values:**

The range of values for feature X is parametrically set for each language.

With the exception of Case in Czech (discussed in Section (2.3.5)), the phi features and Definiteness/ Universality features are relevant for the syn-sem interface for the following reasons:

- Phi-features influence the morphological form of the elements in Extended NP and at the same time carry a meaning; see Section (2.3).
- The Definiteness/ Universality feature syntactically determines the positioning of the element in the structure and at the same time limits its semantic scope; see Section (2.4).

As for Case features in Czech, they are a relevant diagnostic tool of the syntactic structure but are not directly semantic, which is also the reason why the Case is not present in all three languages. For further discussion see Section (2.3.3).

2.3 Phi-features of the noun are frequently shared by D and Q

The features traditionally connected with a Noun are usually labeled as φ-features (Chomsky 1981). In spite of wide discussion in the literature (Reuland 2011), there is no clear consensus about:

- Which features should be included in this group and whether they are relevant for the syntactic, semantic or both interface components?

- Where exactly they are located in the nominal phrase?

- How they spread through the nominal phrase (whether up or down; or in both directions)?

In this thesis, phi features include Gender and Number. Some authors, e.g. Reuland 2011, include Person as well; or do not include Case, e.g. Chomsky 1981 and Kerstens 1993.

The reason I do not include the Person feature is my descriptive goal - I only treat the Extended NPs with a lexical head and their internal structure, as noted in the Introduction. The importance of **the Person feature** in Czech, English and Spanish lies in two areas which are not treated here: **the agreement on the Verb Phrase** and **pronominals** e.g. *I, you* (and counterparts in Czech and Spanish). As opposed to Number, Gender and Czech Case, there is no evidence that Person features influence NP-internal processes in these languages. For a detailed analysis and placement of the Person feature see Adger, Bejar and Harbour 2008.

On the other hand, I include Czech Case because it contrasts with and helps to classify Extended NP elements in English and Spanish through a cross-linguistic comparison of properties, and as such, it is an indispensable, though not general, component of NPs from my point of view.

According to the **principle of Compositionality**, which is assumed in any mainstream generative framework, even non-overt elements must be interpreted (for discussion see Giusti 2015). As for Case, these non-overt elements are features which are present in the underlying structure even if not overtly signaled.[31]

In spite of differing degrees to which the considered languages reflect these features overtly, the D and Q members of nominal phrases share phi-features with Ns in Czech, English and Spanish as exemplified below. The head Nouns in the following

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[31] Brody 1997 offers another way expressing the same concept in his Thesis of Radical Interpretability, which states that "each feature must receive a semantic interpretation in some syntactic location". Note that neither of the two principles states that the interpretation of a feature must be assigned within the boundaries of a single phrase.

examples (89) and (90) are underlined. The morphemes which realize the phi features are in bold. In (89), which presents grammatical examples, the nominal phrases are bracketed and the subscripted features apply to all words within the brackets.

89. a. (Cz) *[tamt**i** tři siln**í** <u>muž**i**</u>]*MASC. PL. NOM.

    b. (En) *[th**ose** three strong <u>m**en**</u>]*PL.

    c. (Sp) *[aquell**os** tres <u>hombr**es**</u> fuert**es**]*MASC.PL.

90. a. (Cz) **ten*MASC.SG.NOM. *siln**ou**FEM.SG.INSTR. <u>muž**i**</u>MASC.PL.NOM.

    b. (En) **those*PL. *strong <u>man</u>*SG.

    c. (Sp) **las*FEM.PL. <u>*hombres*</u>MASC.PL. *fuerte*MASC.SG.

I adopt and adapt the Agreement theory of Pesetsky and Torrego (2007) which, together with other principles and parameters, predicts the behavior of nominal phrases in all three languages. They explain Agreement by feature sharing based on the need of Valuation of features and established links between Interpretable and Uninterpretable features. This theory as well as the placement of features is discussed in more detail in Chapter 4.

2.3.1 Number

The Number feature, with its values ±Q and 0Q, is the only one which is reflected both outside and inside of the nominal phrase in the three languages, i.e. Czech, English and Spanish. The bold forms in (91)-(94) cannot vary in number.

91. a. (Cz) *[Tři kočky]*PL **jsou**/ **je* *v parku.*

    b. (En) *[Three cats]*PL **are**/ **is* *in the park.*

    c. (Sp) *[Tres gatos]*PL **están**/ **está* *en el parque.*

92. a. (Cz) *[Jedna kočka]*SG **je**/ **jsou* *na stromě.*

    b. (En) *[One cat]*SG **is**/ **are* *in the tree.*

    c. (Sp) *[Un gato]*SG **está**/ **están* *en el árbol.*

93. a. (Cz) *[Marie]*SG *hraj**e**/ **hraj**í** golf.*

    b. (En) *[Marie]*SG *play**s**/ **play* golf.*

    c. (Sp) *[Marie]*SG *jueg**a**/ **jueg**an** golf.*

94. a. (Cz) *[Voda]$_{MASS}$ je/ *jsou studená.*

   b. (En) *[Water]$_{MASS}$ is/ *are cold.*

   c. (Sp) *[Agua]$_{MASS}$ es/ *son fría.*

This obligatory Number Agreement outside of NP is conditioned by the syntactic setting, i.e. by the subject position of Nominal Phrase, as well as by the presence of other features, in this case the Person feature. The verbal morphemes in bold result from a combination of Number and Person, i.e. the verbal suffixes are examples of portmanteau morpheme (Veselovská 2018). The Number value alone is not enough to achieve Agreement in all cases. However, as highlighted above, I keep the focus on the internal processes in the NP; therefore, the Person feature is not relevant for my analysis. Notice that the agreement for Mass Nouns, i.e. 0Q NPs, is singular. Mass Nouns are analyzed in the following Section (2.3.2) treating Countability.

The syntactic relevance of the Number feature is also supported by NP-internal inflection which reflects its value as illustrated in (95).

95. a. (Cz) *[Tato/*Tyto holčička]$_{SG}$ má modré oči.*

   b. (En) *[This/*These girl]$_{SG}$ has blue eyes.*

   c. (Sp) *[Esta/*Estas chica]$_{SG}$ tiene ojos azules.*

It is perhaps not always appreciated that **these cross-linguistic similarities** are in themselves **strong evidence for Universal Grammar**. The generalizations (87) and (88) and others are not about superficial patterns, which in (91) - (94) are all different, but about **the overall architecture**.

Having illustrated the relevance of the Number feature for the syntactic component, I move to its relevance for the semantic component. When the nominal phrase refers to more than one extra-linguistic object, the value of the Number feature is +Q. The same applies for a –Q nominal phrase which refers only to one extra-linguistic object. I illustrate this phenomenon in (96).

96. a. (Cz) *Vidím jednu$_{-Q}$ židli$_{-Q}$/ dvě$_{+Q}$ židle$_{+Q}$.*

   b. (En) *I can see one$_{-Q}$ chair$_{-Q}$ / two$_{+Q}$ chairs$_{+Q}$.*

   c. (Sp) *Veo una$_{-Q}$ silla$_{-Q}$ / dos$_{+Q}$ sillas$_{+Q}$.*

The Number feature values ±Q thus provide a direct link to the semantic component in form of plural and singular nominal phrases.[32] Mass nominal phrases which surface with the value 0Q trigger unmarked "singular" agreement both inside and outside the nominal phrase, as illustrated in (97) and (98).

97. a. (Cz) *Spotřebovali [hodně drahé/ *drahých elektřiny$_{0Q}$]$_{SG}$?*

   b. (En) *Did they use [much expensive electricity$_{0Q}$]$_{SG}$?*

   c. (Sp) *¿Usaron [mucha/ *muchas electricidad$_{0Q}$ cara/ *caras]$_{SG}$?*

98. a. (Cz) *[Příliš málo čisté vody$_{0Q}$]$_{SG}$ je/ *jsou vždycky problém.*

   b. (En) *[Too little clean water$_{0Q}$]$_{SG}$ is/ *are always a problem.*

   c. (Sp) *[Demasiada poca agua limpia$_{0Q}$]$_{SG}$ es/ *son siempre un problema.*

The semantic interpretation of these phrases is *a* **singular mass** and the occurrences of two or more different masses can be actually countable as illustrated in (99).

99. a. (Cz) *[Čistý sníh$_{0Q}$]$_{SG}$ a [špinavý sníh$_{0Q}$]$_{SG}$ byl/ byly na jedné hromadě.*

   b. (En) *[Clean snow$_{0Q}$]$_{SG}$ and [dirty snow$_{0Q}$]$_{SG}$ was/ were on one pile.*

   c. (Sp) *[La nieve$_{0Q}$ limpia]$_{SG}$ y [la nieve$_{0Q}$ sucia]$_{SG}$ estaba/ estaban en un montón.*

In these examples, 0Q can be on each NP or on the conjoined NP. I take this phenomenon as a supporting argument for **Existential Quantifiers**, i.e. **host of the interpretable Number feature, as the head of the Extended NPs**.

The group of mass Nouns is widely considered as a separate group to be **uncountable,** as opposed to plural and singular nouns which are **countable.** I disagree with this assumption because to my knowledge, there are no separate rules concerning only one of the two groups, i.e. a rule for only countable nouns ±Q but not 0Q, or the other way round, which is stated by my **SLOPE** principle.

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[32] I am aware of a few examples against this statement, when syntax decides over semantics, as in the following example:

   1. a. (En) *More than one person is/ *are coming.*
      b. (En) *No one is/ *are happy.*
      c. (En) *None are/ *is happy.*

I devote the following Section (2.3.2) to present my proposal on this subject as well as some of the major competing analyses.

2.3.2 Countability feature or just the Number feature disguised?

One of the goals of the present analysis is to propose a relatively simple morpho-syntactic structure for Extended NPs. In this section I present my view of countability as not being an independent feature, but rather a result of valuing the Number feature on the functional head EQ^0 as 0Q.

The accounts of countability in the generative literature are numerous, and from these I have picked three which in my opinion represent different views, i.e. Chierchia 1998, Borer 2005 and Bale and Barner 2009. It is not my goal to formulate another detailed approach to mass Nouns but rather to show how these three analyses can or cannot be translated into my present approach to NP.

Chierchia 1998 differentiates semantic groups of uncountable Nouns which share the characteristics that their "atomic elements are not lexically accessible" (Chierchia, 1998: 119). He claims that substance Nouns are stably mass as opposed to the rest which can surface as both countable and uncountable.[33] He does not list any syntactic differences between the Ns which are always uncountable and those which can change from mass to count, and I am not aware of any either, therefore I do not consider these as two separate morpho-syntactic groups as already suggested in Section (2.3.1).

Both cross-linguistic variation (100) - (101) and intra-language variation in countability (102) - (103) are mentioned in Chierchia, but they only exemplify a consequence of semantic vagueness, which is in his view the reason for mass Noun occurrence in the first place.

100. a. (Cz) *Tyto informace jsou důležité.*

    b. (En) **These informations are important.*

    c. (Sp) *Estas informaciones son importantes.*

101. a. (Cz) *Včera jsem viděla asi třicet blesků.*

    b. (En) **Yesterday I saw about thirty lightnings.*

    c. (Sp) *Ayer vi más o menos treinta relámpagos.*

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[33] In (99) I showed that *snow* can be counted when referred to in two different masses. In line with Chierchia, the two individual masses remain always uncountable.

102.   a. (Cz) *V moři je hodně vody.*

       b. (En) *There is a lot of water in the sea.*

       c. (Sp) *Hay mucha agua en el mar.*

103.   a. (Cz) *Dáme si dvě vody, prosím.*

       b. (En) *We will have two waters, please.*

       c. (Sp) *Tendrémos dos aguas, por favor.*[34]

To an extent I agree with the semantic part of his account, but the variation exemplified above represents a clear sign of the independent **syntactic character of the mass/ count distinction**, as it cannot be plausible that each language has a different perception of "atomic elements". A similar variation can be found in the Gender feature, as discussed in Section (2.3.3).

As opposed to Chierchia, Borer (2005: Chapter 4) adopts the syntactic view and claims that the mass-count distinction is syntactically derived by the presence or absence of DIV^0 ("division"), which (in case it is present) hosts plural marking and an indefinite article. In Borer´s view, mass is the default semantic value and the plural +Q is not derived from the singular –Q, but from 0Q.

The present analysis sees the values ±Q and 0Q as three equal options for one feature, which are able to account for all the nominal forms in a language. For Borer, the +Q and 0Q are the most central. As to the placement of this feature, the insertion of a separate head for countability seems redundant, as the Q^0, and by extension elements which are generated in this position, reflect the three values of the Number feature including 0Q, i.e. the mass reading.

Overall, the basics of mine and Borer´s analysis are very similar, mine having less functional heads as their function is provided by richer three-way feature valuation. Her extra category is in fact just a name for the necessity of three valued features, which is inexpressible in her system.

In the last analysis, Bale and Barner (2009) argue that there is no such category as mass nouns. In their approach the mass nouns are underspecified for the countability feature. If we take a closer look at what 0Q represents, semantically it can be seen as an impoverished Number feature with default agreement. But, supposing that the values

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[34] The ability of uncountable elements to become countable seems to be subject to frequency-of-usage requirements. Native speakers report that *two rices* in the same context seems to be unacceptable.

±Q are conditioned by Countability, the co-ordinated structure in (99) as well as the variation mass/ count seem complicated to generate, especially if there is a more direct way using **0Q as a full Number feature value independent from ±Q**, at least for Czech, English and Spanish.

To sum up, **the concept of a Countability feature is superfluous**, if there are three values of Number features which can cross-linguistically vary for individual entries and which can be changed even within one language. The arrays of Extended NP morphemes reflect the three values of Number features as there are elements which can only combine with certain values, e.g. *a few* and its Czech and Spanish counterparts with +Q and *a little* and its Czech and Spanish counterparts with 0Q.

2.3.3 Gender

Gender, as the other phi feature, is reflected neither in syntax nor in semantics of English and Spanish as generally as Number. In Chapter 4 I argue that this is due to the fact that it is generated on the N. However, at this point I will describe the Gender feature with respect to its interface relevance.

Just like Number, Gender can reflect extra-linguistic reality, though this requires us to distinguish grammatical and inherent Gender. These two types of Gender usually, but not always, coincide in case of Animate Nouns in the three languages. In English, grammatical Gender is always connected with Animate Ns, i.e. it corresponds with the sex of the extra-linguistic referent without exception, as illustrated in (104).[35]

104. a. (En) *Can you call the waiter$_{MASC}$? He$_{MASC}$/ *It$_{NEUT}$ is very slow.*

b. (En) *My mother$_{FEM}$ is at work. She$_{FEM}$/ He$_{MASC}$ / *It$_{NEUT}$ works late.*

c. (En) *The doctor$_{MASC/FEM}$ will be here in a moment. He$_{MASC}$/ She$_{FEM}$/ *It$_{0G}$ is on the phone.*

d. (En) *The sofa$_{NEUT}$ is new. It$_{NEUT}$/ *He$_{MASC}$/ * She$_{FEM}$ is black.*

The pronouns referring to the same entity show the extra-linguistic Gender of the referent though the Nouns do not contain overt grammatical Gender morphology. As noted in previous sections, +G is rendered as a Masculine Noun and -G as a Feminine

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[35] I am not taking into account the personification of e.g. ships, death or pets, which do not and cannot follow this rule since they are a stylistic instrument of a speaker.

Noun. Inanimate Nouns as *sofa* in (104d) have their grammatical Gender feature valued as 0G which translates as Neuter Gender in surface structures.

Czech and Spanish grammatical ±G values do not always reflect extra-linguistic reality, which shows in the fact that cross-linguistically the same objects can be marked by different grammatical Genders as illustrated in (105) and (106).

105. a. (Cz) *Viděl jsi ten stůl$_{MASC}$?*
    b. (En) *Have you seen the table$_{NEUTR}$?*
    c. (Sp) *Has visto la mesa$_{FEM}$?*
106. a. (Cz) *Koupil jsi tu stoličku$_{FEM}$?*
    b. (En) *Have you bought the stool$_{NEUTR}$?*
    c. (Sp) *Has comprado el taburete$_{MASC}$?*

In the examples above, the grammatical Gender feature on *the table* in English is valued 0G, as opposed to Gender features on its Czech counterpart *ten stůl,* which is +G, and Spanish *la mesa,* which is -G. Another inanimate object of the same class *the stool* is marked as -G in Czech. Furthermore, different Genders referring to the same object may also be found inside one language system, where different dialects of the same language refer to the same extra-linguistic object as illustrated in (107).

107. a. (Cz) *brambor$_{MASC}$/ brambora$_{FEM}$*

    potato$_{MASC/FEM}$
    b. (Cz) *hadr$_{MASC}$/ hadra$_{FEM}$*

    cloth$_{MASC/FEM}$

Czech has different grammatical Genders on some inanimate objects in different dialects. All this is sufficient evidence for seeing **Gender as relevant for the syntactic component**.

In some cases, **the Gender of an N shifts its meaning** and is thus highly **relevant for the semantic interface** as well. This can happen with both animate and inanimate Nouns as illustrated in (108).

108. a. (Sp) *el cometa/ la cometa*

   a comet/ a kite

   b. (Sp) *el editorial/ la editorial*

   an editorial/ a publishing house

   c. (Cz) *detektiv/ detektivka*

   a detective/ a detective story

Therefore, I suggest classifying **Gender as a syn-sem feature**, the relevance of which may be of different importance depending on the linguistic context.

2.3.4 Case

Having discussed Number and Gender in Sections (2.3.1) and (2.3.3) respectively, we are left with Case as the third phi feature. As highlighted above, Case is a relevant diagnostic tool for the structure of NP, though it is employed in the Nominal Phrase only in Czech. Again, two situations must be differentiated.

First, Case is usually the same in the whole Nominal Phrase if there is no EQ which does not overtly agree with the N is modifies.

109. (Cz) *[krásné děvče]*$_{NEUTR.SG.NOM.}$ *s [modrými vlasy]*$_{MASC.PL.INSTR.}$

   "a beautiful girl with blue hair"

Czech nominal inflection in bold overtly reflects Gender, Number and Case as expected. But in (109), we can find two **Nominal Phrases in different Cases**. The Case of the whole nominal phrase is assigned either by the Tense feature, a Verb, a Preposition or another Noun. In other words, the assigner is structurally external to the NP.

Each Nominal Phrase categorial head is then inflected with a portmanteau morpheme which reflects all phi features of the Noun including the Case (for a detailed account see Veselovská 2018, Chapter 2). However, the extra-linguistic reference of the phrase is not changed with the Case, i.e. this feature is not relevant for semantics.

Second, in the lexical cases, i.e. Genitive, Dative, Local and Instrumental, all the heads of nominal phrase reflect the assigned Case as illustrated in (110) and (111), with or without an EQ.[36]

110. a. (Cz) *Neviděla [mnoho [pěkných míst]$_{GEN}$]$_{ACC}$.*
    b. (Cz) *Neviděla *[mnoho [pěkná místa]$_{NOM}$]$_{ACC}$.*
        "She didn´t see many pretty places."

111. a. (Cz) *Mluvila jsem s [několika [inteligentními muži]$_{INSTR}$]$_{INSTR}$..*
    b. (Cz) *Mluvila jsem s *[několika [inteligentních mužů]$_{GEN}$]$_{INSTR}$.*
        "I talked to several intelligent men."

Third, in structural cases, i.e. Nominative and Accusative, several Existential Quantifiers reflect the Case assigned from outside the Extended NP, but the lexical head of the rest of the phrase is in the **Genitive**.

The functional elements which themselves exhibit **no agreement flexion assign Genitive**; i.e. *málo* 'few/ little'*, pár* 'a few'*, několik* 'several'*, mnoho* 'many/ much'*, trochu* 'a little' and numerals higher than four. On the other hand, the EQs which do not assign Genitive Case are the agreeing *nějaký* 'some'*, jakýkoli* 'any'*, žádný* 'no' and they copy the agreement patterns of Adjectives. I discuss these elements in the following Section (2.3.5) together with the relation of Case inside the Nominal Phrase and the prepositions *of* and *de* in English and Spanish.

To conclude this part of the discussion, Case is a purely syntactic instrument which does not influence the semantics of the Nominal Phrase, which can be seen both by its absence in English and Spanish as well as by the **changes** within an NP **dependent on its syntactic position**, but not on semantics.

2.3.5 Case in Czech nominal phrases and its relation to Prepositions

This section is concerned with two matters. First, I look at the **Case from a cross-linguistic point of view** and second, I discuss the main issue of this section – the presence of **Genitive** within Czech NPs in Nominative and Accusative **and its function.**[37]

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[36] Veselovská (2001) provides a division and also an account why this phenomenon appears only in structural positions.

[37] The possessive *of/ de* and derived possessive are discussed in Section (3.3).

In the Nominal Phrases across Czech, English and Spanish we find only one morphological case in Czech and only one preposition connecting Extended NP elements in English and Spanish, as illustrated in (112) and (113). This cannot be a coincidence.

112. a. (Cz) *Pět (z) mých$_{GEN}$ bratrů$_{GEN}$ hraje fotbal.*
    b. (En) *Five (**of** my) brothers plays football.*
    c. (Sp) *Cinco (**de** mis) hermanos juega fútbol.*

113. a. (Cz) *Pár (z těch$_{GEN}$) mužů$_{GEN}$ by mi pomohlo.*
    b. (En) *A few (**of** the) men would help mi.*
    c. (Sp) *Un par **de** (los) hombres me ayudaría.*

114. a. (Cz) **Pět mým$_{DAT}$ bratrům$_{DAT}$ hraje fotbal.*
    b. (En) **Five **to** my brothers plays football.*
    c. (Sp) **Cinco **para** mis hermanos juega fútbol.*

115. a. (Cz) **Pár s těmi$_{INSTR}$ muži$_{INSTR}$ by mi pomohlo.*
    b. (En) **A few **with** the men would help mi.*
    c. (Sp) **Un par **con** los hombres me ayudaría.*

In examples (112) and (113), there are two possible constructions. In the first one, a part of the phrase is either in Genitive (in case of Czech) or the phrase contains the preposition *of* (in case of English) or *de* (in case of Spanish).[38] The first type of construction with prepositions was excluded from the scope of this thesis in Section (1.6) as it is a combination of two Extended NPs. In the second one (exemplified also in (116) and (117)), the prepositions are not present and the Genitive Case in Czech is not overtly translated. For the purpose of the present discussion, it is appropriate to comment on both types.

As the Nominative Case is connected with the subject position and the Accusative Case is connected with the object position, the Genitive Case is a case

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[38] In the example below we see that the prepositions *od/ from/ desde* are ungrammatical in this type of phrases though *od* assigns the Genitive Case.

  1. a. (Cz) **Pět **od** mých bratrů hraje fotbal.*
      b. (En) **Five **from** my brothers plays football.*
      c. (Sp) **Cinco **desde** mis hermanos juega fútbol.*

assigned to a Noun by a Noun (Veselovská 2001 and others) or a Preposition or in this case some EQs. The Genitive Case is the only Case assigned by Nouns, or elements with nominal status, as illustrated in (114) and (115). These examples show that the Dative Case and the Instrumental Case are ungrammatical in this context in Czech, English and Spanish. In other words, **Cases** generally express **a specific relation between two syntactic elements.**

The absence of an overt Case marker in a grammar system is dealt with in different manners. In the absence of Nominative or Accusative we can still see obligatory agreement on a Verb or a fixed position for the relevant NP within the clause structure. In the absence of oblique cases there are usually Prepositions. As suggested above and illustrated in (116) and (117), this is not true for the Czech Genitive Case within Extended NPs and its counterparts in English and Spanish. There is no preposition in the constructions below.

116. a. (Cz) *Máme šest černých koček.*

    b. (En) *We have six black cats.*

    c. (Sp) *Tenemos seis gatas negras.*

117. a. (Cz) *Koupili mnoho různých knih.*

    b. (En) *They bought many different books.*

    c. (Sp) *Compraron muchos libros diferentes.*

As commented on in the previous Section (2.3.1), the **Genitive** case assigned by an Existential Quantifier to the rest of the phrase is **only visible** when the whole NP is **in a structural case**, i.e. the Nominative or Accusative Case, and when the EQ position is filled by a **Quantifier with a non-adjectival agreement**. The Adjectival agreement in the functional layer of Extended NPs, i.e. in UQ, D or EQ, is unique for the EQs listed in Section (2.3.4), as illustrated in (118) and (119) below.

118. a. (Cz) *Přišli s t**ěmi**/ nějak**ými** červen**ými** taškami.*

        came with the$_{INSTR}$ some$_{INSTR}$ red$_{INSTR}$ bags

        'They came with the/ some red bags.'

119. a. (Cz) *Nemluvili o vš**ech**/ žádn**ých** špatn**ých** studentech.*

        not spoke about all$_{DAT}$ no$_{DAT}$ bad$_{DAT}$ students

        'They didn´t speak about all/ no bad students.'

I claim that, in the above examples, the Adjectival agreement in the form of *-ý* (underlined) which appears in As and EQs, but not in Ds, signals the close relation of Q and N. This overt morphology thus serves the same function as the **nominal features in the functional head EQ** manifested by the presence of Genitive.

      The absence of any prepositional construction in English and Spanish for the same construction suggests that we are dealing with a simple Extended NP structure. Therefore, I conclude this discussion by stating that in Czech, **Genitive** within a single Extended NP (i.e. in Nominative and Accusative) as well as the **Adjectival agreement on EQ signals overt realization of the head feature Q.**

2.4 Reanalysis of Definiteness as 0Universality

More tentatively than what I have said about phi-features, I argue in this section that Definiteness and the Definiteness feature are not as inherent to the nominal domain as it may seem, given the extensive semantic literature on this topic. I claim that the concept of **Definiteness** NP can be essentially **replaced by the Universality feature** as a positional feature in the three Extended NP positions UQ, D, EQ **and** the presence of the **semantic Definiteness** feature in several elements.

      The position of Definiteness as an indispensable part of the semantic load of nominal domain is not strong. The **concepts of specificity and definiteness,** as something known to only the speaker or to both speaker and hearer respectively, **both indicate only the mental states** of discourse participants. As a matter of fact, the same referent can be described by both definite and indefinite NP as illustrated in (120).

120. Speaker A: *There is **a/ the cat**$_i$ on the porch.*

    Speaker B: *That´s a/ the **neighbour's cat**$_i$.*

    Speaker C: ***That/ A cat**$_i$ can be awful.*

This is also the reason why specificity and definiteness are often **not** straightforwardly expressed nor systematically differentiated **in morpho-syntactic** constructions outside of the D position, i.e. why Definiteness has minimal syntactic impacts in Agreement.

On the other hand, to get rid of the concept of Definiteness is not a wise idea either, as in English and Spanish we have both Definite and Indefinite Determiners, at least in singular.[39] However, in my view it should not be kept as an obligatory or separate morpho-syntactic feature of the nominal domain, but rather as a defining semantic feature on the same level as those discussed in Chapter 3, which is the analysis foreshadowed here.

Since the Definiteness has always been connected with the D position, it is necessary to revisit the other properties of this position as well. As suggested above, I connect this position with the 0 Value of the Universality feature.[40] As opposed to the Quantifying positions UQ and EQ, which narrow down the set of objects being referred to; **no quantification is expected from the D position**. Therefore, it seems only logical that it will be connected with a 0 value. In the next Section (2.5), I explore the consequences of this analysis.

2.5 Universality

In the present analysis, the Universal feature is obligatorily present for the positions UQ, D and EQ (= SPEC(D), D, and SPEC(N)) like the phi-features. The values +Universal and −Universal are rendered as universal and existential quantification respectively and they are intrinsic to these two Q positions. 0Universal, i.e. no quantification, is connected with the D position. In (121) – (123) I illustrate the values of each position.

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[39]I discuss the realization of both definite and indefinite feature values (connected with the definite and indefinite articles) on Ns in Czech in Section (2.6).

[40]As to the label "**Universal**", the reader might ask, why not use rather the term Existential for the values of this feature, if the EQ is the position for an overtly expressed head Q feature. The fact is that "Universal" makes more sense. Both +Universal elements and 0Universal elements confirm that the entity being referred to is the one suggested by either the extra-linguistic context or by the speaker's Universe of Discourse (as suggested by Emonds 2012a, citing lectures by Chomsky). They do not bring new information about the modified N.

121. a. (Cz) *[Všichni$_{+UNI}$]$_{UQ}$ chlapci jsou vysocí.*

b. (En) *[All$_{+UNI}$]$_{UQ}$ boys are tall.*

c. (Sp) *[Todos$_{+UNI}$]$_{UQ}$ chicos son altos.*

122. a. (Cz) *[Někteří$_{-UNI}$]$_{EQ}$ chlapci mají malé nohy.*

b. (En) *[Some$_{-UNI}$]$_{EQ}$ boys have small feet.*

c. (Sp) *[Algunos$_{-UNI}$]$_{EQ}$ chicos tienen pies pequeños.*

123. a. (Cz) *[Tito$_{0UNI}$]$_{D}$ chlapci znají mojí sestru.*

b. (En) *[These$_{0UNI}$]$_{D}$ boys know my sister.*

c. (Sp) *[Estos$_{0UNI}$]$_{EQ}$ chicos conocen a mi hermana.*

Whereas UQs refer to a whole set of referents, EQs refer only to some part of this set. Ds do not provide quantification but determine the set of referents. As noted above, the values of the Universal feature are inseparable from the Extended NP positions, i.e. they influence the order of the elements in the nominal domain of Czech, English and Spanish.

Emonds 2012 argues that as universal quantification does not change the extra-linguistic reference set, it should not be considered a quantifying, but rather an emphasizing tool. All bracketed and indexed NPs in (124) - (126) refer to the same set of referents. The elements which are UQs are *all, every, each, both* and are discussed in more detail in Chapter 6. Their respective counterparts in Czech and Spanish which share these properties can be found in the examples below.

124. a. (Cz) *[Ti chlapci]$_{i}$ jsou vysocí. [Všichni ti chlapci]$_{i}$ jsou vysocí.*

b. (En) *[The boys]$_{i}$ are tall. [All the boys]$_{i}$ are tall.*

c. (Sp) *[Los chicos]$_{i}$ son altos. [Todos los chicos]$_{i}$ son altos.*

125. a. (Cz) *[Dva chlapci]$_{i}$ jsou vysocí. [Oba dva chlapci]$_{i}$ jsou vysocí.*

b. (En) *[Two boys]$_{i}$ are tall. [Both two boys]$_{i}$ are tall.*

c. (Sp) *[Dos chicos]$_{i}$ son altos. [Ambos dos chicos]$_{i}$ son altos.*

126. a. (Cz) *[Chlapci z Opavy]$_{i}$ jsou vysocí. [Každý chlapec z Opavy]$_{i}$ je vysoký.*

b. (En) *[Boys from Opava]$_{i}$ are tall. [Each/ every boy from Opava]$_{i}$ is tall.*

c. (Sp) *[Chicos de Opava]$_{i}$ son altos. [Cada chico de Opava]$_{i}$ es alto.*

I agree with Emonds that **whether quantification is or is not present is questionable** considering the interpretation of UQs. For now, I conclude that the Universality feature is undoubtedly classified as a syn-sem feature for its structure-ordering properties inside of the NP and for differences in meaning of UQs, Ds and EQs.

Replacing the Definiteness feature with the Universality feature resolves at least two issues. First, the positions in the Extended NP are now unified by three values of the Universality feature which has an objective syntactic and semantic definition. Second, the definiteness and specificity are still parts of the nominal entry but they are only optional for successful structure generation.

In the following Section (2.6) I finish the discussion by focusing on the non-prototypical realization of the phi-features and Universality in Czech, representing a language with optional determiners.

2.6 The function of articles and how Czech copes with their absence

In spite of the lesser function of Definiteness within the Nominal Phrase in the present analysis, the articles play a crucial role in the structure building. As noted in Chapter 1 and illustrated again in (127) and (128), an overt Determiner is generally obligatory in English and Spanish, but not in Czech (129).

127. a. (En) *The/ A/ One swimsuit is ready.*

     b. (En) **Swimsuit is ready.*

128. a. (Sp) *Quiero ir a la/ una comisaría.*

          'I want to go to the police station.'

     b. (Sp) **Quiero ir a comisaría.*

          want$_{1ST.SG.}$ go to police station

129. a. (Cz) *Mám pro Evu toho/ jednoho/ nějakého plyšáka.*

          'I've got the/ one/ some plush toy for Eva.'

     b. (Cz) *Mám pro Evu plyšáka.*

          have$_{1ST.SG.}$ for Eva$_{ACC}$ plush toy$_{ACC}$

          'I've got a plush toy for Eva.'

In this section I argue that the **main function of determination** within the Extended NP **is the overt realization of the head feature Q,** and its optional presence in Czech is

redeemed by obligatory Case-Gender-Number, i.e. phi-features, reflecting suffixes on the Noun which are in fact **Alternatively Realized** indefinite articles in the sense of Emonds 1987. As a result, the otherwise obligatorily filled position in the Extended NP may remain empty under the **Invisible Category Principle** in the sense of Emonds 2000.[41]

Within the Czech NP, there are two layers which are reflected by frequently (but not always) differing suffixation in agreement with the N – the functional (D and Q position) and lexical Adjectival positions. In (130) - (132), I illustrate this difference as well as the obligatory suffixes on the Ns (compare (130b), (131b) and (132b) with uninflected forms in (133)). The relevant morphemes are in bold.

130. a. (Cz) *[**Te**n krásn**ý** dům-**Ø**]*$_{NOM.SG.}$ *je na kopci.*

'The beautiful house is on a hill.'

b. (Cz) *Jdeme do [**to**ho krásn**ého** dom**u**]*$_{GEN.SG.}$*na kopci.*

'We´re going to the beautiful house on the hill.'

c. (Cz) *Mluvili jsme o [**to**m krásn**ém** dom**ě**]*$_{LOC.SG.}$*na kopci.*

'We spoke about the beautiful house on the hill.'

131. a. (Cz) *[**Ta**to mlad**á** žena]*$_{NOM.SG.}$ *je velmi statečná.*

'This young woman is very brave.'

b. (Cz) *Chtěl bych mluvit s [**tou**to mlad**ou** ženou]*$_{INSTR.SG.}$.

'I would like to speak to this young woman.'

c. (Cz) *Mluvili jsme o [**té**to mlad**é** žen**ě**]*$_{LOC.SG.}$.[42]

'We spoke about this young woman.'

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[41] **Invisible Category Principle (ICP)** (Emonds 2000)
If all marked canonical features F on B are alternatively realized, except perhaps B itself, then B may be empty.

[42] The proximal demonstratives *tento, tato, toto* in Czech (=*this* in English) reflect the phi-features of the N on its first syllable as opposed to the distal demonstratives *tamten, tamta, tamto* and all the other elements in the Extended NP. I am not aware of any analysis of this phenomenon in the literature and I do not have any solid analysis of my own. Given the cross-linguistic nature of this thesis, I leave this matter for further research and for now, consider it a post-syntactic phenomenon which does not interact with the structure.

132. a. (Cz) *[Jedno červené auto]* je zaparkované na ulici.

   'One/ A red car is parked in the street.'

   b. (Cz) *Nastoupili do [jednoho červeného auta]*.

   'They got in one/ a red car.'

   c. (Cz) *Jsme tu kvůli [jednomu červenému autu]*.

   'We are here because of one/ a red car.'

133. a. (Cz) *Jdeme do (toho*_{GEN.SG.} *krásného*_{GEN.SG.}*) domu*_{GEN.SG.}*/ *dům*_{NOM.SG.}*.*

   b. (Cz) *Chtěl bych mluvit s (touto*_{INSTR.SG.} *mladou*_{INSTR.SG.}*) ženou*_{INSTR.SG.}*/ *žena*_{NOM.SG.}*.*

   c. (Cz) *Jsme tu kvůli (jednomu*_{DAT.SG.} *červenému*_{DAT.SG.}*) autu*_{DAT.SG.}*/ *auto*_{NOM.SG.}*

This set of examples illustrates several points. First, it shows that Adjectival suffixes are longer than agreeing morphemes in the functional layer above N.[43] The difference in suffixes in different layers of NP has already been mentioned in Section (2.3.4). Second, the Ns are obligatorily inflected by a portmanteau morpheme expressing phi-features. The form of this morpheme is directly dependent on the Case, Gender and Number the N appears in. Third, in (133) we can see that while the modifying elements are not obligatory, i.e. the **N can stand bare**, it is the **inflection expressing phi-features that is indispensable** to generate a grammatical utterance. Throughout the Cases of NPs, there are present syncretisms both in the lexical Ns and Adjectives as well as in the functional layer of Plural Ns. For example, in the Czech plural, the functional agreement with the N is syncretic for all Genders with the exception of Nominative, Accusative and Vocative Case.

   To make sense of this data set, first, I argue that the head feature Q which is generated on, i.e. canonically associated with, EQ is Alternatively Realized on N, which is the sister of EQ, as in Emonds, 1987:

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[43] See Chapter 5 for the argumentation in favor of seeing this length as Alternatively Realized N suffix (Emonds 2000).

134. **Alternative Realization (AR)**

A syntactic feature F canonically associated with category B can be realized in a closed class grammatical morpheme under X^0, provided X^0 is the lexical head of a sister of B or some projection of B.[44]

Second, under the Invisible Category Principle suggested by Emonds 2000, the EQ, and as a matter of fact all the other positions in the Czech Extended NP may remain empty, as all the phi features are realized on N itself.

135. Invisible Category Principle (ICP)

If all marked canonical features F on B are alternatively realized, except perhaps B itself, then B may be empty.

Just as D does not in itself express +Def or -Def, neither does the Case-inflection. The latter is just "a D". These two principles, which are used also with Adjectives in Chapter 5, resolve the question of the apparent non-obligatory determiner in Czech. Therefore, I leave this matter and move to a more detailed analysis of featural content of individual elements which is provided in Chapter 3 after a short summary of Chapter 2.

2.7 Summary of Chapter 2

Chapter 2 has established and advocated three-valued features, with the focus on phi-features, which in the present analysis include Number, Gender and Case, as well as the Universality feature, which is a positional feature. The values are always +F, -F and 0F, though their cross-linguistic distribution is not universal. Pre-theoretically, the three-value system has been shown to predict grammatical and exclude ungrammatical patterns in the Extended NP of Czech, English and Spanish.

This chapter has also addressed the interface relevance of the features which is one of the defining characteristics for each feature and directly influences the effect the presence of the feature has. The interface relevance is a cross-linguistically universal characteristic, i.e. for a feature it is the same across languages. Whereas Gender, Number and Universality features are of the syn-sem type, the Case in Czech is a purely syntactic feature, at least inside the boundaries of the Extended NPs.

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[44] Emonds 2000 changes sister of B to some projection of B.

Addressing the Number feature, I have gotten rid of the Countable/ Uncountable Nouns distinction, as that matter is already covered by the three values of Q.

The analysis of the Gender feature explored the relationship between grammatical and extra-linguistic Gender to state that while they do not always coincide, there is a connection between the two characteristics.

The Case feature was analyzed from two points of view. First, cross-linguistically as an expression of relations between two elements in the structure; and second, with the emphasis on its role within the Czech Extended NP. Cross-linguistically, Case is replaced by other grammatical instruments, and in the Case of NPs, these are either prepositions or simple apposition of the relevant elements.

The final section focused on the Alternative Realization of determiners in Czech, which does not require any other determination.

3. Lexical-semantic features

Chapter 1 offered a basic overview of functional elements in the Extended NP of Czech, English and Spanish. Part of this overview was a division into three categories, which are dependent on the structural position of given element.

Three positions UQ, D and EQ accommodate an array of elements with different featural content but as shown in Chapter 2, all these elements agree with the lexical head N in phi-features (whether overtly or not) and their structural position is determined by the Universality feature value.

As opposed to Chapter 2, which focused on the common characteristics of the functional elements, the present Chapter focuses on features which create the differences among individual elements. The analysis of these features should provide an explanation of co-occurrence idiosyncrasies.

The table (136) presents an array of these features with appropriate sections and the table (137) lists functional elements with their featural content.

136. Cross-linguistic features used to classify Determiners and Quantifiers

Chapter	Label	Determiners	Quantifiers
Chapter 2	Phi features	Number (2.3.1)	
		Gender (2.3.3)	
		Case (2.3.4)	
	Positional features	Universality (2.4 and 2.5)	
Chapter 3	Lexical-semantic Features	Definite (3.1) Demonstrative (3.2) Person and Possessive (3.3)	Dual (3.4) Negative (3.5) Qualitative and Distributive (3.6) Expectative (3.7)

137. Featural classification of elements in the Extended NP

Syntactic position	Element *CZ/ EN/ SP*	Featural content
UQ	*všechny/ all/ todos*	+Pl, +Uni, -Distr
	... /every/ ...	~~+Pl,~~ +Uni, ±Distr
	každý/ each/ cada	-Pl, +Uni, +Distr
	oba/ both/ ambos	+Pl, +Uni, +Dual
D	*possessive pronouns*	±Pl, +Def, 0Uni, +Pers, +Poss
	... / a/ un	-Pl, -Def, 0Uni
	ten/ the/ el	±Pl, +Def, 0Uni
	tento/ this/ este	-Pl, +Def, +Dems, 0Uni, +Prox
	tamten/ that/ aquel	-Pl, +Def, +Dems, 0Uni, -Prox
	.../ .../ ese	-Pl, +Def, +Dems, 0Uni, 0Prox
	tito/ these/ estos	+Pl, +Def, +Dems, 0Uni, +Prox
	tamti/ those/ aquellos	+Pl, +Def, +Dems, 0Uni, -Prox
	takový/ such/ tal	±Pl, -Def, +Qual, 0Uni
	který/ which/ cuál	±Pl, +Def, +Distr, -Qual, 0Uni
	jaký/ what/ qué	±Pl, -Def, -Distr, +Qual, 0Uni
EQ	*jakýkoli/ any/ cualquier*	±Pl, -Def, Uni, 0Neg
	žádný/ no/ ningún	±Pl, -Def, -Uni, +Neg
	nějaký/ some/ algún	±Pl, -Def, -Uni, -Neg
	numerals	+Pl, -Def, -Uni, +Distr
	mnoho/ many / muchos	+Pl, -Uni, +Exp
	pár/ (a) few/ un par de	+Pl, -Uni, -/0Exp
	trochu /a little / un poco	0Pl, -Uni, -/0Exp
	několik/ several/ varios	+Pl, -Uni, 0Exp

In contrast with the other chapters, the present chapter is often focused on the semantic properties, as the features which are discussed here are in many cases purely semantic. I should note that this is not a complete list of the featural content of the Extended NP in the three languages but rather a probe focusing on contrastive features which are in my view central to differentiate individual elements.

If one goal of determination is to convey phi-features to syntactic context, another goal is to specify and quantify. The nature of these specifications and quantifications is determined by the featural content of the determiner.

3.1 Definiteness feature

As opposed to other features, the Definiteness feature comes in three values in none of the three languages and misses the value 0Definite. That means that Czech, English and Spanish elements which carry this feature can be sorted into two groups using these values: definite elements, with the value +Def, and indefinite elements, with the value –Def. From the table (137) it is obvious that most of the elements are +Def, i.e. that **+Def is the default value**.

In this section, I discuss two main issues connected with the Definiteness feature. First, the definiteness effect, and second, the combinatorial properties of elements with different or the same values of the Definiteness feature.

3.1.1 Definiteness effect

One of the ways to confirm the relevance of Definiteness for the syntactic interface is the definiteness effect (Milsark 1977), which states that no definite phrase can appear as a complement in the expletive construction *there* plus copula. Since this work, it has been shown that the definiteness effect is not as general as first claimed for English or other languages. Spanish has a similar effect in the construction with *haber* 'exist', as first pointed out by Suñer 1982 and discussed in detail by Leonetti 2008. In Czech, this constraint is parametrically lost, which is caused partly by the presence of the *pro-drop* parameter and partly by the structural identity of locative and existential structures. However, my claim is that the feature values +Definite and –Definite are the same in Czech as in their respective counterparts in English and Spanish, as discussed in (2.2) and summarized in (87). The following examples (138) – (141) illustrate the definiteness effect test in the three languages.

138. a. (Cz) *Na zahradě jsou [nějaké$_{-DEF}$]$_{INDEF}$ židle.*

b. (En) *There are [some$_{-DEF}$]$_{INDEF}$ chairs in the garden.*

c. (Sp) *En el jardín hay [(alg)unas$_{-DEF}$]$_{INDEF}$ sillas.*

139. a. (Cz) *Na zahradě je ([nějaká₋DEF]INDEF) židle.*

   b. (En) *There is [a₋DEF]INDEF chair in the garden.*

   c. (Sp) *En el jardín hay [una₋DEF]INDEF silla.*

140. a. (Cz) *Na zahradě jsou [tamty₊DEF]DEF židle.*

   b. (En) **There are [those₊DEF]DEF chairs in the garden.*

   c. (Sp) *?En el jardín hay [aquellas₊DEF]DEF sillas.*

141. a. (Cz) *Na zahradě je [ta₊DEF]DEF židle.*

   b. (En) **There is [the₊DEF]DEF chair in the garden.*

   c. (Sp) ** En el jardín hay [la₊DEF]DEF silla.*

If the ±Definite feature is to be the same for all the considered elements, then the definiteness effect should hold for all the +Def elements in one language. Nevertheless, as noted in the literature, the definiteness effect is not general for all +Def elements. McNally (1992, 1998) argues that e.g. demonstratives and definite articles should be considered as two separate groups with respect to the definiteness effect. This is illustrated by different level of ungrammaticality in Spanish above in (140c) and (141c), which illustrate a demonstrative and a definite article respectively. Whereas the demonstrative has been accepted by some native speakers and rejected by others, the definite article is completely ungrammatical.

   Throughout this thesis, I will assume that though the definiteness effect test yields mixed results, the ±Definite feature represents the same characteristics for all the elements in the Extended NP, and, that it is the co-occurrence with other features which causes McNally´s discrepancy. For a discussion of the relation of Definiteness to the Demonstrative feature, see Section (3.2).

   As to the definiteness effect test itself, Leonetti 2008 limits the definiteness effect to pure existential constructions (142c), as opposed to the eventive ones (142b). Structurally, pure existential constructions contain a "coda", which is a locative phrase. On the other hand, his eventive constructions contain a developed NP and no coda, as indicated by the bracket in the following example (142).

142. a. (Cz) *Na zahradě je [ten+DEF]DEF/ [nějaký-DEF]INDEF jednorožec.*

    b. (En) *There is [[the+DEF]DEF unicorn in the garden].*

    c. (En) *There is [[a-DEF] unicorn]INDEF [in the garden].*

    d. (Sp) *Hay *[el+DEF]DEF / [un-DEF]INDEF unicornio en el jardín.*

To sum up, adapting the analyses introduced in the previous paragraphs, **I limit the definiteness effect test to purely existential constructions** and state that any other idiosyncrasies are a result of the combination of the Definiteness feature with other features, more specifically +Demonstrative. For a further discussion of existential construction and the definiteness effect see the authors named in this section.

3.1.2 Definiteness is not connected to co-occurrence

It has been stated that elements which carry the Definiteness feature in the Extended NP are valued ±Def. Since we also know that the co-occurrence of functional elements is possible but idiosyncratic in Czech, English and Spanish (at least for elements with plural reference as suggested in Section (1.5)), a question arises whether the value of the Definiteness feature plays a role in limiting this co-occurrence in any or all three languages. If so, it would be a syntactic effect internal to the nominal domain.

So far, I have demonstrated that the co-occurrence of functional elements in Czech, English and Spanish Extended NPs is not based on a universal principle but it is parameterized, i.e. different for each language, which means that if the value of the Definiteness feature (or any other feature as a matter of fact) has an effect on the co-occurrence of functional elements in Extended NPs, this effect has to be parametrically set as well.

The table (78), which gives a complete overview of co-occurrence in the three languages, shows that the D and EQ co-occurrence restrictions are possible in all three studied languages both with different values of the Definiteness feature. I illustrate this in (143).

143. a. (Cz) *[Ti+DEF]DEF [tři-DEF]INDEF kluci si zpívali.*

    b. (En) *[The+DEF]DEF [three-DEF]INDEF boys were singing.*

    c. (Sp) *[Los+DEF]DEF [tres-DEF]INDEF chicos estaban cantando.*

But the fact that two elements D and EQ with opposite values of the Definiteness feature co-occur cannot be generalized to all elements as illustrated in (144) in any of the three studied languages. Therefore, I conclude that the Definiteness feature does not interact with the ability to co-occur and therefore there is no reason to consider it relevant for the syntactic interface with respect to the structure of the Nominal Phrase.

144. a. (Cz) *[Ti$_{+DEF}$]$_{DEF}$ [někteří$_{-DEF}$]$_{INDEF}$ kluci si zpívali.[45]

   b. (En) *[The$_{+DEF}$]$_{DEF}$ [some$_{-DEF}$]$_{INDEF}$ boys were singing.

   c. (Sp) *[Los$_{+DEF}$]$_{DEF}$ [algunos$_{-DEF}$]$_{INDEF}$ chicos estaban cantando.

To sum up this and the previous section, the Definiteness feature is thus considered to be a syn-sem feature because of the definiteness effect. The syntactic operations which are conditioned by the value and as a matter of fact the presence of the Definiteness feature are **external to the nominal domain**, e.g. they are rather in the clausal existential structures as exemplified in (142a).

3.1.3 Definite determiners from a cross-linguistic point of view

Having assumed the universal DP hypothesis in Chapter 1, I argue that the structure of the Extended NP is obligatorily D-Q-(NP).[46] Section (2.6) in the previous Chapter 2 introduced grammatical instruments which help Czech to cope with the absence of an overt determiner. The present section focuses on cases where the determiner is overtly present, especially on the status of Czech determiners which could be considered definite articles from the cross-linguistic point of view.

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[45] By inverting the two elements in Czech, and adding *of* or *de* in English and Spanish respectively, this combination becomes grammatical.

   1. a. (Cz) **Mnoho tamtěch děvčat** *má dlouhé vlasy.*
      b. (En) **Many of those girls** *have long hair.*
      c. (Sp) **Muchas de aquellas chicas** *tienen el pelo largo.*

I argue in Chapter 1, Section (1.6), that this structure is not inside one single nominal domain, but consists of an NP and an emphasizing element which modifies the whole phrase.

[46] I will argue in Chapter 4 that though two positions are obligatory; they can be filled by only one element, but as already stated in Chapter 2, the middle position D/ 0Uni cannot be skipped.

One of the most prototypical elements assumed to be placed in D is the definite article as first suggested by Abney 1987. In Table (6) repeated here as (145), the definite articles *the* in English and *el* in Spanish are translated as *ten* or *Ø* in Czech.

145. Preliminary list of functional modifiers in masculine Gender in the Extended Nominal Projections of singular Nouns

Label	Czech	English	Spanish
weak definite	*ten/ Ø*	*the*	*el*
proximal definite	*tento*	*this*	*esto*
distal definite	*tamten*	*that*	*aquel/ ese*
indefinite	*jeden/ Ø*	*one/ a(n)*	*uno/ un*
distributive UQ	*každý*	*every/ each*	*cada*

As opposed to the other elements in the table (145), in the literature Czech *ten* is not a widely recognized counterpart of Spanish *el* and English *the*. Mathesius 1947 notes that *ten* and its variants for Feminine and Neutral Genders *ta* and *to* are used in contexts similar to the definite article *the* in English. However, *the* is translated as either a zero element **or** a demonstrative in such a high percentage of cases that this cannot be ignored. I propose *ten* and not demonstratives as counterparts of *the* for the following reasons:

- Semantic neutrality: The definite article is connected only with the +Definiteness feature of previous mention or shared knowledge, as opposed to demonstratives, which are also deictic.
- Its presence in demonstratives: When analyzed morphologically, all demonstratives in Czech contain *ten* or its variants for Feminine or Neutral gender. The same applies to English *this/ that (the)* and Spanish *aquel (el)*.
- Non-obligatory usage of determiners and pronouns in Czech: Postal (1966) analyzed pronouns as determiners with zero nouns. Since subject pronouns (i.e. determiners with zero nouns) are not obligatory in Czech, the same rule can explain the non-obligatory usage of determiners above an NP.

As to the usage of demonstratives, they come into play not only in translation into Czech but also between Spanish and English, as illustrated in (146).

146. a. (Cz) *Ten/ tento dům není drahý.*

   b. (En) *The/ This house isn´t expensive.*

   c. (Sp) *La/ Esta casa no es cara.*

Therefore, I consider the interchangeability of demonstratives and definite articles to be a part of a general cross-linguistic relationship resulting from the closeness of their featural content.[47]

Coming back to Czech *ten* as a counterpart to definite articles in English and Spanish, I conclude that the fact that *ten* is **non-obligatory does not stand in the way of this analysis**; and by extension it is not in the way of the analysis of Czech Extended NP as having the same positions D-Q-(NP) either.

When discussing the pro-drop parameter for the position of subject, nobody argues that a pro-drop language such as Czech does not have the subject position at all. To drop the subject is possible merely as a result of overt inflection on the verb, which reflects the full bundle of features of the empty subject position. The two variants *ten/ Ø* are thus similarly a manifestation of the pro-drop parameter in the Czech Extended NP, which allows leaving the D position empty since the D-position features are realized on N.

Of course, one cannot ignore that Spanish is a pro-drop language as well, and unlike Czech it uses the article obligatorily.[48] I claim that the difference between Czech and Spanish lies in the **complete feature bundle of D**, which is reflected in the suffix of a Czech Noun but not in Spanish, as discussed in Section (2.6) and later in Chapter 4. I illustrate this difference in (147).

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[47] Furthermore, when translating, each translator has his own style which may influence the choice of determiner as well.

[48] For the rules of usage of the definite article see *Real Academia Española* 2009: 825-894.

147. a. (Cz) *Chci (tu) kočku hned.*

       'I want the cat now.'

    b. (Cz) *Hráli si s (tou) kočkou celé odpoledne.*

       'They were playing with the cat all afternoon.'

    c. (Sp) *Quiero *(el) gato ahora.*

       'I want the cat now.'

    d. (Sp) *Jugaron con *(el) gato toda la tarde.*

       'They were playing with the cat all afternoon.'

In Chapter 4 I show in detail that **the function of the D-position is to ensure all the phi features of the NP** are visible for other syntactic members of the sentence and how this function can be realized in the nominal suffix in Czech. If this function of D can be provided by another suffix/ position than in this case, the D is not overt. This concrete example of Alternative Realization is summed up in (148).

148. Alternatively realized articles

If a morpheme M on a Noun N in a language X reflects all the phi features, then the language X allows dropping of the article.

In the following Section (3.1.4), I continue with the discussion of articles but focus on the indefinite article from the cross-linguistic point of view.

3.1.4 Indefinite determiners from a cross-linguistic point of view

The –Definite value of the Definiteness feature is proper to a smaller number of elements than the +Definite value, perhaps because it is difficult to define more shades of indefiniteness. This section discusses *a/ one/ some* and their counterparts in Czech and Spanish which overlap in their distribution (Dušková 1994 for Czech and English). As in the case of definite articles and demonstratives, their interchangeability is partially caused by closeness of their featural content, noting that stylistics comes into play as well as in the case of definite article. The featural content was presented in Table (137) and it is repeated in (149) for relevant elements.

149. Featural content of possible counterparts of indefinite article

Czech	English	Spanish	Featural content
jeden/ Ø	*a*	*un*	-Pl, -Def
jeden	*one*	*uno*	-Pl, -Def, -Uni, +Distr
nějaký	*some*	*algún*	±Pl, -Def, -Uni, -Neg

The goal of this section is to describe the cross-linguistic behavior of all three elements while keeping in mind that the indefinite article in Czech can be realized by the phi-feature suffix on N as suggested by (148) and Section (2.6). Thus, the preliminary list of functional modifiers in Extended Nominal Projection must be modified:

150. Modified list of singular functional modifiers in Extended Nominal Projections I.

Element	Czech	English	Spanish
weak definite	*ten*	*the*	*el*
proximal demonstrative	*tento*	*this*	*este*
distal demonstrative	*tamten*	*that*	*aquel/ ese*
numeral	***jeden***	***one***	***uno***
weak indefinite	***ϕ-feature suffix***	***a***	***un***
distributive UQ	*každý*	*every/ each*	*cada*

Assuming this division, I am not looking for a counterpart of the indefinite article in Czech but rather for a further analysis of elements which are overlapping in function with indefinite articles across languages.

All elements discussed here are –Definite, which makes the interchangeability possible. A prototypical countable concrete English and Spanish Noun in singular cannot generally stand without a determiner. On the other hand, as argued in the previous section, the Czech counterparts of both definite and indefinite articles are often zero morphemes though it is not the only option. As illustrated in (151) and (152), the indefinite article can be translated as *jeden* 'one' or *nějaký* 'some'.

151. a. (Cz) *(**Jeden/ Nějaký**) chlapec čeká u dveří.*

             one   some   boy   wait at door

    b. (En) ***A** boy is waiting at the door.*

    c. (Sp) ***Un** chico está esperando en la puerta.*

152. a. (Cz) *Viděla jsem (**jednoho/ nějakého**) chlapce.*

    b. (En) *I saw *(**a**) boy*

    c. (Sp) *Vi a *(**un**) chico.*

Furthermore, *one/ a* and *some* and *un/ uno* and *algún* are at least to some extent semantically interchangeable in both English and Spanish, as illustrated in (153).[49]

153. a. (En) ***One/ A/ Some** boy is wearing your jacket.*

    b. (Cz) ***Nějaký/ Jeden** chlapec má na sobě tvoje sako.*

    c. (Sp) ***Un*(o) /Un /Algún** chico lleva puesta tu chaqueta.*

Note that the Spanish *uno* 'one' loses the suffix *–o*. According to *Real Academia Española* 2009 this is a phonetic change. I agree with the analysis. In spite of identical forms in front of a masculine Noun, the semantics and syntax of the numeral *uno* and indefinite article *un* are different.

    One of the differences lies in the ability of taking an *of*-phrase as illustrated in (154) - (156).

154. a. (Cz) *Chlapci$_i$ jsou připraveni. **Jeden** z nich$_i$ je tady*

    b. (En) *The boys$_i$ are ready. **One** of them$_i$ is here.*

    c. (Sp) *Los chicos$_i$ están listos. **Uno** de ellos$_i$ está aquí.*

155. a. (Cz) *Chlapci jsou tady. * Ø/* ?/ z nich je tady.*

    b. (En) *The boys$_i$ are ready. ****A** of them$_i$ is here.*

    c. (Sp) *Los chicos$_i$ están listos. ****Un** de ellos$_i$ está aquí.*

156. a. (Cz) *Chlapci$_i$ jsou připraveni. ****Nějaký** z nich$_i$ je tady.*

    b. (En) *The boys$_i$ are ready. ****Some** of them$_i$ is here.*

    c. (Sp) *Los chicos$_i$ están listos. ****Algún** de ellos$_i$ están aquí.*

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[49] Colloquial English allows usage of stressed *some* with singular count Nouns though some prescriptive grammarians do not allow it (Huddleston and Pullum 2002). Herein, the usage is considered grammatical.

In all cases, the element in bold is intended to refer to an individual member of the co-indexed group marked as *The boys/ them*, or its respective translations. Whereas the numeral *one* and its counterparts in (154) have these referential properties, the indefinite article *a* and its counterparts in (155) cannot stand alone. In the three languages, only the numerals can take an *of*-phrase in singular.

The data sets in (153) - (156) also raise a question about English *some* and its counterparts Spanish *algún* and Czech *nějaký.* All these elements become grammatical in the same context when used in plural reference. (157) illustrates this situation in all three languages:

157. a. *(Cz) Chlapci$_i$ jsou připraveni.* **Nějací$_i$** *z nich* **jsou** *tady.*

    b. *(En) The boys$_i$ are ready.* **Some$_i$** *of them* **are** *here.*

    c. *(Sp) Los chicos$_i$ están preparados.* **Algunos$_i$** *de ellos* **están** *aquí.*

This suggests that the properties of *some* either change with the value of its Number feature or, implausibly, that it represents two separate elements for singular and plural.

The following Table (158) offers an overview the singular and plural forms *a, some* and *one* and their counterparts in Czech and Spanish.

158. Indefinite reference in singular and plural Extended NP

Language	Singular	Plural
Czech	*ϕ-feature suffix/ jeden/ nějaký*	*--/ jedni/ nějací*
English	*a/ one / some*	*--/ --/ some*
Spanish	*un/ un*(o) / algún*	*--/ unos/ algunos*

As shown in Table (158) and illustrated by the following set of examples, Spanish and colloquial Czech employ a plural form of the numeral *one*, i.e. *'ones'.*[50]

159. a. *(Cz) Jeden kamarád Lisy přijde zítra.*

    b. *(En) A friend of Lisa comes tomorrow.*

    c. *(Sp) Un amigo de Lisa viene mañana.*

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[50] Do not confuse this prenominal determiner with the Noun substitute *ones* in e.g. *the blue ones*.

160. *a. (Cz) Nějací/ Jedni kamarádi Lisy přijdou zítra*

     b. (En) Some friends of Lisa come tomorrow.

     c. (Sp) (Alg)unos amigos de Lisa vienen mañana.

The indefinite reference in the plural is provided by *some* and its counterparts in all three languages. The fact that Spanish and colloquial Czech offer another element can be possibly due to two reasons. First, as in the case of the suffix of numeral *uno* discussed above, it can be a phonetic shortening of *algún*. Second, *unos* can be the plural of the numeral and it is the counterpart of plural Czech *jedni*.

To my knowledge, there is no discussion in the literature of these elements in plural, there is no syntactic difference and native speakers report no objective semantic differences. Therefore, I assume the analysis of phonetic shortening for Spanish keeping this matter in mind for further research.

Czech *jedni* 'ones' is assumed to be more specific than *nějací* 'some' and possibly out of the scope of this thesis, as it can be considered the partitive-reference construction introduced in Section (1.6.1).

Thus, in this thesis, I take *nějací/ some/ (alg)unos* as a cross-linguistically unified indefinite reference for plural contexts. As to the singular context, these **semantically close elements** are assumed to **overlap in function** but not to be identical as they differ in both semantics and syntax.

3.2 Demonstrative feature

In this section I focus on the Demonstrative feature and its properties, but I also introduce and briefly discuss Spanish demonstratives from a cross-linguistic point of view with focus on their referential properties. The Demonstrative feature comes in three values ±Proximal and 0Proximal and these give names to demonstratives which are listed in Table (161):

161. Demonstratives in Czech, English and Spanish

Label	Value	Czech	English	Spanish
proximal demonstratives	+Proximal	*tento, tito*	*this, these*	*este, estos*
distal demonstratives	-Proximal	*tamten, tamta*	*that, those*	*aquel, aquellos*
neutral demonstratives	0Proximal	Ø	Ø	*ese, esos*[51]

In the present analysis, demonstrative pronouns are defined as elements which refer to a concrete object and require the presence of extra-linguistic object or its representation being referred to. The presence might be situational or contextual and as a consequence a number of authors differentiate two or more types of deictic reference (e.g. *Mluvnice češtiny*, 1986: 81).[52] Definiteness and Specificity are natural parts of the Demonstrative feature though, as already noted, highly subjective. In spatial reference, the proximal demonstrative connects with "the concept of here" and the distal demonstrative with "the concept of there" as illustrated in (162) – (165).

162. *a. (Cz) [Tohle$_{+PROX}$]$_{PROX}$ auto je tady.*

b. (En) [This$_{+PROX}$]$_{PROX}$ car is here.

c. (Sp) [Este$_{+PROX}$]$_{PROX}$ coche está aquí.

163. *a. (Cz) [Tamto$_{-PROX}$]$_{DIST}$ auto je tam.*

b. (En) [That$_{-PROX}$]$_{DIST}$ car is there.

c. (Sp) [Aquel$_{-PROX}$]$_{DIST}$ coche está allí.

164. *a. (Cz) [Tato$_{+PROX}$]$_{PROX}$ auta jsou tady.*

b. (En) [These$_{+PROX}$]$_{PROX}$ cars are here.

c. (Sp) [Estos$_{+PROX}$]$_{PROX}$ coches están aquí.

165. *a. (Cz) [Tamta$_{-PROX}$]$_{DIST}$ auta jsou tam.*

b. (En) [Those$_{-PROX}$]$_{DIST}$ cars are there.

c. (Sp) [Aquellos$_{-PROX}$]$_{DIST}$ coches están allí.

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[51] This three-way distinction is present also in Latin: *hic, iste, ille.*

[52] Literal translation: Grammar of Czech.

Whereas the proximal and distal demonstratives were listed separately in respective overviews in Chapter 1, the Spanish neutral demonstratives were not. The main reason is that in spite of ongoing discussion in the literature (e.g. Alarcos Llorach, 1976; Fernández Ramírez, 1987; Cifuentes Honrubia, 1989; Sarmiento, 1993; Leonetti, 2013) there is no consensus about its syntactic-semantic properties and native speakers' reports are contradictory as well which is probably a result of inter-speaker variation as already suggested by e.g. Sarmiento (1993: 97-98). Thus, as opposed to other elements which are systematically present in one language but missing in another (e.g. articles as discussed in the previous Chapter 2), demonstratives seem to represent a case of lexical rather than syntactic difference.

Therefore, I discuss some of the analyses and offer my own account which fits in the present system in the following paragraphs. Demonstratives are usually discussed from two points of view, the first one being their deictic properties and the other their anaphoric properties.

Real Academia Española (2009: 1280-81) offers two classifications of demonstratives which sum up basic approaches to demonstrative pronouns in Spanish. In **the first classification,** the **deictic properties** can be viewed as **connected to the Person feature**. *Este* expresses closeness to the speaker, *ese* expresses closeness to the addressee and *aquel* expresses distance from both speaker and addressee (which is in parallel to the 1st, 2nd and 3rd grammatical person).

In contrast with the first classification, **the second one** attributes with **deictic properties** only to *este* (close to the speaker) and *aquel* (close to the addressee) and **describes *ese* as a non-deictic and neutral demonstrative** which can be used in contexts where distance is not important.[53]

The authors listed above all adopt and adapt one of the two approaches. Based on the value 0Proximal of the Demonstrative feature assigned to neutral demonstrative in Table (161), the reader can correctly suppose that **I incline to the second analysis.**[54] I also follow Leonetti (2013: 69) in supposing that the **"closeness"** and **"distance"** in

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[53] Alarcos Llorach (1976: 62-63) partly shares this definition of *Real Academia Española*, i.e. viewing *ese* as a neutral element, but for him, the deixis expressed by these elements is only temporal.

[54] Alternatively, it would be possible to define *ese* by the combination of the ±Proximal feature (depending on the speaker) and the 0Person feature which suggest relation to the third person. For simplicity and systematicity, I prefer the analysis above.

Spanish **can be read not only literally** but also figuratively, e.g. in the temporal sense, as it is the case in Czech and English.

Supposing that *ese* is a neutral element as to the distance raises a question whether it should not be classified together with the definite article rather than demonstratives. In (166) I illustrate a case where Spanish demonstrative pronoun *ese* is translated as a definite article.

166. *a. (Cz) [To$_{+DEF}$]$_{DEF}$ auto vedle Lucie je nové.*
     b. (En) [The$_{+DEF}$]$_{DEF}$ car next to Lucie is new.
     c. (Sp) [Ese$_{0PROX}$]$_{IMPERS}$ coche al lado de Lucie es nuevo.

Erbenová (2017) explores a corpus data set focused on Spanish demonstratives and their Czech counterparts to determine how are *esto, ese, aquel* translated into Czech. She does not give a statistics but offers several conclusions based on examples found in corpus (Rosen and Vavřín: Intercorp, 2017) which suggest that the definite article should be taken into account as a counterpart of all the above mentioned demonstratives.

In the present system, it is only natural that if an element present in one language system is missing from another, it will be substituted by the featurally closest element possible. For reminder, I offer a list of elements which are generated in the 0UNI, i.e. D position.

167. List of Determiners in English

Determiners	*the, this, these, that, those, which, what, a,* possessives

Given the poor featural content of demonstratives, the most suitable candidate for the counterpart of *ese* is the definite article which misses the deictic properties but otherwise fulfils the function of demonstratives. However, this is not a reciprocal relation, i.e. *ese* will not be classified with articles.

To sum up, in Spanish the Demonstrative feature in the value 0Proximal differentiates the neutral demonstrative *ese* from the definite article and any demonstrative can be replaced by the definite article in reference to the same extra-

linguistic object due to their similar featural content and high subjectivity in the reference reading.

3.3 Person and Possessive features

Internal to the Nominal Projections, the Person feature is used only for possessives and the so far marginally mentioned Germanic genitive. As these elements are also the only ones which also carry the Possessive feature, I discuss these two features together.

For the Possessive feature, the only value in the three languages (and in any other as far as I am concerned) is +Possessive.[55] The difference between the definite article and a possessive pronoun is the presence of the Possessive and Person features which are tentatively going to be fused into one feature later in this section.

Taking into account the basic economy of language, this should mean that these two elements are in complementary distribution. As illustrated in (168), this is true only for English and Spanish.

168.　a. (Cz) *(Ten) náš pes zase žere.*
　　　b. (En) *(*The) our dog is eating again.*
　　　c. (Sp) *(*El) nuestro perro come otra vez.*

After a description of morpho-syntactic properties of possessives, I come back to this matter.

The possible values of the Person feature are ±Speaker and 0Speaker. The 1st person matches with +Speaker, the 2nd person matches with –Speaker and the 3rd person matches with 0Speaker.[56] The Germanic genitive is valued as 0Person. Together

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[55] It is probable, that the +Possessive is one of the three values of one feature and I have not been able to find the connection. The other option is that purely semantic features come in one value only. I take this as a matter for further research.

[56] I use this value label to differentiate this word-internal Person feature from the syntactic ϕ-feature Person on the N^0 which is usually valued e.g. 1sg, 2pl and triggers the agreement on the verb as in the following example.

1.　a. (Cz) *Naše$_{+SP}$ Marie$_{3SG}$ chodí$_{3SG}$ s Janem.*
　　b. (En) *Our$_{+SP}$ Marie$_{3SG}$ is$_{3SG}$ dating Jan.*
　　c. (Sp) *Nuestra$_{+SP}$ Marie$_{3SG}$ sale$_{3SG}$ con Jan.*

with the Number and in some cases Gender feature, these values are able to account for all forms of possessives. In (169) and (170) you can find two examples for illustration.

169. a. (Cz) *[Jeho$_{-PL,0SPEAK,+G}$]$_{3RD.SG.MASC.}$dům je starý.*

      c.   (En) *[His$_{-PL,0SPEAK,+G}$]$_{3RD.SG.MASC.}$ house is old.*

     c. (Sp) *[Su$_{-PL,0SPEAK,+G}$]$_{3RD.SG.MASC.}$ casa es vieja.*

170. a. (Cz) *[Náš$_{+PL,+SPEAK}$]$_{1ST.PL.}$ dům má dvoje dveře*

     b. (En) *[Our$_{+PL,+SPEAK}$]$_{1ST.PL.}$ house has two doors.*

     c. (Sp) *[Nuestra$_{+PL,+SPEAK}$]$_{1ST.PL.}$ casa tiene dos puertas.*

The Person feature defines also the post-nominal and independent possessives. They are not treated as elements in the Extended NP for the reasons briefly discussed below, and they are exemplified in (171) and (172).

171. a. (Cz) *Ten dům je [náš$_{+PL,+SPEAK,}$]$_{1ST.PL.}$.*

     b. (En) *The house is [ours$_{+PL,+SPEAK,}$]$_{1ST.PL.}$.*

     c. (Sp) *La casa es [nuestra$_{+PL,+SPEAK,}$]$_{1ST.PL.}$.*

172. a. (Cz) *Ten můj dům/ ?Ten dům můj stojí na kopci.*

     b. (En) *A house of mine is on a hill.*

     c. (Sp) **La cas*a* mí*a* está en un cerro.**

As opposed to English and Spanish, Czech does not exhibit any difference in the forms of possessive, i.e. it uses the same form for pre-nominals, (169a) and (170a), post-nominals, (172a), and independently standing possessives, (171a). The post-nominal position is used for Czech possessive pronouns only in case of poetic or otherwise marked style, (172a).

On the other hand, English and Spanish use adjectival forms of possessives in case they are co-occurring with another D and in case they are standing alone in (166d-e). Compare (172) and (173).

As opposed to the syntactic person (as one of the phi-features), the word-internal Person feature does not trigger any agreement but differentiates the forms of possessive pronouns.

173. a. (Cz) *?Můj ten/ Ten můj dům stojí na kopci.*

　　 b. (En) **My the/ *The my house is on a hill.*

　　 c. (Sp) **Mi la/ *La mi casa está en un cerro.*

　　 d. (En) **The house on the hill is my.*

　　 e. (Sp) **La casa en el cerro es mi.*

Pre-nominal forms are traditionally labeled possessive determiners (e.g. Greenbaum and Quirk, 1990: Chapters, 5, 6 and 7 for English; *Real Academia Española*, 2009: 1343-1344 for Spanish), illustrated in (169) and (170), and post-nominal forms are labeled as possessive Adjectives, illustrated in (171) and (172). Table (174) is an overview of these forms.

174. An overview of possessive Determiners and possessive Adjectives in English and Spanish

English		Spanish	
Possessive determiners	Possessive adjectives	Possessive determiners	Possessive adjectives
my, your, his, her, its, our, your, their	*mi**ne**, your**s**, his, her**s**, its, our**s**, your**s**, their**s***	*mi, tu, su, nuestro, vuestro, su*	*mí**o**, tu**yo**, su**yo**, nuestro, vuestro, su**o***

The structure and behavior of possessive Adjectives resembles the structure and behavior of regular Adjectives, as they have the properties listed below.

175. **Adjectival properties of post-nominal possessives**

- complete a copular construction as exemplified in (176)
- overt agreement with the N^0 in Spanish as exemplified in (172)
- show contrastive morphology, e.g. supportive *one* in English constructions with an independent pronoun, as in (176) and (177) in bold; or a suffix in Spanish which enables them to stand alone, bold in the table (174)

176. a. (Cz) *Můj otec mi koupil auto. Je moje.*

     b. (En) *My father bought me a car. It is mi**ne**/ *my.*

     c. (Sp) *Mi padre me compró un coche. Es mío/ *mi.*

177. a. (Cz) *Chci nějaké jablko. Dej mi **(jedno)** zelené.*

     b. (En) *I want an apple. Give me a green **one**./*Give me green.*

     c. (Sp) *Quiero una manzana. Dame **una** verde./ *Da me verde.*

Possessive Adjectives are thus considered to be part of the A class and as a consequence, they are not part of this discussion. They fall under the Adjectives in Chapter 6.

Coming back to Czech, which exhibits the widest range of co-occurrence of possessives with the other Extended NP elements, the previously discussed elements lead to one conclusion – the **Czech possessives** seem to **have an ability to attain the status of Adjectives even in the Extended NP**, not only as post-nominal elements, and thus allow co-occurrence. Supporting evidence for this hypothesis of the different status of Czech and English possessives comes from the Germanic genitive, more specifically from its Czech counterpart, the "derived possessive" (Kozánková, 2015), which are exemplified in (178). As for Spanish, it does not employ a pre-nominal counterpart of the Germanic genitive.

178. a. (Cz) *(Ten) Jakubův kamarád je tady.*

     b. (En) *(*The) Jacob′s friend is here.*

Czech derived possessive, which replaces possessives, can combine with all functional elements in the Extended Nominal Projection, it is strictly pre-nominal and exhibit the Adjectival properties listed in (175) as well as the Czech possessives. This is in direct opposition to the English Germanic genitive. Therefore I conclude that as opposed to their counterparts in English and Spanish, Czech possessives have more Adjectival status than status of Determiner as in (178), which enables them to co-occur with other elements in the Extended NP. This corresponds with the non-obligatory nature of the Czech article and in my view confirms the closeness of the two elements.

The last matter I want to discuss is concerned with the realization of multiple features within one element using the example of possessives. In Czech, English and

Spanish, the Gender feature of the lexical-semantic type comes into play **only** when the Person feature is valued as **0Speaker**.

The Czech forms of possessive genitive which always have the 0Speaker value differentiate the Gender as well.

179. a. (Cz) *tatínk-ův/*   **-in*   *hotel*

     dad –POSS.MASC.   POSS.FEM.   hotel

   b. (Cz) *maminč-in/*   **-ův*   *hotel*

     mum –POSS.FEM.   POSS.MASC.   hotel

I take this as a supporting argument for this hypothesis. The other forms of possessive pronouns do not **require or allow a Gender specification**. Compare (180) and (181).

180. a. (Cz) *V [našem$_{+SPEAK.-0G}$] týmu jsou jen ženy. Ve [vašem$_{-SPEAK.-0G}$] týmu jsou jen muži.*

  b. (En) *There are only women in [our$_{+SPEAK.-0G}$] team. There are only men in [your$_{-SPEAK.-0G}$] team.*

  c. (Sp) *En [nuestro$_{+SPEAK.-0G}$] equipo hay solo mujeres. En [vuestro$_{-SPEAK.-0G}$] equipo hay solo hombres.*

181. a. (Cz) *[Jeho$_{0SPEAK.+G}$] dcera a [její$_{0SPEAK.-G}$] syn jsou kamarádi.*

   b. (En) *[His$_{0SPEAK.+G}$] daughter and [her$_{0SPEAK.-G}$] son are friends.*

   c. (Sp) *[Su$_{0SPEAK.+G}$] hija y [su$_{0SPEAK.-G}$] hijo son amigos.*

Both examples refer to extra-linguistic objects of one grammatical and inherent sex, but only (181) which lists 0Speaker value elements shows the difference in Gender. As a matter of fact, the values ±G and 0G of the Gender feature could replace the 0Speaker in the possessives with homonymic forms *su$_{+G}$* and *su$_{-G}$* in Spanish. Together with other examples which will be presented in the following sections, this rule can be summarized as a cross-linguistically general principle in (182):

182. Unique overt semantic values

In a language X of morpheme M, there is always only one overtly expressed valued feature F, even in case that there are other valued features.

The other elements in the Extended NP do not reflect the Person feature and as shown above this feature does not influence any morpho-syntactic processes beyond the level of the word; therefore, I consider this feature irrelevant for the syntactic interface and classify it as a **purely semantic feature.**

To sum up, the status of Czech possessives, including the derived possessive, are closer to Adjectives; therefore, they allow more co-occurrence than their counterparts in English and Spanish. The Possessive and Person features are purely semantic features and only one of these can be overtly reflected in an element as proposed in (182). As indicated earlier, they are possibly to be unified as a single feature.

3.4 Dual feature

Inside the NP in Czech, English and Spanish, this feature can be found on *oba/ both/ ambos* respectively.[57] As the Possessive feature, it comes only in value +Dual. –Dual and 0Dual correspond to +Plural, i.e. 2 and higher numbers which are not morphologically marked. Though it is not overtly reflected in the agreement of any of the studied languages, other languages, e.g. Slovenian or Sorbian, manifest a special agreement with +Dual phrases as illustrated in (183) and (184).[58]

183. a. (Cz) *Dva/ Oba vlci běží do lesa.*

b. (En) *Two/ Both wolves run to the forest.*

c. (Sp) *Dos/ Ambos lobos corren a la selva.*

d. (Slovenian) ***Dva/ Oba** volk**ova** bež**ita** v gozd.*

184. a. (Cz) *Všichni vlci běží do lesa.*

b. (En) *All wolves run to the forest.*

c. (Sp) *Todos lobos corren a la selva.*

d. (Slovenian) ***Vsi** volk**ovi** bež**ijo** v gozd.*

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[57] Outside of the Nominal Phrase, the dual can be found in e.g. *either, neither* as well as in their respective counterparts in Czech and Spanish.
[58] For analyses of Dual in these languages see Bélic (1932), Lötzsch (1965), Derganc (2003) and Slobodchikoff (2019).

The comparison of suffixes in (183d) and (184d) shows a morpho-syntactic reflection of +Dual and +Plural in Slovenian which the other languages in corresponding examples do not exhibit. In other languages, but not in Czech, English and Spanish, it is also possible to find similar effects with paucal numbers, i.e. three and four.

As stated in Section (2.2), the interface relevance of the features is universal. Therefore, in spite of lack of Dual agreement in Czech, English and Spanish, I consider the Duality feature relevant for the syntactic interface based on other languages, such as Slovenian and Sorbian.

In the studied languages, the semantic relevance is supported by the impossibility of co-occurrence with an amount different than two, as the +Dual feature is interpreted as reference to exactly two extra-linguistic subjects.

185. a. (Cz) *Oba tři chlapci mají nové boty.*
    b. (En) *Both three boys have new shoes.*
    c. (Sp) *Ambos tres chicos tienen zapatos nuevos.*

In conclusion, the Duality feature is classified as a syn-sem feature.

3.5 Polarity feature

In the present work, the Polarity feature appears in the three English elements *no, some* and *any,* which are classified based on their respective values +Negative, -Negative and 0Negative. Their Czech and Spanish counterparts are also divided by these features, but they exhibit different properties as discussed below. I present the relevant elements in the table (186).

186. Featural content of elements with the Polarity feature

Czech/ English/ Spanish	Featural content
jakýkoli/ any/ cualquier	±Pl, -Def, -Uni, 0Neg
žádný/ no/ ningún	±Pl, -Def, -Uni, +Neg
nějaký/ some/ algún	±Pl, -Def, -Uni, -Neg

The Polarity feature is a feature reflecting the sensitivity of elements to their context. The first feature of this type was introduced for English in Klima 1964, who labeled it

as the Affective feature since it **affects other elements**. Though he did not clearly mention polarity, he did define the +Affective environment as including negative and interrogative features. After Klima's work, there was a wide semantic discussion some of which I use here, though I focus on syntax.

Baker 1970 then divided the polarity items, i.e. items sensitive to negation, into positive and negative. In the present section I try to show that the three-valued Polarity feature offers an analysis which predicts the behavior of these elements in Czech, English and Spanish.

In this section, I discuss two matters. First, the conditions created by these polarity items which are put in the type of clause. Second, I come back to the interaction of this feature with the stand-alone property across the three languages.

The values of Polarity feature clearly condition both syntactic and semantic contexts at the same time. When in affirmative sentences or positive questions, the +Negative value negates the whole clause in English.

187. a. (En) *We need [no$_{+NEG}$] linguists.*

b. (En) *We need [some$_{-NEG}$] linguists.*

c. (En) *We need [any$_{0NEG}$] linguists.*

The value 0Negative, i.e. *any,* expresses **general but not specific reference** to a kind of an extra-linguistic object. This value does not condition the type of the clause, but it substitutes for the other two values, +Neg and -Neg, above in contexts where those are not allowed without a change of meaning. The substitution is both semantic and syntactic as *any* overtakes the meaning of *some* and *no* which is possible due to its least specific value 0.[59]

188. a. (En) **We don´t need [no$_{+NEG}$] linguists.*

b. (En) *?We don´t need [some$_{-NEG}$] linguists.*

c. (En) *We don´t need [any$_{0NEG}$] linguists.*

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[59] I am aware of the existence of so called freechoice *any* which reads as *every.* However, as Giannakidou 1998 points out, the difference between the *any* described above and the freechoice *any* is questionable.

189. a. (En) *?Do we need [no$_{+NEG}$] linguists?*

   b. (En) *Do we need [some$_{-NEG}$] linguists?*

   c. (En) *Do we need [any$_{0NEG}$] linguists?*

These values influence (or are influenced by) the polarity of the whole NP and in extension the whole clause, which is crucial in English since the structure of English does not allow negative concord as seen in (187a) and (188a). For further discussion of negative concord from the cross-linguistic point of view see Horn 2010.

On the other hand, **Czech and Spanish** allow and, as a matter of fact **require**, **multiple negation** which is reflected in the set of these elements which are a subject to different restrictions than those described above for English. I illustrate this in (190) - (192). The feature system explains why the 0Neg form alone is ungrammatical in English.

190. a. (Cz) **(Ne)potřebujeme [žádné$_{+NEG}$] lingvisty.*

   b. (En) *We (*don´t) need [no$_{+NEG}$] linguists.*

   c. (Sp) **(No) necesitamos [ningunos$_{+NEG}$] linguistas.*

191. a. (Cz) *(*Ne)potřebujeme [nějaké$_{-NEG}$]/ [jakékoli$_{0NEG}$] lingvisty.*

   b. (En) *We (*don´t) need [some$_{-NEG}$] linguists.*

   c. (Sp) *(*No) necesitamos [algunos$_{-NEG}$]/ [cualquieres$_{0NEG}$] linguistas.*

192. a. (Cz) *(Ne)potřebujeme [nějaké$_{-NEG}$]/ *[jakékoli$_{0NEG}$] lingvisty?*

   b. (En) *Do we (not) need [some$_{-NEG}$]/ [any$_{0NEG}$] linguists?*

   c. (Sp) *(No) necesitamos [algunos$_{0NEG}$]/ *[cualquieres$_{0NEG}$] linguistas?*

Whereas the +Neg feature in English requires a linguistic context of non-negative polarity, in Czech and Spanish the same feature requires a linguistic context of negative polarity. This difference is caused by different parametric settings in the three languages as summarized in (193).

193. Parametrized syntactic-semantic requirement of polarity feature

The ±Negative elements in languages X and Y obligatorily require certain polarity of their local syntactic context. This polarity of their local syntactic context is determined parametrically as either -Negative or +Negative.

The Polarity feature also interferes with the stand-alone property in English. In Section (1.4), I have argued that no element of English Extended NP which refers to a single extra-linguistic object, i.e. is singular, can stand alone as opposed to elements in plural, as illustrated in (195) - (198)). In Czech and Spanish, the situation is more complicated because of the present inflection. This principle was summarized in (46) and it is repeated here as (194):

194. **Inflectionless languages limit of stand-alone property**

In a language X with no concord inside the nominal domain, grammatically singular Extended NP elements E cannot stand alone.

The values +Negative and 0Negative in English, i.e. *no* and *any* seem to break this rule as illustrated in (196) and (197).

195. a. (Cz) *Potřebuji tři jablka z té hromady. Podáš mi [nějaké]?*
   b. (En) *I need three apples from that pile. Will you hand me [some]?*
   c. (Sp) *Necesito tres manzanas del montón. Me pasas [algunas]?*
196. a. (Cz) *Smím jíst jen jedno jablko denně. Podáš mi [nějaké]?*
   b. (En) *I am allowed to eat only one apple a day. Will you hand me *[some]?*
   c. (Sp) *Puedo comer solo una manzana al día. Me pasas [alguna]?*
197. a. (Cz) *Chceš červené, žluté nebo modré auto? [Jakékoli]./ [Žádné].*
   b. (En) *Do you want a red, yellow or blue car? [Any]./ [*No]./ [None].*
   c. (Sp) *Quieres un coche rojo, amarillo o azul? [Cualquier]./ [Ningún].*
198. a. (Cz) *Koupíš si červené, žluté nebo modré ponožky? [Jakékoli]./ [Žádné].*
   b. (En) *Will you buy red, yellow or blue socks? [Any]. / [*No]./ [None].*
   c. (Sp) *Comprarás calzoncillos rojos, amarillos o verdes? [Cualquieres]./ [Ningunos].*

However, if we look closer at the referential properties of *some, any* and *no,* we find out that whereas *some* refers to a concrete set of elements or at least its part, the reference of *any* and *no* is not specific but general as already suggested above. In consequence it means they do **not** refer to **one specific extra-linguistic object** and their semantic

number is thus **plural**. This phenomenon can be found also with *every,* which is discussed in Chapter 6.

To sum up, the cross-linguistic differences in the syntactic requirements of the polarity elements are explained by parametric setting. The stand-alone property of the seemingly singular elements is explained by their plural semantic reference.

3.6 Qualitative and Distributive feature

This section discusses two features, the Qualitative feature and the Distributive feature, which are tentatively going to be merged into one. The relevant elements, which carry one or both of these features, are listed in the table (199) with their featural content.

199. Elements carrying the Qualitative feature or the Distributive feature

Czech/ English/ Spanish	Featural content
takový/ such/ tal	±Pl, -Def, 0Uni, +Qual
který/ which/ cuál	±Pl, +Def, 0Uni, -Qual
jaký/ what/ qué	±Pl, -Def, 0Uni, +Qual
všechny/ all/ todos	+Pl, +Def, +Uni, -Distr
... /every/ ...	+~~Pl~~,[60] +Def, +Uni, ±Distr
každý/ each/ cada	-Pl, +Def, +Uni, +Distr

The table above illustrates that we are treating only elements in D and UQ position. The Qualitative feature is carried by elements which put focus on or ask about a quality (+Qualitative) or by elements which put focus on or ask about a specific element without being concerned about its quality (–Qualitative).

As to the Distributivity feature, Beghelli and Stowell (1997) observe that as opposed to *each*, *all* and *every,* here –Distributive elements, can be modified by an adverbial. I discuss their hypothesis in more detail in Chapter 6. For now, I extend this claim to –Distributive elements in Czech and Spanish and illustrate this claim in (200) and (201).

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[60] The cross-out stands for feature Impoverishment discussed in Chapter 6.

200. a. (Cz) *Jeden kluk snědl téměř všechna jablka, která jsme měli.*

b. (En) *One boy ate almost all apples that we had.*

c. (Sp) *Un chico comió casi todas manzanas que tuvimos.*

201. a. (Cz) *?Jeden kluk snědl skoro každé jablko, které jsme měli.*

b. (En) *One boy ate almost *each/ every apple that we had.[61]*

c. (Sp) *?Un chico comió casi cada manzana que tuvimos.*

Dougherty (1970a: 868) highlights that in English the ±Individual value, herein labeled ±Distributive, can be tested. +Distributive elements co-occur with e.g.: *alone, singly, individually.* -Distributive elements can co-occur with e.g.: *together, simultaneously, at once*. Again, I extend these claims to Czech and Spanish and illustrate it in (202) and (203).

202. a. (Cz) *Všichni chlapci dokončili test samostatně.*

b. (En) *All boys finished the test independently.*

c. (Sp) *Todos chicos terminaron el test independientemente.*

203. a. (Cz) *Každý chlapec si koupil auto jednotlivě.*

b. (En) *Each/*Every boy bought a car individually.*

c. (Sp) *Cada chico compró el coche individualmente.*

These examples serve only for the illustration of the Distributivity feature semantics. I will provide a more detailed discussion about the UQs in Chapter 6. In the following paragraphs I focus first on the connection between the Distributivity and the Qualitative feature.

The Distributivity feature values +Distr and –Distr and the Quality feature values +Qual and – Qual never co-occur and furthermore the third value which is expected in my system is apparently not present. Semantically, the Distributivity feature connects to the ability to refer to the individual elements of the group of referents. +Distributive elements have the individual reference, whereas –Distributive elements do not. If there is a 0Distributive value, it should have to have a special type of reference, like e.g. the 0Q value which is rendered as Mass. In my view, this can easily be the

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[61] See Chapter 6 for a discussion that confirms that *každý* in Czech and *cada* in Spanish as counterparts of *each* but not *every*.

Qualitative feature with its specific reference (plural or singular) either concerned or not concerned with the quality of the referent.

Suppose then that the Qualitative feature is in fact the 0Distributive value. This raises a question how to distinguish ±Qualitative elements. The difference between *what* and *which* is actually provided by the Definiteness feature supposing that *what* is – Definite, as already proposed by Katz and Postal 1964. The +Def and 0Distr *which* and its Czech and Spanish counterparts then inquire about definite elements regardless of their quality. On the other hand, –Def and 0Distr *what* and its Czech and Spanish counterparts then focus on the quality rather than definiteness.

This interaction is a good example of how one feature can behave differently in different contexts. Therefore, I propose to fuse these two features into one. The table (199) has to be modified as in (204):

204. Elements carrying the Distributive feature

Czech/ English/ Spanish	Featural content
takový/ such/ tal	±Pl, -Def, 0Uni, 0Distr
který/ which/ cuál	±Pl, +Def, 0Uni, 0Distr
jaký/ what/ qué	±Pl, -Def, 0Uni, 0Distr
všechny/ all/ todos	+Pl, +Def, +Uni, -Distr
... /every/ ...	~~+Pl,~~ +Def, +Uni, ±Distr
každý/ each/ cada	-Pl, +Def, +Uni, +Distr

To sum up, the Distributive feature with three values ±Distr and 0Distr accounts for the behavior of the six elements listed in (204). I will go back to discuss more properties and other view of this feature in Chapter 6 in the context of the Universal Quantifiers.

3.7 Expectative feature

This section is concerned with the Expectative feature, which expresses the expectations encoded in the functional elements listed in (205).[62] All these elements **refer to an indefinite number of extra-linguistic referents** and their featural contents differ only

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[62] I am aware that there are more elements which express similar concepts, e.g. *a lot of, a number of*. Because of the presence of an *of*-phrase they are out of the scope of this thesis. See Veselovská 2001 for the classification of these elements and other quantifying elements in Czech as determiners with nominal features.

in the Q feature and the herein discussed Expectative feature. The **Expectative feature** (I am coining this term) indicates the speaker´s evaluation of a quantity as more or less expected in a given context.

205. Elements carrying the Expectative feature

Czech/ English/ Spanish	Featural content
mnoho[63]/ many / muchos	+Pl, -Uni, +Exp
mnoho/ much / mucho	0Pl, -Uni, +Exp
několik/ several/ varios	+Pl, -Uni, 0Exp
pár/ a few/ un par de	+Pl, -Uni, 0Exp
trochu /a little / un poco de	0Pl, -Uni, 0Exp
málo/ few/ poco	+Pl, -Uni, -Exp
málo/ little / poco	0Pl, -Uni, -Exp

For clarity, the table in (205) breaks down the relevant elements which were presented together in all previous tables listing these elements. The Expectative feature has three values and thus it represents another case of a three-value system. +Expectative is read as "more than expected", 0Expectative is read as "no expectations on the amount" and –Expectative is read as "less than expected". Three elements with different values of the Expectative feature can refer to the same amount, even the same group elements as illustrated in (206). Imagine that the following utterances refer to the same rock concert.

206. a. (Cz) *Manažer mi říká, že **hodně** lidí zkolabovalo. Zdravotníci říkají, že vzhledem ke špatné klimatizaci jich bylo **málo**. Noviny infomovaly, že **několik** lidí zkolabovalo, až včera.*

b. (En) *My manager tells me that **many** people collapsed. The paramedics say that given the bad A/C there were **few**. The newspapers didn´t inform us about **several** people collapsing until yesterday.*

c. (Sp) *Mi manager dice que **mucha** gente sufrió un colapso. Los paramédicos dicen que considerando el mal aire condicionado fueron **pocos**. Los periódicos no informaron sobre el colapso de **varias** personas hasta ayer.*

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[63] Czech also offers synonyms *hodně* and *moc*, which are fully interchangeable with the more standard *mnoho*.

As suggested above, the array of elements is widened by their ability to combine either with 0Q or +Q Ns. English separates the –Exp elements *few/ little* and +Exp elements *many/ much,* while Czech and Spanish keep only one element as illustrated in (207) - (210).

207. a. (Cz) *Máme málo pomerančů.*
    b. (En) *We have few oranges.*
    c. (Sp) *Tenemos pocas naranjas.*
208. a. (Cz) *Máme málo vody.*
    b. (En) *We have little water.*
    c. (Sp) *Tenemos poca agua.*
209. a. (Cz) *Koupili jsme mnoho lístků.*
    b. (En) *We bought many tickets.*
    c. (Sp) *Compramos muchos billetes.*
210. a. (Cz) *Zaplatili jste hodně peněz?*
    b. (En) *Did you pay much money?*
    c. (Sp) *Pagastéis mucho dinero?*

I consider this cross-linguistic difference to be a case of **allomorphic variation in English**.

The final observation is concerned with the 0Exp elements *a few/ a little* and their counterparts in Czech and Spanish illustrated in (211) and (212).

211. a. (Cz) *Máme pár pomerančů.*
    b. (En) *We have a few oranges.*
    c. (Sp) *Tenemos un par de naranjas.*
212. a. (Cz) *Máme trochu vody.*
    b. (En) *We have a little water.*
    c. (Sp) *Tenemos un poco de agua.*

The indefinite article which is present in English and Spanish changes the value of the Expectative feature. It seems that the combination of clashing values of Number in *a* and *few/ little* creates an environment for the 0Exp value.

To sum up, even though expectations are highly individual and subjective, they are encoded cross-linguistically by a finite number of elements in a functional category modifier of N.

3.8 Summary of Chapter 3

In this Chapter, I have explored mostly semantic features, though some of them, such as the Polarity, Definiteness or Demonstrative, have syntactic effects. I have claimed that exactly these features differentiate determiners from one another. In Table (137) I offered a complete overview of the discussed featural content.

The Definiteness feature brought us to the discussion of the definiteness effect and the co-occurrence of determiners, as well as possible counterparts of articles which do not belong to the same group. I limited the definiteness effect to the constructions with a "coda" and concluded that the interaction of the Demonstrative and Definiteness feature allows the occurrence of demonstratives in such constructions in some cases.

Section (3.2) about Demonstratives was focused mostly on the wider array of these in Spanish, which offers a third element, again a tri-valued feature, and its possible analyses. I concluded that *ese* is a neutral element in line with its strong position of a possible counterpart of a definite article.

As to possible counterparts, the Possessive and Person features lead us to a discussion on this topic as well, since they are the only features which differentiate the definite articles from the possessive pronouns. Apart from this matter, I analyzed more frequent co-occurrence of Czech possessives with the other functional elements and conclude that they have stronger Adjectival properties in Czech which allow this co-occurrence.

The Dual feature was described as to its properties in the three languages though I touched on other Slavic languages as well.

The elements containing the Polarity feature were explored also in terms of their reference, which plays a role in their ability to stand alone. As stated in that section, plural or non-specific reference overrides the –Q value of the Number feature and enables the element to stand alone even if it is singular.

The Qualitative and Distributive features were tentatively fused into the Distribute feature with a claim that its three values are able to account for the characteristics of the six relevant elements.

In the final section, I discussed the Expectative feature which differentiates elements specifying a group of more than one extra-linguistic referent. Again, I found that the data confirms the idea of these features having three rather than two values.

4. Extended NP structure building

The previous three Chapters have introduced the building material of the Extended NP in Czech, English and Spanish from different points of view. Chapter 1 presented a cross-linguistic overview of functional elements in the structure above Nouns. Chapter 2 focused on the features which define positions in that structure as well as the morphological forms of functional items described in Chapter 1. Chapter 3 analyzed the features which are the base for syntactic-semantic characteristics of these elements. Before moving to Adjectives in Chapter 5, I contextualize the above analyzed characteristics and show how they interact within one system with the focus on the placement of features in the structure and their spreading through the phrase. Chapter 6 then offers a description and illustration of an additional operation not discussed in the present Chapter 4 – Impoverishment.

The present system is based on Pesetsky and Torrego 2007 with modifications or extensions taken from the Nanosyntactic approach (Starke 2001), as well other generative analyses, such as the device of the Alternative Realization defined by Emonds 1987. [64]

Though this might seem an unorthodox combination of frameworks, they all pursue the same goal – to create a working engine which will generate all grammatical utterances and exclude the ungrammatical ones, in this case with respect to Czech, English and Spanish Extended NPs. What I intend to provide is a system of feature operations integrated into already existing generative morpho-syntactic theories rather than a new theory, having in mind that a lot of individual issues have largely been solved.

The structure is binary branching. However, following Starke 2001 who quite radically argues against several principles of Minimalist Program I do not assume all its usual principles.

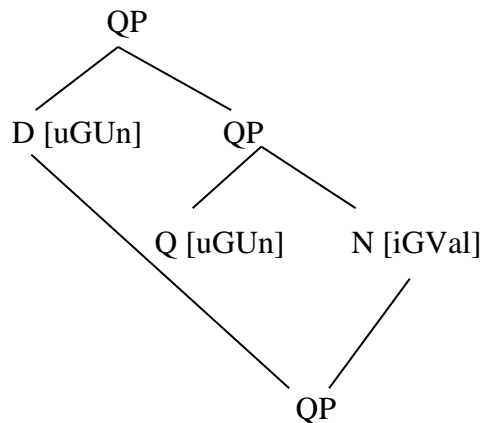First, I follow Starke and others in questioning traditionally assumed differences between **internal and external merge**, i.e. movement and merging of new material. In his view both processes are **local and involve labeling** (Starke, 2001: 136) as illustrated in (213) and discussed below.

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[64] A framework somewhat similar to Pesetsky and Torrego can be found in Frampton and Gutmann 2000 and 2006.

213. Movement/ Agreement/ Internal merge in the sense of Starke 2001 exemplified on the Gender (G) feature[65]

```
                    QP
                   /  \
                  /    \
          D [uGUn]     QP
               \      /  \
                \    /    \
                 Q [uGUn]  N [iGVal]
                  \       /
                   \     /
                    QP
```

In (213), the features on Q and D are in the same relation to the N, i.e. both unvalued Gender features get their value from the Valued feature in N. In cases where a material "moves up", i.e. it is basically remerged, it is connected both with its original position and with its post-movement sister. Thus, though subject to two relations, the internally merged objects are subject to the same rules as the externally merged objects.

The sisterhood is clearly local as there are no intervening elements and his version of movement respects the definition above as well. Starke´s view of **locality** of the internal merge is "the impossibility of 'crossing' a different token of the same class" (Starke 2001: 136). In the present Chapter, I classify the Extended NP features into three groups which respect this locality definition.

On the other hand, **labeling** is just a simple projection. As to labeling, each external merge yields a new object, i.e. projects, and "each movement/chain has its own interpretive properties and chains are thus typed and the type of the movement/chain is a function of its landing site" (Starke, 2001: 139). This is a description of the projection function.

In other words, **both** internal and external merge follow the same set of principles, therefore they should be and here are **considered as one type of process**. Furthermore, it is necessary to say that these processes are relevant for features or features bundles. All these points are summed up in (214):

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[65] The Interpretability and Valuation of a feature are abbreviated as i(nterpretable), u(ninterpretable), Val(ued), Un(valued).

214. **Definition of Merge** (following and adapting Starke 2001)

a.   There is no difference between internal and external merge.

b.   Internal merge is blocked by a same-class element between the original and goal position.

c.   Merge involves locality and labeling.

d.   The building blocks for Merge are features.

Starke also **rejects** the special status of a **specifier-head** relationship and as a matter of fact denies the existence of specifiers as such. His main arguments are that except for φ-features no such relationship has been demonstrated, and there is no way a structure can differentiate a head-complement and specifier-head relationship. I accept the strength of Starke´s argument and I do not make separate use of specifier-head and head-complement relationships in the present analysis.[66]

Furthermore, independent of the previous arguments, Starke highlights that there is **no logical reason to have each feature occur at two nodes**. As the focus of this thesis is limited to the nominal domain and neither Starke nor I has a better account of Agreement, **for phi features** I preserve Pesetsky and Torrego´s feature **checking/ spreading** account with a minor change.[67] For other features, the Agree operation does not apply as discussed in detail in Section (4.1).

215. Agree (Feature sharing version)

(i) An unvalued feature F (a *probe*) on a head H at syntactic location α (Fα) scans **the domain they dominate** for another instance of F (a *goal*) at location β (Fβ) with which to agree.

(ii) Replace Fα with Fβ, so that the same feature is present in both locations.

(adapted Pesetsky and Torrego, 2007)

Starke (2001: 141) argues that if c-command is replaced by dominance, the results of external and internal merge are indeed identical, i.e. a new syntactic object which is at the same time a higher projection. **Overabundance of c-command** relationship

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[66] For general purposes I leave this issue undiscussed.

[67] In the following pages I vary between the transcription 'phi' and 'ϕ' according to the context where I use the label. There is no difference between these.

represents Starke's second objection against the Minimalist program analyses which I follow. My understanding of Starke´s term **dominance** is that a relevant **feature dominates any lower projection**.

As to the placement and function of features, in contrast to Pesetsky and Torrego who place phi features on N, in the present account they are not necessarily first specified on N. I resolve this situation using Alternative Realization first introduced by Emonds 1987.

4.1 Interpretability and Value of features

As opposed to Chomsky 2000 and 2001, Pesetsky and Torrego do not see Valuation and Interpretation as mutually dependent and parallel operations but rather as two independent processes. The consequences of this division are discussed in this section.

Interpretability is defined by Pesetsky and Torrego as the relevance for the semantic interface. A feature which is **semantically relevant**, i.e. the element carries meaning encoded in a morpheme, is **Interpretable**. In the present framework, the appearance of an Interpretable feature marks also its **locus of semantic interpretation**. Thus, if an Interpretable feature is placed on N, it is interpreted on N. On the other hand, an Uninterpretable feature is a result of Agreement and is not interpreted in a given position.[68]

Below, I discuss the locus of concrete features in detail. From now on, in relevant parts, I mark the Interpretable instance of a feature as iFeature, e.g. iGender; as opposed to an Uninterpretable instance of a feature which is labeled as uFeature, e.g. uGender.

Valuation is defined by Pesetsky and Torrego as **Agree or feature sharing**. Though I do not apply this process to all features discussed here, but only to some of them, I modify their definition of the process as suggested in Starke 2001, i.e. as in (215). Note that in my view, a feature is valued once it has one of the **three values**, +F, -F, 0F. To illustrate what the consequences of the feature type and placement are, in (216) I offer a subscripted example in Czech. Below the example (216) I comment on each feature.

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[68] In other words, the variation in Interpretability and Uninterpretability within instances of a feature is a way to encode (ir)relevance for the semantic interface as in Svenonius 2007. I briefly discuss this connection later in this section.

216. (Cz) *s [těmito$_{0UNI.PROX.}$[třemi$_{-UNI.}$[uličkami]]]* $_{PL.FEM.INSTR}$

       with these$_{INSTR}$ three$_{INSTR}$ streets$_{INSTR}$

Feature type overview

D (*těmito*) [uQUn;uGUn uCaseUn; iUniVal; iDemVal]

    Q (*třemi*) [iQUn;uGUn; uCaseUn; iUniVal]

       N (*uličkami*) [uQVal; iGVal; uCaseVal]

Number feature   The N *uličkami* 'streets' enters the derivation with a Valued but Uninterpretable Number feature. The Uninterpretability, i.e. non-semanticity, of this feature on N can be shown by semantically vacuous change of its Value, whether we speak of the difference between singular and plural or the mass and count interpretation. On the other hand, while the Value is always present on N, it is **Interpreted in the Q position**.

      I hold that the Q feature causes **N** to **always project** to **QP**. However, as the Q position is not always filled, its Value can be, and often is, overtly expressed on N.[69] See Section (2.6) for a discussion of Alternative Realization introduced in Emonds 1987. As Number is one of the phi features, i.e. features connected with the nominal domain, it spreads to all the positions and both D and Q get Valued by, i.e. Agree with, the Value on N.

Gender feature   The N *uličkami* 'streets' enters the derivation with an Interpretable and Valued Gender feature. Being one of the phi-features, this feature is the **goal** for uGender features in Q and D during the probe operation of Agree. Using the same logic as for the Number feature, a change of Gender is not semantically vacuous, which I take as an argument for **N being its locus** of Semantic Interpretation.

Case feature I follow the assumption suggested by Pesetsky and Torrego 2001 that Case is not semantically interpreted, which is the reason Case is the only phi-feature that is Uninterpretable in all the positions within the Extended NP.[70] The fact, that this

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[69] Pesetsky and Torrego report similar case in verbal domain, where Tense is Interpretable in the Tense position but expressed in the Verb position.

[70] For an attempt to argue for the opposite view see e.g. Jakobson 1984.

feature is Valued in N, and not on a functional category, is the result for the centrality of N in larger syntactic construction like sentences.

Universality feature   This "positional" feature is Interpretable and Valued in all positions of the Extended NP, i.e. UQ, D, and EQ. Its obligatory Interpretability and Valuation results from the fact that it is **part of the universal functional sequence** in the sense of Starke 2001 which is the analysis I argue for in detail in the next Section (4.2). As opposed to the previous phi-features, the Universality feature does not undergo the Agree operation, probably because it is interpretable in all positions in the Extended NP.

Demonstrative feature   Bound to the D position, the Demonstrative feature is one of the D-type features (see (220) or Section (4.2)) which are obligatorily Interpretable and Valued and are in complementary distribution with each other. The features of semantic type are, I argue, **free from feature checking operations**, as they are "complete", i.e. Interpretable and Valued, and there are no signs of their Uninterpretable or Unvalued counterparts.

The following schemes (217) and (218) show how the specific features described above are generated in the structure before and after the Agree process, i.e. unvalued and then valued. Whether the valuation of all features takes place at the same time or is done step-by-step in each position is not an issue in this theory. In the overview of feature values before Agree, the question mark stands for an Unvalued feature which needs to probe for its value, and the exclamation mark stands for an Uninterpretable feature which needs to be Interpreted elsewhere in the structure. The exclamation mark with Case is parenthesized because it gets interpreted outside of the Extended NP.

217. **Feature value overview before Agree**

D (*těmito*) [?Q; ?G, ?CASE, 0UNI, +PROX]

Q (*třemi*) [?Q; ?G, ?CASE, -UNI]

N (*uličkami*) [!+Q; -G, (!)INSTR]

218. **Feature value overview after Agree**

D (*těmito*) [+Q; -G, INSTR, 0UNI, +PROX]

Q (*třemi*) [+Q; -G, INSTR, -UNI]

N (*uličkami*) [+Q; -G, INSTR]

Chomsky (2001) sees Valuation as the precondition for the deletion of features, and this is a view adopted in Pesetsky and Torrego as well. In their view, **Unvalued features** either cause a derivation to crash or **are Valued by** the operation of **Agree** as described in (215).[71] In the present framework the Unvalued features also cause a derivation to crash, but as noted above, I depart from Chomsky's view and follow Pesetsky and Torrego's claim that a connection is established between two agreeing features. But opposed to both, I claim that the **features do not delete** but rather, in the sense of Starke 2001, that features are an **inherent part of the structure**. This is the bases for the discussion of derivations below in Section (4.4).

From now on, in relevant parts, I notate the Valued instance of a feature as FeatureVal, e.g. G(ender)Val; as opposed to an Unvalued instance of a feature which is labeled as FeatureUn, e.g. GUn.

Following Pesetsky and Torrego, I claim that one feature can appear in **several "instances"** within a phrase. The result of separating Interpretability and Valuation is that we get four possible combinations instead of two. Each type of feature fulfills a different function which might extend over the scope of nominal domain. Thus, the function of Uninterpretable and Unvalued feature, in the context of NP **Case** in Czech, lies in their connection to non-nominal domains, especially the Verb Phrase.[72] The function which is performed by Case in Czech is fulfilled by prepositions or marked syntactic positions in English and Spanish as discussed in (Emonds 2000: Chs. 7 and 8 or herein Section (2.3.5)). The overview in (219) shows the four combinations and type of features in concrete positions. Read each line as for example: "The Universality feature is Interpretable and Valued in UQ, D and EQ."

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[71] These authors differ in the relation which Pesetsky and Torrego create between two agreeing features and which is absent in Chomsky 2001.

[72] For further discussion of this function of Case, see any work on Case Filter, e.g. Chomsky 1981, Chapter 3.

219. **The type and position of Extended NP features classified in the Pesetsky and Torrego framework**

Feature	Feature type	Position
Universality Demonstrative, Distributivity, Person, Possessive, Dual, Negativity, Definiteness, Expectative	iFeatureVal	**in UQ, D, EQ** in the respective positions listed in Tables (136) and (137) in Chapter 3
Number Gender Case	uFeatureVal	in Q in N in N
Number Gender	iFeatureUn	Elsewhere (not in the positions listed in the lines above)
Case	uFeatureUn	

In Chapters 2 and 3, I discussed the featural content of individual elements and the **relevance** of individual features **for syntactic** and/ or **semantic interfaces,** which is a concept introduced by Svenonius 2007. Now we see that (except for Case) all these features are Interpretable at least once in the given position as they are relevant for the semantics of the Extended NP.

The features **relevant for the syntactic interface** in the sense of Svenonius 2007 (regardless of whether they are relevant for the semantic interface according to his framework) are at the same time those whose **Uninterpretable instances** can be found across the Extended NP. As a reminder, these are **phi features,** as discussed in Chapter 2, but not the features discussed in Chapter 3, i.e. Demonstrative, Distributivity, Person, Possessive, Dual, Negativity, Definiteness, and Expectative.

By definition, the **morpho-syntactically defining features** will appear as both Unvalued and Valued and thus are **subject to feature checking**. On the other hand, features in the groups above are always Valued in the lexicon as they underlie the semantic characteristics of each element, and therefore they do not take part in the feature checking process. This difference is the reason why they should be treated differently from the processes subsequent to their insertion into the structure. These processes are discussed in the next Section (4.2).

The only feature which does not fit in either of the two groups is the **Universality feature**, i.e. the feature which differentiates the three positions in the Extended NP. Its property of being always Valued, i.e. not subject to Valuation, would classify it as a semantic feature, but it is obviously also syntactically relevant. On the other hand, as a syntactically relevant feature it should potentially have Interpretable and Uninterpretable instances; however, it is Interpretable in all positions, and so for this reason is never actually Uninterpretable.

In Chapter 2, I argued that it is not a coincidence, that features are valued in three ways. Now I offer an additional supporting argument. It has been argued in different frameworks within generative linguistics that when lexical morphemes are inserted into the syntactic structure, they either contain or are later merged with a categorial feature (e.g. Alexiadou, 2001; Borer, 2005; Hale and Keyser, 1993; Marantz 2000). The Universality feature, like the Adjectival feature discussed in Chapter 5, is **a categorial feature.** The fact that the category is given rather by its three values than by the feature itself can be seen as a matter of labeling or as another example of a natural three-way distinction. I retain this conception for reasons discussed in detail in Chapter 2.

To sum up the relation between the theoretical concepts of Interpretability and Valuation (Pesetsky and Torrego) and relevance for interfaces (Svenonius): these two characteristics enable us to classify morpho-syntactic features which take part in the structure building into three groups listed in (220) which will be relevant for discussion in the next Section (4.2).

220. **The division of features according to their properties**

a. α (alpha features) Demonstrative, Distributivity and Qualitative, Person, Possessive, Dual, Negativity, Definiteness, Expectative

Proper to the Extended Projection, relevant for the semantic interface, they are always Interpretable and Valued, and not subject to feature sharing.

b. β (beta features) – Universality

In a broad sense this feature expresses universal quantification. Every position in the Extended NP is Valued for Universality, relevant for syn-sem interface, and not subject to feature sharing. It is rather responsible for the syntactic positioning and limiting the semantic reference of individual elements, instead of encoding more specific semantics. The latter is the task for alpha features, and of the morpho-syntactic characteristics of a given NP, which is the task of phi features.

c. ɸ (phi features) – Case (Czech), Grammatical Gender, Number

Proper to each position in the nominal domain, relevant for the syn-sem interface, and subject to feature sharing.

The framework of Pesetsky and Torrego thus applies only to features which are relevant to the syntactic interface in the sense of Svenonius 2007, i.e. the group ɸ. The groups α and β do not take part in the processes applied to ɸ features. The following Section (4.2) explores the way they are treated differently.

4.2 Realization of features in the Functional Sequence

The organization of features within Extended NPs can be seen either as unstructured bundles or as a functional sequence. The former view scales down the role of the feature for structure building in favor of other operations and this is the view adopted in Pesetsky and Torrego and others, e.g. Bošković 2008. Though this type of analyses and theories have revealed important tendencies of the structure, in my view it does not reflect the whole array of feature functions and represents an overabundance of rules implemented in the past decades.

For the view adopted here, the features are crucial building blocks. In Starke's view (2001: 7) "grammar is subject to an abstract **anti-identity constraint"** - two items of the same class cannot "overlap". This anti-identity constraint is behind the functional sequence as discussed below but also behind the exclusion of some combinations of features, as discussed in Section (4.3) and in Chapter 3.

The organization of features has been analyzed in different manners. From a separate head for each feature (e.g. Cinque 2010 or Borer 2004a), through organized groups of features which undergo operations and get deleted afterwards (Pesetsky and Torrego and Chomsky 2000), to features connected to a position in the structure not necessarily in a one-to-one manner. The last strategy is the one adopted here for Czech, English and Spanish Extended NPs.

As suggested in Section (4.1), there are 3 kinds of features, here labeled as alpha, beta and phi features. If I use a metaphor with a brick wall, then alpha features are what the bricks are made of, beta features are the order they can be used in the construction and phi features are the grout. Thus, they are treated in different manners as to their position in the structure. Phi features are present in different forms throughout the structure of NP. Alpha features appear only in certain positions which in turn are given by beta features. This obligatory sequence of beta features is called the functional sequence.

The **functional sequence** can be translated as the **order of functional projections**. Throughout the Chapters 1, 2 and 3, I have been refining the structure of the Extended NP. For what remains, based on data, in Chapter 3 I have concluded that in the functional projection, there is **one phrasal and one head position.** In (221) I repeat the structure presented as it developed.

221. **Development of the Extended NP structure** (based on Abney 1987 and Emonds 2012)
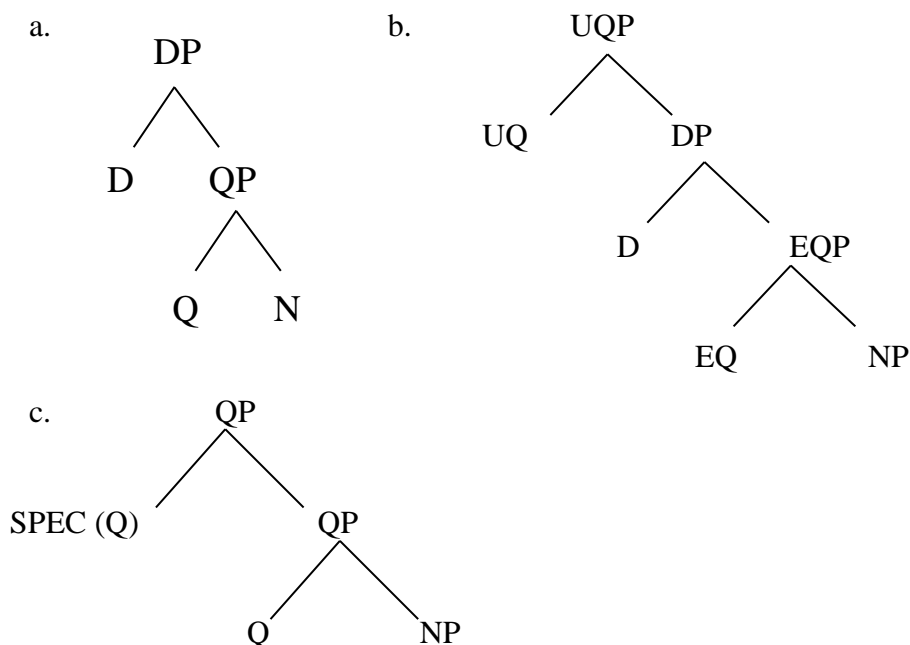
From this point of view, Determiners are considered to be placed in the Specifier of Q and the Universal Quantifiers are not a part of the basic structure of Extended NPs as can be seen in (221c).

As opposed to such trees, the functional sequence does not take into account the positions of morphemes but rather their featural content. **One featurally saturated element can thus fill more than one position;** i.e. features and positions are not in one-to-one correspondence.

The basic pattern of the functional sequence advocated here is presented in (222) with capitalized features which get interpreted in the given position. Its simplicity allows grammar to generate phrases which consist of a bare N (with Alternatively Realized Q feature as discussed below) as well as those which have a morpheme for every node; see (223).

222. Functional sequence for Czech, English and Spanish N

$$QP$$

UNI-position   [Q, UNI, sem features]   N-position [G, sem features][73]
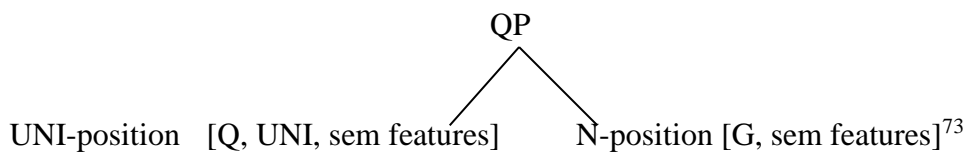
Following this functional sequence, a simple NP structure can consist only of as few as two positions. In case the NP is more developed, the order of projections is as in (223).

223. Functional sequence for developed Czech, English and Spanish N

UNIP
+UNI   UNIP
0UNI   UNIP
-UNI   N
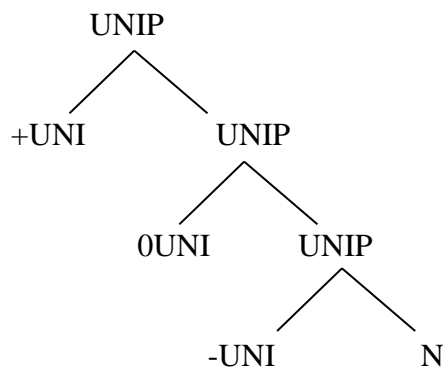
As presented in Chapter 3, the Values +UNI, 0UNI and -UNI are connected to UQs, Ds and EQs respectively, i.e. they classify these groups just like the N feature classifies

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[73] Nouns have obviously a whole array of semantic features, which are in some frameworks, e.g. Distributed Morphology replaced by roots.

Nouns. For example, the determiner *the* Valued 0UNI can appear only under 0UNI, i.e. the D position, but not in e.g. -UNI, i.e. EQ position, just like the element *car* categorized by N-feature can appear only as the head of nominal domains, but not as the head of e.g. verbal domains.

This sequence predicts that categories will always appear in this order in case they co-occur. In other words concrete elements divided into three categories in the table (33) repeated and expanded here as (224) can only enter the position in which their Universality feature Value matches the position. Thus, Czech and Spanish counterparts belong to the same classes.

224. Elements of Extended NPs divided into Universal Quantifiers, Determiners and Existential Quantifiers

Class	Feature specification	List of elements
Universal Quantifiers	+UNI	*all, every, each, both* (and the +numerals 2, 3, 4)
Determiners	0UNI	*the, this, these, that, those, which, what, a,* possessives, *such*
Existential Quantifiers	-UNI	numerals (higher than 4)*, many, much, some, any, no, few, a few, little, a little, one*

In cases where the phrase does not contain an overt realization of an element in –Uni position, which is the lowest one in the functional sequence, but overtly realizes a 0Uni or +Uni element, the –Uni position is still present in the structure and though empty, it is "saturated" by the featural content of another morpheme which is overtly realized in the structure as exemplified in (225).

225. **Structure and featural content of an Extended NP *this house* with empty –UNI position**

```
                      uniP
                     /    \
            0uni: this      uniP
          [-Q; 0G, +PROX]  /    \
                     -uni: Ø      n: house [-Q, 0G]
```
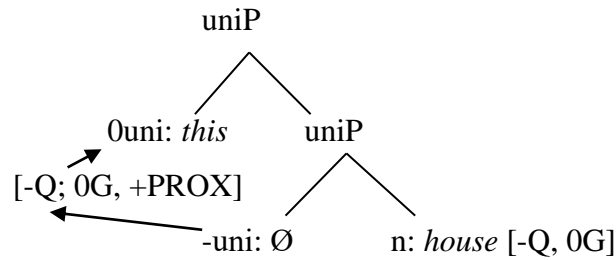
The arrows in (225) suggest that the feature –Q which is interpretable in the –Uni position, i.e. EQ position, is overtly realized in the 0Uni position. Thus, the condition of overt realization of each feature is fulfilled and at the same time the functional sequence is not broken. In my analysis, therefore, the implication of existential quantification in *this house* is predicted, though more familiar representations of this NP contain no Quantifier position and so fail to predict this.

In the following section I show how the principles presented so far determine the subject of the present thesis – the Extended NP in Czech, English and Spanish.

4.3 Applying the rules: concrete features

As suggested in the previous Chapters, the seemingly chaotic co-occurrence of noun-modifying elements follows certain principles and rules which are cross-linguistically (potentially) universal and parameters which are language particular. I have excluded some of the co-occurrence from the discussion in Chapter 1 and now I provide an account of the remaining restrictions. They are underlined in the following table (226) which is an adaptation of the table (78).

The element in the first column is the first one in surface ordering and higher one in the structure, i.e. D. On the other hand, the element in the first line is Q, i.e. the second element in the structure.

226. Possible combinations of Ds and Qs within ENPs in Czech (C), English (E) and Spanish (S)[74]

	many	*much*	*one*	*two*	*five*	*some*	*any*	*no*	*few*	*little*	*a few*	*a little*	*several*
the	<u>C, E, S</u>	<u>C, S</u>	C	C, E, S					<u>C, S</u>	<u>C</u>	<u>C, E, S</u>	<u>E, S</u>	<u>C</u>
this	■		C, E	■					■		■	<u>C, S</u>	■
these	<u>C, E, S</u>	■	■	C, E, S					<u>C</u>	■	C, E	■	C, E, S
that	■		C, E	■					■	<u>C</u>	■	C, E, S	■
those	<u>C, E, S</u>	■	■	C, E, S						■	C, E	■	<u>C</u>
my	<u>C, E, S</u>		C	C, E, S							C, E, S		<u>C, S</u>
which				C, E, S							<u>C, E, S</u>		
what				C, E, S							<u>C, E, S</u>	C, E, S	
such			C	C, E									

---

[74] Appendix lists examples to each of these co-occurrences.

In order to start the discussion, let me review analyses of possible types of co-occurrences under (227) - (231) which I proposed in the previous Chapters.

227. **Co-occurrence of three elements**

   a. (Cz) *Všech těch sedm chlapců mělo špinavé ruce.*

   b. (En) *All the seven boys had dirty hands.*

   c. (Sp) *Todos los siete chicos tenían manos sucias.*

If all three functional positions in the Extended NP are overtly realized, the top Universal Quantifier functions as an emphasizer. For further discussion of UQs see Chapter 6.

228. **Co-occurrence in reversed order**

   a. (Cz) *Tři ti chlapci si je umyli.*

   b. (En) *Three of the boys washed them.*

   c. (Sp) *Tres de los chicos las lavaron.*

If a Determiner follows an Existential Quantifier, the expected functional sequence is broken. However, as shown in Section (1.6.1) these are so-called partitive-reference phrases which have more complicated internal structure than simple, non-recursive Extended NPs.

229. **Co-occurrence of elements placed spelled out in the same position**

   a. (Cz) *Nějakých dvacet chlapců šlo domů dříve.*

   b. (En) *Some twenty boys went home earlier.*

   c. (Sp) *Algunos veinte chicos fueron a casa más temprano.*

As suggested in Section (1.7), these elements represent either the cases when one position is filled with more than one element because of **compatible featural content**, or a case of partitive reference.

230. **Co-occurrence of elements with complementary featural content**

     a. (Cz) *Neviděli jsme těch pár chlapců s čistýma rukama.*

     b. (En) *We didn´t see the few boys with clean hands.*

     c. (Sp) *No vimos a los pocos chicos con manos limpias.*

If the featural content of one or both elements is negative or neutral, e.g. in the case of a Q feature on a definite article, they can be complemented by another element. In prototypical cases each element occupies its own position and the values of the two features do not cause a "crash".

231. **Co-occurrence with *one***

     a. (Cz) *Ten jeden chlapec nestačí.*

     b. (En) **The one boy is not enough.*

     c. (Sp) **El uno chico no basta.*

     d. (En) *Only one boy is not enough.*

     e. (Sp) *Solo un chico no basta.*

Czech *jeden* 'one' following a D is interpreted as only. English and Spanish in which the same structure is ungrammatical employ alternative structures as illustrated in (231d) and (231e).

     Other cases of featural (in)compatibility are discussed in the following paragraphs. I focus on the parametric differences and their causes, i.e. on the differences of features which are cross-linguistic counterparts. I show that even features which are relevant only for the semantic interface can influence the co-occurrence; in this case the Distributivity and Expectative features.

     The elements carrying the zero value of the Distributive feature are a nice example of the influence of featural compatibility of each element on co-occurrence within one language. This is the effect of Starke's 2001 anti-identity constraint, as well as cross-linguistically differing compatibility of the same features. The relevant elements are listed in the following example (232).

232. Determiners carrying the Distributive feature

Czech/ English/ Spanish	Featural content
takový/ such/ tal	±Pl, +Def, 0Uni, 0Distr
který/ which/ cuál	±0Pl, +Def, 0Uni, 0Distr
jaký/ what/ qué	±0Pl, -Def, 0Uni, 0Distr

Except for numerals higher than 1 which show cross-linguistically consistent co-occurrence with these elements, Czech has an extra co-occurrence with *pár* and *několik* ('*a few*' and '*several*' in English) as illustrated in (233).

233. a. (Cz) *Takových pár/ několik tisíc by nám pomohlo.*

　　b. (En) **Such a few/ several thousand would help us.*

　　c. (Sp) ** Tal un par de/ varios millones nos ayudaría.*

This exceptional co-occurrence can be analysed as a direct result of the optional determiner in Czech. In fact, it is another example of an emphasizing structure similar to the UQ discussed in Section (1.6.2), based on the following set of data in (234), limited to Czech precisely because of the optional nature of the determination.

234. a. (Cz) *Mám tu takový ten šroubovák.*

　　　　have here such the screwdriver

　　　　'Here I have the screwdriver (you know which one).'

　　b. (Cz) *Podej mi takové ty tři poličky.*

　　　　hand me such the three shelves

　　　　'Hand me those three shelves (you know which ones).'

　　c. (Cz) *Kterých/ Jakých těch pět koček chceš?*

　　　　which　　　what the five cats want

　　　　'Which/ what five cats do you want (we talked about them)?'

The Distributive feature elements have only emphasizing or perhaps focusing semantic function but do not further limit or specify the set or the object of extra-linguistic reference.

The fact that *what/ which/ such* have a valued Definiteness feature blocks their co-occurrence with *a few/ a little/ several* which are also valued for this feature in English (and relevant counterparts in Spanish) but not in Czech, which has "weaker" definiteness feature as suggested in Section (2.6).

What is interesting with respect to the present structure building rules is the interaction of features which semantically distinguish these elements from the other ones, i.e. the Expectative and Distributive feature. It seems that the 0Expectative value, but not the other values, allow co-occurrence with the Distributive feature in Czech (but not in English and Spanish) as shown in Table (226) and illustrated below in (235).

235. a. (Cz) *Takových pár/ několik tisíc by nám pomohlo.*

        such a few several thousand would us help

        'A few/ several thousand would help us (more or less).'

   b. (Cz) **Takových mnoho/ málo tisíc by nám pomohlo.*

        such   many   few thousand would us help

The values of the Expectative feature express whether the number of extra linguistic referents is or is not expected, or if there are no expectations at all. The elements carrying this feature always refer to more than one element and as suggested in the previous Section (4.2), the value of the Expectative feature may have an influence on the possibility of co-occurrence. The following Table (236) lists all the relevant elements in Czech, English and Spanish. This table partially repeats (137).

236. Elements carrying the Expectative feature

Czech/ English/ Spanish	Featural content
mnoho/ many / muchos	+Pl, -Uni, +Exp
mnoho/ much / mucho	0Pl, -Uni, +Exp
pár/ a few/ un par de	+Pl, -Uni, 0Exp
trochu /a little / un poco de	0Pl, -Uni, 0Exp
málo/ few/ poco	+Pl, -Uni, -Exp
málo/ little / poco	0Pl, -Uni, -Exp
několik/ several/ varios	+Pl, -Uni, 0Exp

The +Exp and –Exp elements co-occur with any determiner except for those which contain the Distributive feature. I illustrated this in (235) and I add more examples in the three languages in (237) and (238).

237. a. (Cz) *Žili tam **těch mnoho** let šťastně.*
 b. (En) *They lived there for **the many** years happily.*
 c. (Sp) *Allí felizmente vivieron **los muchos** años.*

238. a. (Cz) **Jaké málo vody mi přineseš?*
 b. (En) **What little water will you bring?*
 c. (Sp) **¿Qué poca agua traerás?[75]*

To sum up, the present system predicts that the Distributive feature will combine only with numerals and elements with the Expectative feature valued 0Exp in Czech, and by extension in languages which do not require obligatory filled Extended NPs. Together with the limitations listed in the beginning of the present section, the co-occurrence within the Extended NP in Czech, English and Spanish seems to follow simple rules.

4.4 Reasons why features do not delete

To my knowledge, the assumption of Chomsky and of Pesetsky and Torrego that once an unvalued feature has been used or checked, it is deleted and the only thing that is left is the surface realization in the structure, such as a morpheme, is not supported by any empirical evidence. The present mechanisms for building a phrase do not encounter or interact with semantically vacuous deletion at any point. On the other hand, Impoverishment, i.e. feature deletion which causes an effect for both syntactic and semantic interfaces, is discussed in Chapter 6.

For clarity I offer the following metaphor. When you, as a user, look at a website, the interface you see is the surface. If the programmer of the website logs in, he will see the code – brackets and numbers and abbreviations which ensure the correct functioning of the website. If the programmer wants to move a phrase or rephrase a sentence, he needs to do so in the code, not in the surface manifestation. The assumption that he deletes the code once he gets the right result is simply not plausible.

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[75] If we replace *jaké/ what/ qué* with *jak/ how/ cuán* which are grammatical in this context an interesting data set is created. I leave it for further research.

In my view, the same applies to natural languages. The underlying structure, including the features, is always present, just on a different level and visible only to the programmer, i.e. our brain. When moving an element or changing the structure (e.g. from active to passive), the changes are done on the underlying level in order to become relevant for the surface structure. However, we only see the surface.

A clear example of the feature presence long after a sentence has been processed is the Noun – Verb agreement which takes place not only locally but also in cases where the Noun is very far from the verb. I exemplify this long-distance agreement in example (239).

239. (Cz) *Nevím, proč se **Jana**, kter**á** nikdy neby**la** dobr**á** kuchař**ka**, i když chodi**la** do kurzů, kde vařili asijskou kuchyni, kterou fakt nemám ráda, protože ty chutě jsou moc exotické, nabíd**la**, že bud**e** vařit.*

'I don´t know why **Jana**, **who has** never been a good cook, even though **she** attended a course of Asian cuisine, which I really don´t like because the taste is too exotic, offered **herself** to cook.'

Anaphors and cataphors present another example of feature presence after finishing the processes within a particular constituent.

Last, but not least, the presence of features throughout and after the derivation is desirable as they react to each other at a distance, even though the actual structural relations are local. Obviously, this is true not only within nominal phrases but also outside of the nominal phrase where a preposition combines only with a certain Case as in (240) or a Verb only combines with a certain type of selected phrase as in (241).

240. a. (Cz) *Něco **pro/ *s tebe** mám.*
    b. (En) *I´ve got something **for/ *with you**.*[76]
    c. (Sp) *Tengo algo **para/ *con tí**.*

241. a. (Cz) ***Rozdali své dary/ *svůj dar** chudým.*
    b. (En) *They **scattered their gifts/ *gift** to the poor.*

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[76] Obviously, the sentences are both grammatical but the meanings are different.

c. (Sp) ***Esparcieron sus dones/ *su don*** *a los pobres.*

All these processes are made possible by the presence of features even after the derivation has been finished.

4.5 Summary of Chapter 4

The present Chapter introduced a structure building system consisting of several theories which accounts for the phenomena discussed in Chapter 1 - 3. The instruments used for the analysis are:

- A simplified version of Merge, as introduced in Starke 2001, which considers both external and internal merge as one type of process.
- Separation of Interpretability and Valuation, which adds two possible types of features that play different roles in the derivation and have different functions in the structure.
- A feature sharing version of Agree for phi-features adapted from Pesetsky and Torrego 2007, in which c-command is replaced by dominance following Starke 2001.
- A functional sequence which accounts for the order of elements in the Extended NP.
- Three types of features each of which goes through different processes but none of which gets deleted after the derivation has ended.

Besides the instruments above I have also discussed the original position of features in the structure, i.e. the places where they get semantically interpreted as well as the processes they go through during agreement.

5. Syntactic analysis of Adjectives

In spite of different surface positions of Adjectives (hereafter As) in Czech, English and Spanish, I will argue that inside the Nominal Phrase, there are three positions for Adjectives which are cross-linguistically comparable in all three languages.

These three adjectival positions, labeled A1, A2, A3 in left-to-right direction, differ in their characteristics.[77] This is not a completely new idea as already Abney 1987 argues that pre-nominal and post-nominal adjectives are not mere optional variants of each other.

Though there can appear more than three Adjectives, to keep a phrase felicitous, their number must be limited in all three languages. As illustrated in examples (242) and (243) below, the adjectival positions may remain empty, but they may be all filled as well.

242. a. (Cz) *moje opravdová$_{A1}$ krásná$_{A2}$ bílá $_{A2}$ holubice hrdá$_{A3}$ na své peří*
    b. (En) *my actual$_{A1}$ beatiful $_{A2}$ white $_{A2}$ dove proud $_{A3}$ of her feathers*
    c. (Sp) *mi auténtica$_{A1}$ paloma blanca $_{A2}$ bonita $_{A2}$ orgullosa $_{A3}$ de sus plumas*

243. a. (Cz) *ten budoucí$_{A1}$ manžel naštvaný $_{A3}$ na svou sestru*
    b. (En) *that future$_{A1}$ husband angry $_{A3}$ with his sister*
    c. (Sp) *este futuro$_{A1}$ marido enfadado $_{A3}$ con su hermana*

A1 is a position for a limited number of Adjectives which have very idiosyncratic properties. On the other hand, A2 and A3 can accommodate almost every Adjective. The adjectival positions are classified by **their morpho-syntactic properties** listed in (244).

244. Characteristic properties for an adjectival position

i.   Gradability
ii.   Possible pre-modification
iii.   Possible post-modification
iv.   Recursion
v.   A-N agreement

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[77] A2 and A3 are already exemplified in the example (1) in Chapter 1.

These syntactic and morphological properties have been chosen as relevant as opposed to semantic properties of Adjectives which do not yield a clear classification. I discuss these characteristics in turn with respect to Czech, English and Spanish in Sections (5.1) – (5.5).

Another syntactic property of As discussed throughout the present Chapter is the size of the Adjectival phrase or projection. It is generally acknowledged that **the size of a phrase influences its properties**. Therefore, I will also discuss the characteristics above from this point of view.

In contrast with Chapters 1 - 4, which focused on the elements of Extended NPs, I do not discuss the featural content of As. First, because as an open lexical class, the list would be very long and of doubtful relevance to grammar, and second, because the literature on As has been saturated by discussions from that point of view (see Dixon 1982; Scott 2002; Cinque 2010 and many others). The present discussion is therefore an attempt of mostly morpho-syntactic analysis.

5.1   Gradability and the A1 position

With the exception of As in the A1 position, Czech, English and Spanish **Adjectives** are **generally gradable**, i.e. they **have comparative and superlative forms**. In Czech and English, the grading can be either **synthetic** as in (245) or **analytic** as in (247), though in Czech the synthetic grading is more usual as illustrated in (246) and commented on below the examples. Spanish employs only analytic grading.

245. a. (Cz) *Velký chlapec obdivoval **většího** chlapce, který obdivoval **největšího** chlapce.*

    b. (En) *A **big** boy admired a **bigger** boy who admired **the biggest** boy.*

    c. (Sp) *Un chico **grande** admiró un chico **más grande** quien admiró **el** chico **más grande**.*

246. (Cz) *Na talíři byly **horké** brambory.V hrnci byly ještě **více horké** brambory. **Nejvíce horké** brambory byly v troubě.*

    'On the plate there were hot potatoes. In the pot there were even hotter potatoes. The hottest potatoes were in the oven.'

247. (En) *I work with **careless** colleagues. My sister works with **more careless** colleagues. Your dad works with **the most careless** colleagues.*

Osolsobě 2014 (138-9) infers from corpus research that the analytic grading in Czech is much less frequent than the synthetic grading. Furthermore, it is usually parallel to the synthetic grading, as it is the case for some words in English. In other words, a number of As can be graded both analytically and synthetically, and these two manners are interchangeable though not used with the same frequency. I give more examples of the two types of grading in (248) and (249).

248. *a.* (Cz) *známá herečka, známější herečka, nejznámější herečka*

      known actress   known$_{COMP}$ actress known$_{SUP}$ actress

      'a known actress, a more known actress, the most known actress'

   b. (Cz) *známá herečka, více známá herečka, nejvíce známá herečka*

      known actress   more known actress most   known actress

      'a known actress, more known actress, the most known actress'

249. a. (En) *a pretty picture, a prettier picture, the prettiest picture*

   b. (En) *a pretty picture, a more pretty picture, the most pretty picture*

Both **analytic and synthetic** grading will be considered as **one phenomenon**. **Likewise** for irregular **suppletive** grading, which can occur with *good* in all three languages as illustrated in (250).[78]

250. a. (Cz) *dobré mléko, lepší mléko, nejlepší mléko*

     b. (En) *good milk, better milk, the best milk*

     c. (Sp) *leche buena, leche mejor, la leche mejor*

The Adjectives which are in comparative or superlative forms are realizations of the same feature, whether they are formed analytically, synthetically or by suppletion, that is, the two degrees of grading share a common feature. For a developed discussion in favor of this analysis see Bobaljik 2011.

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[78] Another example of suppletive grading in all three languages would be *bad:*

   1. a. (Cz) *špatný herec, horší herec, nejhorší herec*
     b. (En) *a bad actor, a worse actor, the worst actor*
     c. (Sp) *un actor malo, un actor peor, el actor peor*

Adjectives in A1 are pre-nominal and non-gradable in all three languages. They are exemplified in comparison with A2 in (251) – (254) .

251. a. (Cz) *__Skvělejší___{A1} býk se objevil už včera.*

    b. (En) *__The greater__ _{A1} bull already appeared yesterday.* (meaning *more wonderful*)

    c. (Sp) *__Un más gran__ _{A1} toro ya apareció ayer.*

252. a. (Cz) *__Větší___{A2} býk se objevil už včera.*

    b. (En) *A __bigger__ _{A2} bull already appeared yesterday.*

    c. (Sp) *Un toro __más grande__ _{A2} ya apareció ayer.*

253. a. (Cz) *__*Ubožejší__ _{A1} chlapec sbíral své tužky.*

    b. (En) *__*The poorer__ _{A1} boy was picking his pencils up. (*meaning *unfortunate*)

    c. (Sp) *__*Un más pobre__ _{A1} chico recogía sus lápices.*[79]

254. a. (Cz) *__Chudší__ _{A2} chlapec sbíral své tužky.*

    b. (En) *A __poorer__ _{A2} boy* (meaning *lacking money*) *was picking his pencils up.*

    c. (Sp) *Un chico __más pobre__ _{A2} recogía sus lápices.*

As opposed to Czech and English, the **prototypical position for Spanish Adjectives is post-nominal**. Any Spanish Adjective which surfaces as **pre-nominal is in the A1 position**. An Adjective which is generated in the A1 position has meaning shifted from when it is generated in the A2 position. Counterparts of these Adjectives in English and Czech are either homonymic or translated as two different words, as illustrated in examples (255) - (260) below.

255. a. (Cz) *Byl to __skvělý___{A1} býk.*

    b. (En) *It was a __great__ _{A1} bull.* (meaning *fantastic, wonderful*)

    c. (Sp) *Fue un __gran__ _{A1} toro.*

256. a. (Cz) *Byl to __velký___{A2} býk.*

    b. (En) *It was a __big___{A2} bull.*

    c. (Sp) *Fue un toro __grande___{A2.}* (meaning *large*)

---

[79] English *poor* meaning *unfortunate* can be generated in the A2 and A3 position as well. In those cases, it is gradable.

257. a. (Cz) *Ten **ubohý** A1 chlapec nemá rodinu.*

    b. (En) *The **poor**A1 boy doesnˊt have a family.* (meaning *unfortunate*)

    c. (Sp) *El **pobre** A1 chico no tiene una familia.*

258. a. (Cz) *Kde je ten **chudý** A2 chlapec?*

    b. (En) *Where is the **poor**A2 boy?* (having no money)

    c. (Sp) *¿Dónde está el chico **pobre**A2?*

259. a. (Cz) *Je to můj **starý**A1 přítel.*

    b. (En) *Heˊs an **old**A1 friend of mine.* (meaning *long-time*)

    c. (Sp) *Es un **viejo**A1 amigo mío.*

260. a. (Cz) ***Starý**A2 přítel ti může dobře poradit.*

    b. (En) *An **old**A2 friend can advise you well.* (meaning *born long ago*)

    c. (Sp) *Un amigo **viejo**A2 puede aconsejarte bien.*

Since the only non-gradable position for Adjectives is A1, I conclude that Spanish pre-nominal Adjectives are generated in A1. Moreover, we can propose that the reason grading is not available in A1 is that **A1 is not the head of an AP** as are A2 and A3. The following Section (5.2) comes back to this point.

5.2 Possible pre-modification

Adjectives generated in the **A1 position do not allow adverbial pre-modification**, as opposed to A2 and A3, all of which can be pre-modified in Czech, English and Spanish as illustrated in (261) – (264).

261. a. (Cz) *Velmi šťastný*A2 manžel je často doma.*

    b. (En) *A very happy*A2 husband is often home.*

    c. (Sp) *Un marido muy feliz*A2 está amenudo en casa.*

262. a. (Cz) *Manžel velmi naštvaný*A3 na svou ženu jde do hospody.*

    b. (En) *A husband very angry*A3 with his wife goes to a pub.*

    c. (Sp) *Un marido muy enfadado*A3 con su esposa va a un pub.*

263. a. (Cz) **Velmi budoucí*A1 manželje milý na tchána.*

    b. (En) **A very future*A1 husband is nice to the father-in-law.*

    c. (Sp) **Un muy futuro*A1 marido es bueno con el suegro.*

264. a. (Cz) *Je to jen (*opravdu) pouhý$_{A1}$ otravný$_{A2}$ komár.*

b. (En) *That is just a (*really) mere$_{A1}$ annoying$_{A2}$ mosquito.*

c. (Sp) *Es solamente un (*realmente) mero$_{A1}$ mosquito fastidioso$_{A2}$.*

The ungrammaticality of pre-modification is caused by the syntactic size of Adjectives. Supposing that both grading and pre-modification requires a structure above the A, i.e. requires being a part of an AP, it is clear that **As positioned in A1 cannot be APs**. Therefore again, I conclude **they are bare A^0**. Further consequences of this analysis are discussed in the next Section (5.3).

Before I move there, let me discuss the exceptional group of the A1 Adjectives. Syntactic characteristics are not enough to characterize the A group which can appear in this position. The following table (265) lists some of the A groups with examples in English (Czech and Spanish counterparts belong to those groups as well) which **commonly appear in the A1 position.** They are non-gradable and do not allow pre-modification and as discussed in Section (5.3).

265. List of Adjectival groups which appear in the A1 position

Group	Examples
Emotionally evaluative	*poor* (meaning *unfortunate*), *great, true*
Temporal	*future, next, former*
Measuring	*mere, real*
Related to a unique object	*lunar, solar, divine, universal*
Absolute dimension	*final, supreme, dead*

This list is not complete and there are other As which do not fit any of the groups perfectly, but for illustration the table serves well. The A1 Adjectives are an atypical and limited group and though some of them can be placed also in A2 and A3, they tend to retain their special status and properties.

5.3 Possible post-modification

As opposed to the two points about A1 which treated gradability and pre-modification and by which A2 and A3 were in the same group, the positions **A1 and A2** are grouped together by the **impossibility of post-modification** which is allowed only with A3. As

suggested earlier, an A can be generated in all three positions with different characteristics. Therefore Czech *slabý* 'weak' and its English and Spanish counterparts occupy A3 in (266), but they are ungrammatical if generated on A2 with the modifying PP obligatory for A3, as illustrated in (267).

266. a. (Cz) *Poslali nám muže příliš slabého$_{A3}$nápráci.*

b. (En) *They sent a man too weak$_{A3}$ to work.*

c. (Sp) *Nos enviaron a un hombre demasiado débil$_{A3}$ para trabajar.*

267. a. (Cz) **příliš slabý$_{A2}$ na práci muž*

b. (En) **a too weak$_{A2}$ to work man*

c. (Sp) **un hombre demasiado débil$_{A2}$ para trabajar*

The post-modification increases the size of AP to such an extent that it becomes ungrammatical in the pre-nominal position in Czech and English, or, as a matter of fact even in the position immediately following the Noun in Spanish. The post-modification of As exemplified in (266) and (267) is usually realized by a Prepositional phrase or a Verb Phrase (henceforth PP or VP).

Czech, English and Spanish require that any post-modified phrase occurs only at the right edge of the higher Nominal Phrase. Thus, they are part of the phenomena of Heavy Constituent Shift. The positions A1, A2 and A3 are ordered from left to right, i.e. A3 is always the last Adjectival position.[80]

In **Czech and English**, the distinction between A2 and A3 is clear because **A2 is a pre-nominal** position in these languages. On the other hand, **in Spanish**, both **A2 and A3 are post-nominal**. The only obvious distinctions are the position, i.e. its closeness to the Noun, and the possibility of post-modification. The ability of Spanish **A2** to stand

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[80] There may be some heavy complements of the head N, like PPs (bold in (1)) and clauses (bold in (2)) which follow the A3 in an NP, but I do not enter into this complex area.

1. a. (Cz) *chléb **s marmeládou***
   b. (En) *bread **with marmalade***
   c. (Sp) *pan **con mermelada***
2. a. (Cz) *Je to chléb, **který musíš zkusit.***
   b. (En) *It´s bread **which you must try**.*
   c. (Sp) *Es pan **que tienes que probar.***

in the post-nominal position **without post-modification** is at the same time **a test for this position**.

Like pre-modification, **post-modification increases the size of AP**, which is the reason why it does not occur in A1.[81] On the other hand, if both A2 and A3 are positions for APs, post-modification should be possible with both of them. However, we know that is not the case. I argue that the inability of A2 to take a complement in the form of a PP or VP is caused by the fact that **the complement position of A2 is already occupied by the NP**. Then, the syntactic distinctions among A1, A2 and A3 need to be viewed not only as a result of their size but also their **subcategorization properties** which are listed in (268).

268. **Subcategorization properties of Adjectival positions**

A1 (__ NP)

A2 (__ NP)

A3 (__ PP/ VP)

These subcategorization properties correspond to the fixed order of the three positions. This hypothesis is also supported by the ungrammaticality of any A1 being generated as a predicate, since it is not a full AP and when bare it misses the nominal features. Together **with NPs, APs are candidates to complete a copula** in Czech, English and Spanish. A2 and A3 can appear in the predicative position as opposed to A1 which I illustrate in (269) – (274).

269. a. (Cz) *On je vysoký$_{A2}$.*

b. (En) *He is tall$_{A2}$.*

c. (Sp) *Él es alto$_{A2}$.*

270. a. (Cz) *On je vysoký$_{A3}$ jako hora.*

b. (En) *He is tall$_{A3}$ like a mountain.*

c. (Sp) *Él es alto$_{A3}$ como una montaña.*

---

[81] As already noted, the fact that A1 does not allow any pre-modification or post-modification and the Adjectives there are not gradable suggests that Adjectives in A1 are not APs but A^0.

271. a. (Cz) *On je budoucí premiér.*

    b. (En) *He is the future prime minister.*

    c. (Sp) *Él es el futuro primer ministro.*

272. a. (Cz) **On se stal budoucí$_{A1}$.*

    b. (En) **He became future$_{A1}$.*

    c. (Sp) **Él se volvió futuro$_{A1}$.*

273. a. (Cz) **On se zdá pouhý$_{A1}$.*

    b. (En) **He seems mere$_{A1}$.*

    c. (Sp) **Él parece mero$_{A1}$.*

274. a. (Cz) **On je předchozí$_{A1}$.*

    b. (En) **He is former$_{A1}$.*

    c. (Sp) **Él es anterior$_{A1}$.*

Having shown that the **three positions have different subcategorization properties** and that **A1 is a head whereas A2 and A3 are APs**, I move to the recursion, another aspect of Adjectives as a part of the Extended NP in Czech, English and Spanish.

5.4 Adjectival recursion limited to A2

As noted in the Introduction of this Chapter 5, the three A positions can be filled or remain empty and a Noun can be modified by more than three Adjectives. In the present section I argue that when there is a productive, i.e. not lexically specified, **recursion** of Adjectives, it **relates to the A2 position**, which is pre-nominal in Czech and English and post-nominal in Spanish.

    The term of recursion is defined as the **repetition of the same position**. The following example (275) illustrates a situation with a triple recursion of the A2 position in bold. The post-nominal A2 adjectives with Spanish nominals are the same combinations as in English and Czech, but with reversed order, and therefore no glosses are necessary. The phrases are grammatical but difficult to process, therefore listed with a question mark.

275. a. (Cz) *?pouhá_{A1} **krásná_{A2} talentovaná_{A2} tmavovlasá_{A2}** dívka hrdá_{A3} na své šaty*

    b. (En) *?a mere_{A1} **beautiful_{A2} talented_{A2} dark-haired_{A2}** girl proud_{A3} of her dress*

    c. (Sp) *?una mera _{A1} chica **morena_{A2} talentosa_{A2} bonita_{A2}** orgullosa_{A3} de su vestido*

The occurrence of phrases with multiple recursion is infrequent and the restriction on number of modifiers appears to limit the size of Extended NPs. I claim that this restriction applies to Adjectives in all three languages as well.

    The recursion of two Czech and English As in A2 is very common, but Spanish often uses a nominalized Adjective, i.e. adjective with a definite or indefinite article, as illustrated in (276d) and (276e) which are two possible versions of the same phrase.

276. a. (Cz) *Viděla jsem hezkého_{A2} vysokého_{A2} muže.*

    b. (En) *I saw a handsome_{A2} tall_{A2} man.*

    c. (Sp) *Vi a un hombre alto_{A2} guapo_{A2}.*

    d. (Sp) *Vi a un guapo_N alto_{A2}.*

    e. (Sp) *Vi a un alto_N guapo_{A2}.*

This frequent change is achieved by a simple addition of the article tells us that the structure of Agreeing As is very close to Ns, which is a hypothesis I argue for in the following section.[82]

    In case where the Noun ellipsis is not possible, which are mostly the cases when the N carries stronger meaning, there are two possible structures. Either one of the As is either placed in A1 and loses the properties present in case it is an A2, i.e. gradability and pre-modification, as illustrated in (277c), or both As follow the N and retain the properties of A2, as illustrated in (277d).

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[82] In the case of being one of the two A2 in recursion, the As *pequeño* 'little' and *grande* 'big' can be translated as suffixes on Ns as illustrated below.

    1. a. (Cz) *Je to chytrý **malý** chlapec.*
       b. (En) *It is a clever **little** boy.*
       c. (Sp) *Es un chiqu**ito** listo.*
    2. a. (Cz) *Byla to **velká** černá kočka*
       b. (En) *It was a **big** black cat.*
       c. (Sp) *Fue un gat**ón** negro.*

277. a. (Cz) *Držela krásnou$_{A2}$ černou$_{A2}$ knihu.*

  b. (En) *She held a beautiful$_{A2}$ black$_{A2}$ book.*

  c. (Sp) *Sostenía un bonito$_{A1}$ libro negro$_{A2}$.*

  d. (Sp) *Sostenía un libro negro$_{A2}$ bonito $_{A2}$.*

The other two positions, A1 and A3, are not prototypically recursive. In the case of A3 the recursion of obligatorily post-modified Adjectives causes difficulties in processing the phrase. The speaker chooses an alternative syntactic strategy to express the same semantic context, e.g. a dependent clause or an elliptical construction connected by a preposition.

278. a. (Cz) *??Zastavili muže rozčíleného kvůli stávce připraveného pracovat.*

  b. (En) *??They stopped a man upset about the strike ready to work.*

  c. (Sp) *??Pararon a un hombre molesto por la huelga listo para trabajar*

279. a. (Cz) **Nějaké knihy plné fotek příliš staré na renovaci byly prodány.*

  b. (En) **Some books full of photos too old for a re-binding were sold.*

  c. (Sp) **Algunos libros llenos de fotos demasiado viejos para una renovación se vendieron.*

As for the A3 recursion, the main issue seems to be the processing of a double structure which is obligatorily post-modified, as illustrated in (280).

280. a. (Cz) **Je to muž pyšný$_{A3}$ na svou dceru zvědavý$_{A3}$ na svého syna.*

  b. (En) **It´s a man proud$_{A3}$ of his daughter curious$_{A3}$ about his son.*

  c. (Sp) **Es un hombre orgulloso$_{A3}$ de su hija curioso$_{A3}$ por su hijo.*

The same issue appears with too many pre-nominal As as already illustrated in the example (275).

  In case two A1 Adjectives are used, I claim that their usage must be lexically stipulated as grammatical based on the low number of these cases and their fixed order. These two limitations are illustrated in (281) - (284).

281. a. (Cz) *On je pouhý$_{A1}$ budoucí$_{A2}$ manžel.*

   b. (En) *He is a mere$_{A1}$future$_{A2}$ husband.*

   c. (Sp) *?Él es un mero$_{A1}$marido futuro$_{A2}$.*

   d. (Sp) *?Él es un mero$_{A1}$ futuro$_{A2}$ marido.*

282. a. (Cz) **On je budoucí pouhý manžel.*

   b. (En) **He is a future mere husband.*

   c. (Sp) **Él es un futuro marido mero.*

   d. (Sp) **Él en un futuro mero marido.*

283. a. (Cz) **To, co viděla, byl ubohý skutečný žebrák.*

   b. (En) **What she saw was a virtual poor beggar.*

   c. (Sp) **Lo que vió fue un virtual pobre mendigo.*

   d. (Sp) **Lo que vió fue un virtual mendigo pobre.*

284. a. (Cz) **To, co viděla, byl skutečný ubohý žebrák.*

   b. (En) **What she saw was a poor virtual beggar.*

   c. (Sp) **Lo que vió fue un pobre virtual mendigo.*

   d. (Sp) **Lo que vió fue un pobre mendigo virtual.*

The question mark in (281c) and (281d) suggests that Spanish native speakers are not sure of acceptability of either of the two phrases. Whereas in Czech and English the native speakers assess the phrases in (281) as "a bit emphatic", Spanish speakers doubt, though do not conclusively reject, the acceptability and suggest the phrasing in (285).

285. *a. (Cz) On je pouze budoucí$_{A1}$manžel.*

   b. (En) He is merely a future$_{A1}$ husband.

   c. (Sp) Él es meramente un futuro$_{A1}$ marido.

The preference of Adverbial forms of the leftmost A1 suggests that the recursion is not an option or at least, that it is marginal. These adverbs in the VP are just paraphrases and seem irrelevant to syntax.[83]

   In the following Section (5.5) I explore the morpho-syntactic properties of each position to demonstrate that they are indeed unique.

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[83] Note that the Adverb does not modify the A1 but the whole Extended NP, as it comes before the determiner therefore it is not relevant for the present thesis.

5.5 A-N Agreement and relation of the two categories

The last property which helps to classify the Adjectives into A1, A2 and A3 is the phi-feature Agreement with the N the As modify. The Agreement is done according to the principles stated in Chapter 4, i.e. the N shares its features with the modifying A as in (286) where the phi-feature values translate as Masculine Singular, with Case, such as Instrumental, being an additional feature in Czech.

286. a. (Cz) *Přišla s tím hezkým$_{INSTR.-Q.+G}$ mužem$_{INSTR.-Q.+G}$.*

    b. (En) *She came with the handsome$_{-Q.+G}$ man$_{-Q.+G}$.*

    c. (Sp) *Llegó con el hombre$_{-Q.+G}$ guapo$_{-Q.+G}$.*

Outside of Czech NPs, it is possible to employ a "passive-like" agreement pattern after copula which is ungrammatical within the NP. The two forms carry the same meaning and they are illustrated in (287).

287. a. (Cz) *Barvy pro tento pokoj jsou **vybrány/ vybrané.***

           colours for this room are chosen$_{PASS}$ chosen$_{ADJ}$

          'The colours for this room are chosen.'

    b. (Cz) *Barvy **vybrané/ *vybrány** pro tento pokoj se mi nelíbí.*

           colours chosen$_{ADJ}$ chosen$_{PASS}$ for this room $_{REFL}$ me like

          'I don´t like the colours chosen for this room.'

    c. (Cz) *Ty vybrané/ *vybrány barvy jsou zvláštní.*

           the chosen$_{ADJ}$ chosen$_{PASS}$ colours are strange

          'The chosen colours are strange.'

This suggests that within the NP, the structure of an A is at least optionally different than when it appears in an NP-external position. Emonds 2012b argues that agreeing As within Extended NPs are in fact derived nominals with the structure in (288).[84]

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[84] See Bowers 2018 for a modification of Emonds' theory which yields results similar to the present theory.

288. The structure of Extended NP with derived nominals according to Emonds 2012b

```
                    DP
                  /    \
                 D      NP
                 |     /  \
                 |    N    N
                 |   / \   |
                 |  A   ɸ  |
   (Cz)   ten mlad  -ý      student
```

'the young student'
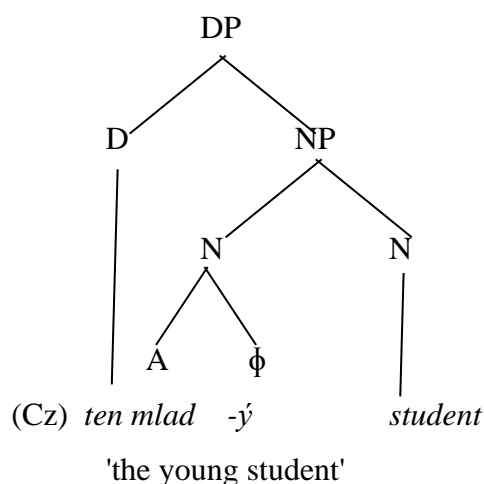
The phi-features on *mladý* 'young' are an N, and then project to the larger N and in Emonds' view, which I adopt, form the head which takes an Adjective as a complement. It seems that outside the Nominal Phrase, this structure is not present.

This structure explains why the Ns are frequently ellipted and replaced by an A with an article in the case of Spanish recursive As and as a matter of fact in other structures too.

5.6 Summary of Chapter 5

In the present Chapter, I have introduced three Adjectival positions A1, A2 and A3 which differ in their morpho-syntactic properties. These Adjectival positions are defined with respect to the Nouns they modify, but they also respect other syntactic principles, e.g. Heavy Constituent Shift, which is the reason for the leftmost post-nominal position of A3. These heavier APs can be followed by other 'heavy' complements of Ns such as clausal complements.

The agreeing Adjectives which are generated in these positions all have common structure of derived nominals (Emonds 2012) though their properties differ according to the position they stand in. The properties discussed in the present Chapter were carefully chosen to yield a classification and include gradability, pre-modification, post-modification, recursion and agreement with N.

Adjectives in the A1 position are non-gradable and can be neither pre-modified nor post-modified. This position is not recursive and the number of Adjectives which can appear in this position is limited. For these reasons, I consider the Adjective generated in this position A^0s and not APs.

Adjectives in the A2 position are generally gradable and, again, can be pre-modified but not post-modified. This position is recursive and can complete a copula which is a property of APs as well as NPs. The group of Adjectives which appear in this position is not limited.

Adjectives in the A3 position are generally gradable and obligatorily post-modified. As the only truly Adjectival position, this position is post-nominal, i.e. it follows the head Noun, in all three discussed languages. It can be pre-modified and probably because of its size it is not fully recursive.

6. Extending Impoverishment – a study of Universal Quantifiers

The English determiners *every, each, both* and *all* are classified as Universal Quantifiers in the framework of generative grammar (Jackendoff 1977). They are in complementary distribution, i.e. they do not co-occur in a single Extended NP.[85] As illustrated in (289) - (291), the same applies to their counterparts in Czech and Spanish.

289. a. (Cz) *Každý všichni kluk hraje fotbal.*
  b. (En) *Each/every all boy plays football.*
  c. (Sp) *Cada todos chicos juega al fútbol.*

290. a. (Cz) *Všechny obě holky zpívají ve sboru.*
  b. (En) *All both girls sing in the chorus.*
  c. (Sp) * Todas ambas chicas cantan en el coro.*

291. a. (Cz) *Všichni každý psi už jedli.*
  b. (En)*All each/ every dogs have already eaten.*
  c. (Sp)*Todos cada perros han comido ya.*

For a better overview, all available Universal Quantifiers in the three languages are listed in the following Table (292).

292. Universal Quantifiers in Czech, English and Spanish

Czech	English	Spanish
všichni	*all*	*todos*
každý	*each*	*cada*
	every	
oba	*both*	*ambos*

I argue that Universal Quantifiers are different phonological realizations (or allomorphs) of the same positional feature +Uni with added features which are listed in (293), which is Table (137) reduced to relevant elements. The crossing on +Q̶ represents the Impoverishment which has caused deletion of the +Q feature in the P(honetic) F(orm) of *every,* as described in more detail later in this section.

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[85] The idiomatic usage *each and every* means 'all, one by one'. I consider this construction a true exception since it has a lexically specified semantics.

293. Featural content of Universal Quantifiers

Element *CZ/ EN/ SP*	Featural content
všechny/ all/ todos	+Pl, +Uni, -Distr
oba/ both/ ambos	+Pl, +Uni, Dual
Ø /every/ Ø	~~+Pl,~~ +Uni, ±Distr
každý/ each/ cada	-Pl, +Uni, +Distr

The present analysis is pre-theoretically based on three observations:

- Syntactic and semantic differences among these elements are minimal.
- Cross-linguistically, these elements are translated by a strictly limited number of phonological elements.
- To my knowledge, no previous satisfying analysis fully explains the differences and similarities among these elements.

So far, I have worked with a system where a feature is either present or absent and the basic syntactic differences can be translated into the presence or absence of features on morphemes. More specific characteristics are then translated as values of these features. In the present chapter, I show that furthermore, it is possible to find **Impoverished** elements, where a feature gets deleted after the structure building is finished.[86]

In the sense of Nevins and Parrot 2010 who work in the framework of Distributed Morphology as presented in Embick and Noyer 2001 and 2007, **Impoverishment treats the agreement features**, e.g. dissociated features, of the verb *to be* in the construction they study. The Impoverishment operation does not influence the semantics of an expression. Nevins and Parrot also connect Impoverishment with variable application of the insertion rules, i.e. if a more specific element is available, it is inserted.

In this work, **Impoverishment can also apply to a feature in a canonical position,** therefore the original term needs to be expanded. If a base-generated feature is **Impoverished**, the operation of Impoverishment must be thus generalized and may well apply in a yet unexplored range of other cases. In particular, I claim this is the case of

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[86] In other terms, the feature is present in Logical Form, but deleted in Phonetic Form.

English *every*, which does not have a counterpart in Czech and Spanish, as shown in following Sections (6.1) – (6.3).

6.1 Semantics and syntax of UQs: evidence from English

All UQs have **intrinsically plural reference**, but they differ in the way they refer to elements as well as in the minimal number of elements they can refer to (and in case of *both* and its counterparts in the maximal number).

In English, *each* refers to two or more elements as opposed to *every* **and** *all*, which can **refer only to three or more** elements, but not two. This restriction is the first argument for *each* being translated into *každý* in Czech and *cada* in Spanish, as illustrated in (294) and (295) and further discussed in Section (6.2):

294. a. (Cz) ***Každý/ *Všichni*** *z těch dvou chlapců má dost odvahy.*

b. (En) ***Each/ *All*** *of the two boys has enough courage.*

c. (Sp) ***Cada/ *Todos*** *de los dos chicos es muy valiente.*

295. a. (Cz) *Dvě děvčata$_i$ si koupila šaty.* ***Každá/ *Všechny$_i$*** *jiné.*

b. (En) *Two girls$_i$ bought a dress.* ***Each one/ *Everyone$_i$*** *different.*

c. (Sp) *Dos chicas compraron vestidos.* ***Cada una/ *Todas*** *diferentes.*

Dougherty (1970a: 868-869) classifies the English UQs *each, all, both* using two features ±Individual and ±Totality. Though he does not include *every,* there are two types of *all*:

296. **Featural content of Universal Quantifiers according to Dougherty**

Each: –Totality, +Individual

Both/ all: +Totality, +Individual

All: +Totality, -Individual

The combination -Totality, -Individual does not occur.[87]

I merge Dougherty's Individual and Totality features using the label ±Distributive. In the context of UQs, +Distributive is in complementary distribution with the +Dual

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[87] In my view, this combination might occur but it would not be classified as a Universal Quantifier.

feature. The Dual feature only appears in the derivation of *both* whereas Distributivity has a role in the derivation of *all, every* and *each.*

The same Distributive feature was used to classify other elements of the Extended NP in the previous Chapters. The characteristics of the Distributive feature are connected with the manner the items included in the reference field are perceived. When the feature is +Distributive, the plurality of items is perceived as individuals. This is the case with *each*:

297. (En) *Each boy has a car which will take him to the wedding.*
298. (En) *Each car was washed by a boy who got paid.*

Each has to include every single boy without any exception, and there has to be the same number of *cars* as the *boys*. This is in direct opposition to *all* which carries the feature -Distributive:

299. (En) *All boys have a car which will take them to the wedding.*
300. (En) *All cars were washed by a boy who got paid.*

The number of *cars* can easily differ from the number of *boys*. Though **every superficially** works as *each* with its singular agreement and *every* and *each* have been argued to express the same meaning (Quirk et al., 1985; Adger, 2003), its meaning and distribution is **closer to *all*** when **preceding the Noun,** as illustrated in (301) and (302).

301. (En) *Every boy has a car which will take him to the wedding.*
302. (En) *Every car was washed by a boy who got paid.*

There are thus **different types of plurality** which are brought about by different featural contents of UQs.[88] Etymologically, *every* was added to phrases for emphasis, e.g. *every single day* (Klein 1971)*.* Currently, *every* is used in the following constructions (303) and (304) to express repetitiveness.

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[88] Some differences are visible only in English. Therefore, I provide Czech and Spanish counterparts only for certain relevant examples.

303. (En) *I go to a doctor every two weeks.*

304. (En) *She talks to him every other day.*

The other UQs are not grammatical in these constructions:

305. (En) **I go to a doctor each two weeks.*

306. (En) **I go to a doctor all two weeks.*

307. (En) **I go to a doctor both two weeks.*

As suggested in the previous chapters, in featural representation the value of the Number feature determines whether the N appears in Plural or Singular. In my view, scope is connected with the Number feature as well. In featural representation, scope translates as the presence/ absence of the Number feature. Let me schematize.

The Number feature is crucial for the construction of a QP. *Every* is impoverished for the feature value +Q. Thus, the NP it takes has a Plural semantics even if the NP surfaces in Singular. I claim that the **usage of *every* in frequency phrases** is one of the effects of **Impoverishment**.

Each has been analyzed as a wide scope variant of *every* (Beghelli and Stowell 1997).[89] However, the examples (305) – (307) suggest that the widest scope is rather a property of *every.* It is specific in the sense that it takes a **scope over the whole time expression,** which results in the "time point" of "frequency" reading, as opposed to the "time period" reading which is provided by the other quantifiers. This "time period" reading, i.e. reading where the time expression does not stand for a single moment but for a period as marked by its name, makes the examples (305) – (307) ungrammatical.

From the formal point of view, *every* **has a wider scope than the other UQs**. Whereas *all, each* and *both* take scope only over the numerals preceding the Noun, *every* takes scope over the whole NP/QP and the Noun is indispensable for its interpretation. Therefore *five* and its Czech and Spanish counterparts in (310) are only acceptable when interpreted as an N, e.g. a toy shaped as the number five, as opposed to (308) – (309) with extralinguistic references to an ellipted N.

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[89] Though I am using some points of Beghelli and Stowell, I am not following their analysis. They analyze the Universal Quantifiers in the context of the other Quantifiers and their analysis is strictly semantic.

308. a. (Cz) *Všechny tři jsou moc krásné.*

    b. (En) *All three are beautiful.*

    c. (Sp) *Todas tres son muy bonitas.*

309. a. (Cz) *Každých$_{ACC.+Q.}$ pět$_{ACC.+Q.}$ dej do jiné tašky.*

    b. (En) *Put each five into a different bag.*

    c. (Sp) *Pon cada cinco en una bolsa diferente.*

310. a. (Cz) *?Každou$_{ACC.-Q.}$ pětku$_{ACC.-Q.}$ dej do jiné tašky.*

    b. (En) *?Put every five into a different bag.*

    c. (Sp) *?Pon cada cinco en una bolsa diferente.*

The Plural suffixes in (309a) are a result of the Agreement with the ellipted Noun. On the other hand, the singular suffix in (310a) confirms that *každý* modifies *pětku* as an N and that by extension the same analysis applies to English and Spanish.

    Another example of the different relation of *every* and *each* to N is the following. If we say, *every adult male can carry 20 kg*, we mean that the ability is intrinsic to adult males, but if we say *each adult male can carry 20 kg*, the truth value depends on verifying one by one the males in the group. The reading does not depend on the meaning of the lexical Noun.

    To sum up, I suggest that Czech *každý* and Spanish *cada* should be considered as counterparts of *each* rather than *every*. I will argue that in some cases *every* and *all* express the same meaning, i.e. they are more probable variants than *each* and *every*. The following Sections (6.2) and (6.3) provide more cross-linguistic evidence supporting these suggestions.

6.2 Cross-linguistic behavior and featural content of UQs

Having presented some evidence of idiosyncratic behavior of *every* and suggested that Czech *každý* and Spanish *cada* correspond rather to *each,* I offer more cross-linguistic evidence on the special status of *every* by looking into the following syntactic aspects of UQs in this order:

- floating quantifiers
- co-occurrence with an *of*-phrase
- compound pronouns

6.2.1 Floating Quantifiers

When focusing on the syntax, a*ll, both* and *each* and their counterparts in Czech and Spanish are able to float rightward, as opposed to *every,* which can modify a Noun only in the pre-nominal position as illustrated in (311) – (314).

311. a. (Cz) *Ti chlapci se **všichni** bavili.*

    b. (En) *The boys have **all** had fun.*

    c. (Sp) *Los chicos se han **todos** divertido.*

312. a. (Cz) *Viděl jsem je **oba**.*

    b. (En) *I saw them **both**.*

    c. (Sp) *Los ha visto **ambos**.*

313. a. (Cz) *Moje sestry mají **každá** svůj pokoj.*

    b. (En) *My sisters have **each** had their own room.*

    c. (Sp) *Mis hermanas tienen **cada** su cuarto.*

314. a. (En) **The designer will **every** have their own workshop.*

    b. (En) **The boys have **every** had fun.*

    c. (En) *They will ***every** speak to the audience.*

As suggested in Section (6.1), *every* requires a Noun in its context as opposed to the other UQs, which can follow the NP and even be outside it.

6.2.2 Co-occurence with an *of*-phrase

Every is the only element in this group that does not take an *of*-PP, as opposed to *all, both* and *each* and their counterparts in Czech and Spanish. I illustrate this phenomenon in (315) - (317) below.

315. a. (Cz) *Oba z těch chlapců jsou ve městě.*

    b. (En) *Both of the two boys are in the city.*

    c. (Sp) *Ambos de los chicos están en la ciudad.*

316. a. (Cz) *Každý z těch chlapců je ve městě.*

    b. (En) *Each of the boys is in the city.*

    c. (Sp) *Cada de los chicos está en la ciudad.*

317. a. (Cz) *Všichni z těch chlapců jsou ve městě.*

    b. (En) *All of the boys are in the city.*

    c. (Sp) *Todos de los chicos están en la ciudad.*

318. (En) **Every of the boys is in the city.*

My proposal is that this characteristic, together with the impossibility of floating and compound pronouns (below), is caused by the **absence of the Number feature** on *every,* which in turn is caused by the operation of Impoverishment.

6.2.3 Compound pronouns

In English, only the UQ *every* can create compound pronouns, as illustrated in (319) – (322).

319. a. (Cz) *každý, všechno, všude*

    b. (En) *everybody/ everyone, everything, everywhere*

    c. (Sp) *todos, todo, en todas partes*

320. **eachbody, eachone, eachthing, eachwhere*

321. **bothbody, bothone, boththing, bothwhere*

322. **allbody, allone, allthing, allwhere*

Note that the Czech and Spanish counterparts of the grammatical compounds in (319) are the morpheme *všechno* and *todo* (*all* in English), which is a cross-linguistic **supporting argument for *every* being a variant to *all.***

    Similar compounds are created by EQs in all three languages as illustrated in (323) and (324).

323. a. (Cz) *Někdo je u dveří.*

    b. (En) *Somebody is at the door.*

    c. (Sp) *Alguien está en la puerta.*

324. a. (Cz) *Je tu někdo bohatý?*

    b. (En) *Is anybody rich here?*

    c. (Sp) *Hay alguien rico aquí?*

All these compounds exhibit singular Agreement. However, while *every*-compounds have plural reference, *somebody* and *anybody* cannot mean plural. This discrepancy in *every*-compounds confirms the internal structure discussed in more detail in the following Section (6.3), namely its lexically specified Plural value, which is Impoverished in the surface.

6.3 Correspondence of *every* and *all*

When looking at the basic characteristics of UQs, one can see that whereas *all* and *both* cross-linguistically appear with a plural form of a Noun as in (325) and (326), *every* and *each* without a Numeral modify only singular forms of a Noun (327).[90]

325. a. (Cz) *Všichni chlapci jsou ve městě.*

    b. (En) *All boys are in the city.*

    c. (Sp) *Todos chicos están en la ciudad.*

326. a. (Cz) *Oba chlapci jsou ve městě.*

    b. (En) *Both boys are in the city.*

    c. (Sp) *Ambos chicos están en la ciudad.*

327. a. (Cz) *Každý chlapec je ve městě.*

    b. (En) *Every boy is in the city.*

    c. (En) *Each boy is in the city.*

    d. (Sp) *Cada chico está en la ciudad.*

328. a. (Cz) **Všichni chlapec je ve městě.*

    b. (En) **All boy is in the city.*

    c. (Sp) **Todos chico está en la ciudad.*

329. a. (Cz) **Oba chlapec je ve městě.*

    b. (En) **Both boy is in the city.*

    c. (Sp) **Ambos chico está en la ciudad.*

330. a. (Cz) **Každý chlapci jsou ve městě.*

    b. (En) **Every boys are in the city.*

    c. (En) **Each boys are in the city.*

    d. (Sp) **Cada chicos están en la ciudad.*

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[90] For (292) - (300), the context could be a summer camp where there are boys and girls having a separate plan for one day. Girls stay in the camp and boys go to the city.

Concepts expressed by the sequence Universal Quantifier + Noun Universal can also be expressed in the case of some UQs by the sequence Universal Quantifier + **Determiner** + Noun in all three languages. Both grammatical and ungrammatical cases are exemplified in (331) – (333).

331. a. (Cz) *Všichni ti chlapci jsou ve městě.*
    b. (En) *All the boys are in the city.*
    c. (Sp) *Todos los chicos están en la ciudad.*
332. a. (Cz) *Oba ti kluci jsou ve městě*
    b. (En) *Both the boys are in the city.*
    c. (Sp) **Ambos los chicos están en la ciudad.*
333. a. (Cz) *Každý ten chlapec je ve městě.*
    b. (En) *Every boy is in the city.*
    c. (En) *Each boy is in the city.*
    d. (Sp) *Cada chico está en la ciudad.*

Table (334) is an overview of the reference and semantics of all above listed constructions.

334. An overview of UQ semantics in different constructions

Construcion CZ/ EN/ SP	Reference	Semantics
všichni ti kluci/ all the boys/ todos los chicos	all individuals of a definite set of boys	collective
oba ti kluci/ both the boys/ *ambos los chicos	out of a specific two, all individuals	dual
všichni kluci/ all boys/ todos chicos	all individuals who can be classified as boys	general
oba kluci/ both boys/ ambos chicos	out of two, all individuals	dual
každý kluk/ every boy/ cada chico	all individuals of a definite set of boys	general
každý kluk/ each boy/ cada chico	all individuals of a definite set of boys	distributive

The reference is plural in all the cases above, but in the last column we see that the semantics of individual constructions is somewhat different. Dougherty (1970: 853) offers a test. He introduces the term "**semantic nonsingularity**" for coordinate conjoined Noun Phrases, which I use to classify the constructions in (334).[91] Dougherty shows that English intransitive verbs *scatter* and *disperse* can occur only with a **plural collective subject** (in Dougherty's term, a semantically nonsingular subject) referring to a **definite set of extra linguistic elements**. In other words, the subject must bear features **–Distributive** and **+Q** and furthermore it **cannot be general**. The "generality" is induced by the syntactic context, i.e. by the presence/ absence of other functional modifiers, which means that it is not featurally represented within UQs.

Taking into account the semantic descriptions in (334) and the featural content of UQs, verbs like *scatter* and *disperse* should thus be ungrammatical in combinations with the UQs, with the exception of *all the* + noun. The following set of data confirms this prediction:

335. (En) **Each horse scattered.*
336. (En) **Each horse dispersed.*
337. (En) **Every horse scattered.*
338. (En) **Every rioter dispersed.*
339. (En) **All horses dispersed.*
340. (En) *All the horses dispersed.*

In (339) we see that in the absence of other functional modifiers, *all* is ungrammatical with the verb *dispersed*. Thus, given this and other evidence I consider *every* as an established **variant of an *all* immediately preceding the N**.

This follows one more additional piece of evidence which shows that *every* and *all* exhibit the same behavior. Beghelli and Stowell 1997 observe that as opposed to *each*, ***all* and *every* can be modified by an adverbial**. To give a wider perspective, I add an example with *both* which as well as *each* is ungrammatical, and I illustrate this in all three languages in (341) – (344).

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[91] This term is also used in Laycock (2006) but with a different sense.

341. a. (Cz) *Jeden kluk snědl téměř všechna jablka, která jsme měli.*

   b. (En) *One boy ate almost all apples that we had.*

   c. (Sp) *Un chico comió casi todas manzanas que tuvimos.*

342. a. (Cz) **Jeden kluk snědl téměř každé jablko, které jsme měli.*

   b. (En) **One boy ate almost each apple that we had.*

   c. (Sp) **Un chico comió casi cada manzana que tuvimos.*

343. a. (Cz) **Jeden kluk snědl téměř obě jablka, která jsme měli.*

   b. (En)**One boy ate almost both apples that we had.*

   c. (Sp) ** Un chico comió casi ambas manzanas que tuvimos.*

344. (En) *One boy ate almost every apple that we had.*[92]

We thus see that again the semantics of *every* mirrors that of *all,* and is distinct from the other UQs.

In the previous chapters, the functional modifiers in the Czech, English and Spanish Extended NPs were basically bundles of features. As suggested above for *every* the situation is more complicated.

I noted that though *every* triggers singular Agreement, in time constructions, it marks repetitiveness. Repetitiveness is a kind of plurality. Therefore, I argued that the value of the Number feature on the root of *every* is +Q and the construction is consequently Impoverished of this feature in PF. I argued that the absence of this feature also brings the ability of *every* to create compounds. It complies with its etymological origin as an emphasizer, not a quantifier, as well as with the rest of its syntactic behavior.

6.4 Summary of Chapter 6

The present Chapter has been concerned with the UQs in Czech, English and Spanish. The main focus is to prove that English *every* does not have real featural counterparts in the other two languages and that it is subject to the operation of Impoverishment (Nevins and Parrott, 2010) of the Number feature. Furthermore, it is a variant of *all* rather than *each.*

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[92] Both Czech and Spanish speakers allow *každý* and *cada* with the counterparts of *almost* in cases when the boy from the example just tastes the apples but does not finish eating them. However, this is not the same interpretation as in the English example.

The featural content of UQs can be reduced to four features: positional Universality, and semantic Number, Distributivity and Duality. In the context of UQs, Distributivity and Duality are in complementary distribution. The Dual feature only appears in the derivation of *both* whereas Distributivity has a role in the derivation of *all, every* and *each.*

To determine the real counterparts of English UQs in Czech and Spanish I examined several syntactic diagnostics: quantifier floating, co-occurrence with an *of*-phrase, and ability to form compound pronouns and modification by an adverbial.

In the last section I discussed the structure of *every* as well as the impact of the Impoverishment operation and confirm the connection of *every* and *all* in contexts where it has a general interpretation, i.e. when there are no intervening elements between *all* and the modified Noun.

7.   Theoretical Conclusions for Extended NPs

The main goal of this thesis has been to establish the structure of Extended NPs in three languages from three different language families. I have argued that their common syntactic structure involves a very specific set of **features with three values** which complete the structure-building processes. Three values of the Universal feature are organized in a very specific **functional sequence**. Thus, the present feature system **predicts a cross-linguistically general range of phenomena in Extended NPs**, including:

- the division and placement of functional nominal modifiers into UQs, Ds and EQs by the Universality feature with the sequence of three values -UNI, 0UNI, +UNI;
- the division of Ns into Plural, Singular and Mass by the Number feature with three values +Q, -Q and 0Q;
- the existence of three Genders, i.e. Masculine, Feminine and Neuter. by the Gender feature with three respective values +G, -G, 0G;
- the existence of Polarity sensitive modifiers, i.e. *some, any, no* and their Czech and Spanish counterparts, by the Polarity feature with three values +Neg, -Neg, 0Neg;
- the range of EQs meaning "more than two" expressing different expectations, i.e. *many, several, few* and their Czech and Spanish counterparts, by the Expectative feature with three values +Exp, -Exp, 0Exp; and others.

The Extended NP thus has the structure (UQ)-D-EQ-NP which can alternatively be notated as the functional sequence +UNI - 0UNI - -UNI - N. If all overtly realized, the elements always follow this order. Furthermore, according to my SLOPE principle (81) of Chapter 2, the position 0UNI may never be left out, i.e. +**UNI never co-occur with –UNI unless the 0UNI is present as well**. This is a prediction separately stipulated in Jackendoff 1977, but intrinsically present in the tri-valued feature system used here.

I have further argued that there are **three types of features** listed below, and that each type takes part in operations in different components.

- The positional Universality feature, which forms the functional sequence in syntax, which is used in Logical Form.
- The phi-features Number, Gender and in Czech Case, which are subject to checking and agreement.
- The semantic features listed in Chapter 3, which differentiate the meaning of individual functional modifiers.

The agreement and feature checking operations are mostly adopted from Pesetsky and Torrego 2007 with some adaptation from Starke 2001. On the other hand, the semantic feature set is a result particular to my research.

A solidly established feature set for every member of the Extended NP helps to **deal with both cross-linguistic principles and language internal idiosyncrasies** posed by differences in featural contents, e.g. the special status of *every*, the non-obligatory determiners in Czech or an extra demonstrative *ese* in Spanish. Furthermore, it **predicts some systematic characteristics** which seem to be "obvious", e.g. possibility of three Genders, but until now have not been precited by any general theory of features.

Finally, in the present system the Extended NP **head is the Q feature**, while the Definiteness feature plays only a marginal role. Though more features need to be present to successfully complete and fully specify derivation, I have shown that the Q feature value is the one which is most generally overtly reflected both outside and inside of the Extended NP, and therefore it is the best candidate for having the universal status of head in the Extended Nominal Projection.

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Appendix: Examples of possible co-occurrences in Czech, English and Spanish

Possible combinations of Ds and Qs within ENPs in Czech (C), English (E) and Spanish (S)

Line		many	much	one	two	five	some	any	no	few	little	a few	a little	several
1	*the*	C, E, S	C, S	C	C, E, S					C, S	C	C, E, S	E, S	C
2	*this*			C, E									C, S	
3	*these*	C, E, S			C, E, S					C		C, E		C, E, S
4	*that*			C, E							C		C, E, S	
5	*those*	C, E, S			C, E, S							C, E		C
6	*my*	C, E, S		C	C, E, S							C, E, S		C, S
7	*which*				C, E, S							C, E, S		
8	*what*				C, E, S							C, E, S	C, E, S	
9	*such*			C	C, E									

Some/ any/ no

1. a. (Cz) *Ten nějaký/ jakýkoli/ žádný pracovník nepřijde.*

    b. (En) *The some/ any/ no worker will come.*

    c. (Sp) *El algún/ cualquier/ ningún trabajador no vendrá.*

2. a. (Cz) *Tento nějaký/ jakýkoli/ žádný pracovník nepřijde.*

    b. (En) *This some/ any/ no worker will come.*

    c. (Sp) *Este algún/ cualquier/ ningún trabajador no vendrá.*

3. a. (Cz) *Tito nějací/ jakýkoli/ žádní pracovníci nepřijdou.*

    b. (En) *These some/ any/ no workers will come.*

    c. (Sp) *Estos algunos/ cualquieres/ ningunos trabajadores no vendrán.*

4. a. (Cz) *Tamten nějaký/ jakýkoli/ žádný pracovník nepřijde.*

    b. (En) *That some/ any/ no worker will come.*

    c. (Sp) *Aquel algún/ cualquier/ ningún trabajador no vendrá.*

5. a. (Cz) *Tamti nějací/ jakýkoli/ žádní pracovníci nepřijdou.*

    b. (En) *Those some/ any/ no workers will come.*

    c. (Sp) *Aquellos algunos/ cualquieres/ ningunos trabajadores no vendrán.*

6. a. (Cz) *Moje nějaké/ jakékoli/ žádné koček jsou černé.*

    b. (En) *My some/ any/ no cats are black.*

    c. (Sp) *Mis algunos/ cualquieres/ ningunos gatos son negros.*

7. a. (Cz) *¿Které nějaké/ jakékoli/ žádné koček jsou černé?*

    b. (En) *Which some/ any/ no cats are black?*

    c. (Sp) *Cuales algunos/ cualquieres/ ningunos gatos son negros?*

8. a. (Cz) *Jaké nějaké/ jakékoli/ žádné koček jsou černé?*

    b. (En) *What some/ any/ no cats are black?*

    c. (Sp) *¿Qué algunos/ cualquieres/ ningunos gatos son negros?*

9. a. (Cz) *Takoví nějací/ jakýkoli/ žádní pracovníci nepřijdou.*

    b. (En) *Such some/ any/ no workers will come.*

    c. (Sp) *Tal algunos/ cualquieres/ ningunos trabajadores no vendrán.*

Line 1

10. a. (Cz) *Ani těch mnoho chlapců nám nepomohlo.*

    b. (En) *Not even the many boys helped us.*

    c. (Sp) *Ni los muchos chicos nos ayudó.*

11. a. (Cz) *To mnoho vody, které se valilo ulicemi, zničilo všechny lavičky.*

    b. (En) **The much water which ran through the streets destroyed all benches.*

    c. (Sp) *La mucha agua que corrió por las calles destruyó todos bancos.*

12. a. (Cz) *Ten jeden hrnek nám nepomůže.*

    b. (En) **The one cup won´t help us.*

    c. (Sp) **La una taza no nos ayudará.*

13. a. (Cz) *Ti dva muži by si měli dát pozor.*

    b. (En) *The two men should be careful.*

    c. (Sp) *Los dos hombres deberían tener cuidado.*

14. a. (Cz) *Viděl jsi těch pět koček?*

    b. (En) *Have you seen the five cats?*

    c. (Sp) *¿Has visto los cinco gatos?*

15. a. (Cz) *Nemluvili jsme o těch málo lidech, kteří přišli.*

    b. (En) **We didn´t speak about the few people who came.*

    (meaning *not enough*)

    c. (Sp) *No hablamos sobre la poca gente que vinó.*

16. a. (Cz) *Přinesli jen to málo alkoholu.*

    b. (En) **They brought only the little alcohol.*

    (meaning *not enough*)

    c. (Sp) **Traeron solo el poco alcohol.*

    (meaning *not enough*)

17. a. (Cz) *Těch pár operací zvládneme.*

    b. (En) *We will manage the few surgeries.*

    c. (Sp) *Manejaremos el par de cirurgías.*

18. a. (Cz) **Ta trochu vody nikomu neublíží.*

    b. (En) *The little water won´t hurt anyone.*

    c. (Sp) *La poca agua no le hará daño a nadie.*

19. a. (Cz) *Těch několik slov stačilo.*

b. (En) **The several words were enough.*

c. (Sp) **Las varias palabras fueron suficiente.*

Line 2

20. a. (Cz) **Proč mi dáváš toto mnoho písku?*

b. (En) **Why do you give me this much sand?*

(literally not as a fixed expression)

c. (Sp) **¿Por qué me das esta mucha arena?*

21. a. (Cz) *Tak mi dej alepoň toto jedno jablko.*

b. (En) *So give me at least this one apple.*

c. (Sp) **Entonces dame al menos esta una manzana.*

22. a. (Cz) **Proč mi dáváš toto málo písku?*

b. (En) **Why do you give me this little sand?*

(meaning *not enough*)

c. (Sp) **¿Por qué me das esta poca arena?*

(meaning *not enough*)

23. a. (Cz) **Neprodáme toto trochu zlata, které nám zbylo.*

b. (En) *We will not sell this little gold which we have left.*

c. (Sp) *No vamos a vender el poco oro que nos queda.*

Line 3

24. a. (Cz) *Těchto mnoho druhů hadů žije v pralese.*

b. (En) *These many types of snakes live in the rainforest.*

c. (Sp) *Estos muchos tipos de serpientes viven en la selva tropical.*

25. a. (Cz) *Tyto dva druhy hadů žijí v pralese.*

b. (En) *These five types of snakes live in the rainforest.*

c. (Sp) *Estos cinco tipos de serpientes viven en la selva tropical.*

26. a. (Cz) *Těchto pět druhů hadů žije v pralese.*

b. (En) *These five types of snakes live in the rainforest.*

c. (Sp) *Estos cinco tipos de serpientes viven en la selva tropical.*

27. a. (Cz) *Nepomůže nám když těchto málo hadů sníme.*

b. (En) **It doesn´t help us, if we eat these few snakes.*

(meaning *not enough*)

c. (Sp) **No nos ayuda si comemos estas pocas serpientes.*

(meaning *not enough*)

28. a. (Cz) *Když těchto pár druhů vynásobíme, vyjde nám vysoké číslo.*

b. (En) *If we multiply these few types, we get a high number.*

c. (Sp) **Si multiplicamos estos par de tipos, obtenemos un número alto.*

29. a. (Cz) *Když těchto několik druhů vynásobíme, vyjde nám vysoké číslo.*

b. (En) *If we multiply these several types, we get a high number.*

c. (Sp) *Si multiplicamos estos varios tipos, obtenemos un número alto.*

Line 4

30. a. (Cz) **Tamto mnoho vody za to nestojí*

b. (En) **That much water is not worth it.*

(literally not as a fixed expression)

c. (Sp) **Aquella mucha agua no vale la pena.*

31. a. (Cz) *Můžu dostat tamten jeden tulipán?*

b. (En) *Can I have that one tulip?*

c. (Sp) **¿Puedo pedir aquel un tulipán?*

32. a. (Cz) *Tamto málo vína na stole nebude stačit.*

b. (En) **That little wine on the table won´t be enough.*

(meaning *not enough*)

c. (Sp) **Aquel poco vino en la mesa no será suficiente.*

(meaning *not enough*)

33. a. (Cz) *Tamta trocha písku je jen zbytek.*

b. (En) *That little sand is over there is just the rest.*

c. (Sp) *Aquella poca arena es solamente el resto.*

Line 5

34. a. (Cz) *Tamtěch mnoho chlapců nebude mít deky.*

b. (En) *Those many boys won´t have blankets.*

c. (Sp) *Aquellos muchos chicos no tendrán mantas.*

35. a. (Cz) *Tamti dva muži mi ukradli kabelku.*

   b. (En) *Those two men stole my handbag.*

   c. (Sp) *Aquellos dos hombres robaron mi bolso.*

36. a. (Cz) *Když tamtěch pět druhů vynásobíme, vyjde nám vysoké číslo.*

   b. (En) *If we multiply those two types, we get a high number.*

   c. (Sp) *Si multiplicamos aquellos dos tipos, obtenemos un número alto.*

37. a. (Cz) *Tamtěch málo květin ten vítr nevydrží.*

   b. (En) *Those few flowers won´t last through the wind.*

   (meaning *not enough*)

   c. (Sp) *Aquellas pocas flores no durarán con el viento.*

   (meaning *not enough*)

38. a. (Cz) *Když tamtěch pár druhů vynásobíme, vyjde nám vysoké číslo.*

   b. (En) *If we multiply those few types, we get a high number.*

   c. (Sp) *Si multiplicamos aquellos par de tipos, obtenemos un número alto.*

39. a. (Cz) *Tamtěch několik dětí si před chvílí hrálo s kameny.*

   b. (En) *Those several kids played with stones a moment ago.*

   c. (Sp) *Aquellos varios niños jugaron con piedras hace un momento.*

Line 6

40. a. (Cz) *Nikdy nemluvíme o jeho mnoha chybách.*

   b. (En) *We never speak about his many mistakes.*

   c. (Sp) *Nunca hablamos sobre sus muchos errores.*

41. a. (Cz) *Jeho mnoho štěstí mě vždy překvapí.*

   b. (En) *His much luck always surprises me.*

   c. (Sp) * Siempre me sorpende su mucha suerte.*

42. a. (Cz) *Moje jedna tužka nám všem nebude stačit.*

   b. (En) *My one pencil won´t be enough for everybody.*

   c. (Sp) *Mi un lápiz no será suficiente para todos.*

43. a. (Cz) *Mí dva bratři jsou mladší než já.*

   b. (En) *My two brothers are younger than me.*

   c. (Sp) *Mis dos hermanos son más jóvenes que yo.*

44. a. (Cz) *Dej mu jeho pět tisíc.*

    b. (En) *Give him his five thousand.*

    c. (Sp) *Dale sus cinco mil.*

45. a. (Cz) **Vážím si svých málo přátel.*

    b. (En) **I appreciate my few friends.*

    (meaning *not enough*)

    c. (Sp) **Aprecio mis pocos amigos.*

    (meaning *not enough*)

46. a. (Cz) **Přinesla jsem svoje málo vína.*

    b. (En) **I brought my little wine.*

    (meaning *not enough*)

    c. (Sp) **Trajé mi poco vino*

    (meaning *not enough*)

47. a. (Cz) *Vážím si svých pár přátel.*

    b. (En) *I appreciate my few friends.*

    c. (Sp) *Aprecio mis pocos amigos.*

48. a. (Cz) *Mám dost peněz na zaplacení mých několika zaměstnanců.*

    b. (En) **I have enough money to pay my several employees.*

    c. (Sp) *Tengo suficiente dinero para pagar mis varios empleados.*

Line 7

49. a. (Cz) **Kteří mnoho chlapců nebude mít deky?*

    b. (En) **Which many boys won´t have blankets?*

    c. (Sp) **¿Cuales muchos chicos no tendrán mantas?*

50. a. (Cz) **Které mnoho vody vyteče z lahví?*

    b. (En) **Which much water will leak from bottles?*

    c. (Sp) **¿Cuál mucha aagua rezumará de las botellas?*

51. a. (Cz) **Který jeden chlapec si to koupil?*

    b. (En) **Which one boy bought it?*

    c. (Sp) **¿Cuál un chico lo compró?*

52. a. (Cz) *Kteří dva chlapci si to koupili?*

    b. (En) *Which two boys bought it?*

    c. (Sp) *¿Cuales dos chicos lo compraron?*

53. a. (Cz) *Kterých pět chlapců nebude mít deky?*

b. (En) *Which five boys won´t have blankets?*

c. (Sp) *¿Cuales cinco chicos no tendrán mantas?*

54. a. (Cz) **Kterých málo přátel jsi pozvala?*

b. (En) **Which few friends did you invite?*

(meaning *not enough*)

c. (Sp) *¿Cuales poco amigos invitaste?*

(meaning *not enough*)

55. a. (Cz) **Které málo písku přinesli?*

b. (En) **Which little sand did they bring?*

(meaning *not enough*)

c. (Sp) **¿Cuál poca arena trajeron?*

(meaning *not enough*)

56. a. (Cz) *Kterých pár přátel jsi pozvala?*

b. (En) *Which few friends did you invite?*

c. (Sp) **¿Cuales par de amigos invitaste?*

57. a. (Cz) **Který trochu písku jsi přinesla?*

b. (En) **Which little sand did they bring?*

c. (Sp) **¿Cuál poca arena trajeron?*

58. a. (Cz) **Kterých několik učitelů respektuješ?*

b. (En) **Which several teachers do you respect?*

c. (Sp) **¿Cuales varios maestros respetas?*

Line 8

59. a. (Cz) **Jací mnoho chlapců nebude mít deky?*

b. (En) **What many boys won´t have blankets?*

c. (Sp) **¿Qué muchos chicos no tendrán mantas?*

60. a. (Cz) **Jaké mnoho vody vyteče z lahví?*

b. (En) **What much water will leak from bottles?*

c. (Sp) **¿Qué mucha aagua rezumará de las botellas?*

61. a. (Cz) **Jaký jeden chlapec si to koupil?*

b. (En) **What one boy bought it?*

c. (Sp) **¿Qué un chico lo compró?*

62. a. (Cz) *Jací dva chlapci si to koupili?*

    b. (En) *What two boys bought it?*

    c. (Sp) *¿Qué dos chicos lo compraron?*

63. a. (Cz) *Jakých pět chlapců nebude mít deky?*

    b. (En) *What five boys won´t have blankets?*

    c. (Sp) *¿Qué cinco chicos no tendrán mantas?*

64. a. (Cz) *Jakých málo přátel jsi pozvala?*

    b. (En) *What few friends did you invite?*

(meaning *not enough*)

    c. (Sp) *¿Qué poco amigos invitaste?*

(meaning *not enough*)

65. a. (Cz) *Jaké málo písku přinesli?*

    b. (En) *What little sand did they bring?*

(meaning *not enough*)

    c. (Sp) *¿Qué poca arena trajeron?*

(meaning *not enough*)

66. a. (Cz) *Jakých pár přátel jsi pozvala?*

    b. (En) *What few friends did you invite?*

    c. (Sp) *¿Qué par de amigos invitaste?*

67. a. (Cz) *Jaký trochu písku jsi přinesla?*

    b. (En) *What little sand did they bring?*

    c. (Sp) *¿Qué poca arena trajeron?*

68. a. (Cz) *Jakých několik učitelů respektuješ?*

    b. (En) *What several teachers do you respect?*

    c. (Sp) *¿Qué varios maestros respetas?*

Line 9

69. a. (Cz) *Takoví mnoho chlapců nepřijede.*

    b. (En) *Such many boys won´t arrive.*

    c. (Sp) *Tal muchos chicos no llegarán.*

70. a. (Cz) *Takové mnoho vody ta země nevsákne.*

    b. (En) *The ground won´t absorb such much water.*

    c. (Sp) *El terreno no absorber tal mucha agua.*

71. a. (Cz) *Takový jeden muž může být rozhodující.*

   b. (En) **Such one man can be decisive*

   c. (Sp) **Tal un hombre puede ser decisivo.*

72. a. (Cz) *Nikdy jsem neviděla taková dvě auta.*

   b. (En) *I have never seen such two cars.*

   c. (Sp) **Nunca he visto tal dos coches.*

73. a. (Cz) *Podíváme se do nejvyšší z takových pěti úrovní.*

   b. (En) *We will take a look into the highest one of such five levels.*

   c. (Sp) **Echaremos un vistazo al más alto de tal cinco niveles.*

74. a. (Cz) **Takových málo chlapců má dva bratry.*

   b. (En) **Such few boys have two brothers.*

   (meaning *not enough*)

   c. (Sp) **Tal poco chicos tienen dos hermanos.*

   (meaning *not enough*)

75. a. (Cz) **Takové málo vody nikomu neublíží.*

   b. (En) **Such little water won´t hurt anyone.*

   (meaning *not enough*)

   c. (Sp) **Tal poca agua no herirá a nadie.*

   (meaning *not enough*)

76. a. (Cz) *Takových pár koní jsme také měli.*

   b. (En) **We had such few horses too.*

   c. (Sp) **Teníamos tal par de caballos también.*

77. a. (Cz) **Takové trochu vody nikomu neublíží.*

   b. (En) **Such little water won´t hurt anyone.*

   c. (Sp) **Tal poca agua no herirá a nadie.*

78. a. (Cz) **Řekla jsem, že tam bylo takových několik chlapců.*

   b. (En) **I said there were such several boys.*

   c. (Sp) **Dijé que había tal varios chicos.*

List of Abbreviations

A	Adjective	MASC	Masculine
A1	First Adjectival Position	MASS	Mass Reference
A2	Second Adjectival Position	N	Noun
		NEG	Negative
A3	Third Adjectival Position	NEUT	Neuter
ACC	Accusative	NOM	Nominative
AR	Alternative Realization	NP	Nominal Projection
COMP	Comparative	PERS	Person
CZ	Czech	PL	Plural
D	Determiner (position)	POSS	Possessive
DAT	Dative	PP	Prepositional Phrase
DEF	Definiteness	PROX	Proximal
DEMS	Demonstrative	Q	Quantifier
DIST	Distal	QUAL	Qualitative
DISTR	Distributive	SG	Singular
DP	Determiner Phrase	SP	Spanish
EN	English	SPEAK	Speaker
EQ	Existential Quantifier	SPEC	Specifier
EXP	Expectative	SUP	Superlative
FEM	Feminine	UNI	Universality feature
G	Gender	UQ	Universal Quantifier
GEN	Genitive	VOC	Vocative
IMPERS	Impersonal	VP	Verb Phrase
INSTR	Instrumental	X^0	Head
LOC	Locative		