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Antonio Civardi

Linguistic Variation Issues: Case and Agreement in Northern Russian Participial Constructions

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ABBREVIATIONS AND TRANSLITERATION

As a rule, the glosses in the examples follow the *Leipzig Glossing Rules (LGR)*[1] to indicate the segmentation of words and morphemes and use the abbreviations therein. The following is a list of abbreviations from the LGR (with some modifications and additions) that appear at least once in the glosses.

1	first person
2	second person
3	third person
ACC	accusative
ADJ	adjective
ADV	adverb/adverbial
AGR	agreement
AUX	auxiliary
CL	clitic
COMP	complementizer
COP	copula
DAT	dative
DET	determiner
ERG	ergative
F	feminine
FOC	focus
FUT	future
GEN	genitive

[1] Available at <http://goo.gl/Hjmyld> (07/2016).

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IMP	imperative
INF	infinitive
INS	instrumental
IPFV	imperfective
LOC	locative
M	masculine
N	neuter
NEG	negation
NOM	nominative
OBJ	object
PASS	passive
PFV	perfective
PL	plural
POSS	possessive
PRS	present
PST	past
PTCP	participle
REFL	reflexive
SBJ	subject
SBJV	subjunctive
SG	singular

Two abbreviations, borrowed from Timberlake (1976), are used extensively throughout the chapters to refer to the dialects dealt with in this book and to the Standard language:

NR	North Russian
CSR	Contemporary Standard Russian

Other abbreviations commonly used in the Generative literature to refer to some specific concepts or to particular frameworks and theories are used in the book and are defined at their first occurrence in the text. A (non-exhaustive) list of them follows below:

DOM	Differential Object Marking
DS	D-Structure

EPP	Extended Projection Principle
FL	Faculty of Language
G&B	Government and Binding
LF	Logic Form
LI	Lexical Item
NP, PP, VP, …	Noun Phrase, Prepositional Phrase, Verb Phrase, …
NSL	Null subject language
P&P	Principles and Parameters
PF	Phonetic Form
PLD	Primary Linguistic Data
SMT	Strong Minimalist Thesis
SO	Syntactic Object
SS	S-Structure
UG	Universal Grammar

Transliteration of the Cyrillic alphabet is provided according to the International Scholarly System with one small modification (Cyrillic <x> is rendered as <x> instead of <ch> or <h>, following widespread scholarly usage). The complete transliteration scheme is:

А а	Б б	В в	Г г	Д д	Е е	Ё ё	Ж ж	З з	И и	Й й
a	**b**	**v**	**g**	**d**	**e**	**ë**	**ž**	**z**	**i**	**j**

К к	Л л	М м	Н н	О о	П п	Р р	С с	Т т	У у	Ф ф
k	**l**	**m**	**n**	**o**	**p**	**r**	**s**	**t**	**u**	**f**

Х х	Ц ц	Ч ч	Ш ш	Щ щ	Ъ ъ	Ы ы	Ь ь	Э э	Ю ю	Я я
x	**c**	**č**	**š**	**šč**	**"**	**y**	**'**	**è**	**ju**	**ja**

1

INTRODUCTION

This study addresses some aspects of the problem of interlanguage variation in the framework of Generative Grammar, in particular within Minimalism and the Biolinguistic Perspective (Chomsky 1993; 1995; 2000 and subsequent work; Hauser, Chomsky and Fitch 2002; Chomsky 2004), by examining a question of micro-variation in the Slavic linguistic space, the 'perfect' participial constructions in Northern Russian (henceforth NR) dialects.

These dialects display a peculiar form of participial perfect which, however, is differently realized (w.r.t. the combination of morphological case on the noun and agreement between the noun, the lexical verb and the auxiliary) in the diverse varieties. This cross-linguistic variation, albeit involving a very limited domain of grammar, has a wider scope as to the consequences it entails for linguistic theory, in the sense that it represents an ideal case study to explore some general questions, especially from the point of view of natural language variation as constrained by a Faculty of Language (or Universal Grammar UG) which has, by hypothesis, an innate and invariable nature.

Examples (1)-(4) illustrate some of the patterns attested for this construction, resulting from the different combinations of morphological case (affecting the internal argument of the verb) and (non)agreement (in gender and number) between the noun and the participle. Worth noting in the examples is, as well, the non-canonical way of expressing the external argument (the Agent), i.e. a locative construction with the preposition *u* 'at' followed by a noun in the Genitive case.

(1) *u* *lisicy* *unese-n-o* *kuroč̌k-a*
PREP fox:GEN carried_away.PFV-PTCP-N.SG chicken-F.SG.NOM
'A fox has carried off a chicken.' (Kuz'mina & Nemčenko 1971 [=K&N]: 27)

(2) *U* *nej* *by-l-a* *privede-n-a* *snox-a*
PREP 3S.F.GEN AUX-PST-F.SG brought.PFV-PTCP-F.SG daughter_in_law-F.SG.NOM
'The daughter-in-law was brought in by her.' / 'She brought the daughter-in-law in.' (K&N: 20)

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(3) *Prjalka* *ne* *by-l-Ø* *ešče* *postavle-n-Ø* *na mesto*
spinning_wheel NEG AUX-PST-M.SG yet put.PFV-PTCP-M.SG in place
'The spinning wheel was not yet put back in its place.' (K&N: 79)

(4) *U* *dedka-to* *merëž-u* *ostavle-n-o*
PREP grandpa.GEN-DET fishnet-F.SG.ACC left.PFV-PTCP-N.SG
'Grandpa left a fishnet.' / 'A fishnet has been left by grandpa.' (K&N: 38)

The 'participial perfect', missing both in Standard Russian and in central and southern dialects, has been exhaustively documented in Kuz'mina and Nemčenko's monograph, from which the above examples are drawn, covering in full the cross-dialectal variation exhibited by these constructions with an impressive amount of data, obtained by the authors both from their own field research and scrutiny of previous work on the topic[1]. Since Timberlake's (1976) seminal work, NR constructions have then gained more and more attention in the functional-typological literature as well as in generative grammar, in virtue of the just mentioned uncommon features they display, which raise non-trivial issues in a formal approach to the analysis of natural languages. Actually, a configuration like the one exemplified in (1) (an external argument surfacing as a locative PP, followed by a participle not agreeing with the nominative NP) is a *prima facie* counterexample to theories making certain assumptions about case, agreement and, above all, subjecthood, a notion which is, on the one hand, of basic importance in linguistic theory but whose status, on the other hand, is still debated and far from a clear definition (cf. Svenonius 2002).

Analysing *u lisicy* in (1) and its analogues in the other examples as 'true' subjects, roughly in the same fashion as Icelandic quirky subjects (Zaenen and Maling 1984; Sigurðsson 1992) has been a way of circumventing these difficulties. Likewise, the 'perfect' morphology has been called upon as a trigger for split ergativity, that would be responsible for assigning the subject a case other than nominative, as happens in Hindi and other Indo-Aryan languages (Mahajan 1997). Approaches like these, however, face empirical difficulties if one has to further explain why nominals in Theme position like *kuročka* (1), *snoxa* (2) and *prjalka* (3) display nominative, that is, the prototypical case for the subject[2], and why in dialects

[1] Worth citing as sources of many data are also Obnorskij (1953) and especially Trubinskij's (1984) book, which provides as well some clues about the areal and diachronic mutual relationships between the different patterns sketched above (see the discussion in subsections 4.1 and 5.2.3.1).

[2] It has to be noted, in any case, that Nominative marking of non-subject nouns is not uncommon in West Slavic, especially in the Northern dialects we are dealing with: it may occur in various constructions, among which are the imperative, predicative ad-

like those illustrated by (1) and (3) there is a mismatch in number and gender between *uneseno* and *kuročka* and between *postavlen* and *prjalka* respectively, which is not expected even if the participles are taken to be exponents of a middle-passive voice. Further complications arise if one takes into account a pattern like (4), where the noun expressing the verb Internal Argument shows up in Accusative case, which appears to be even more incompatible with the passive, all other things being equal.

In a nutshell, the fine-grained variation emerging from the analysis that has just been sketched (in such a limited domain of grammar) calls for a unified theory, able to account for the different participial perfect constructions we find in NR dialects, with possible extensions to other constructions in the Slavic domain, like Polish impersonals in *-no/-to* and the Ukrainian 'passive', again with invariable *-no/-to*.

The proposal I will put forth in this book can be conceived as an attempt to ascribe the cross-dialectal variation to parameters depending solely on specific properties of morphological elements, namely the participle inflectional head *-n-* and the agreement inflections *-a* and *-o*. In detail, I will argue that these agreement inflections are able to satisfy the EPP requirement for the clause, understood as the D(efiniteness) property in Chomsky (1995). In this respect, an explicit comparison will be made with Romance varieties, where a somewhat similar picture of variation occurs in the realization of the simple clause, if we take into account the different possible configurations of null subject and verb/subject agreement.

Proceeding along these lines, and adopting a framework based mainly on works by Rita Manzini, Anna Roussou and Leonardo Savoia (Manzini and Savoia 2007; 2008a; 2011a; Roussou 2009; Manzini and Roussou 2000; 2011; 2012), I will then try to show how treating inflectional heads on a par with syntactic heads, in a unified way, avoids having recourse to quirky subjects to check the EPP requirement and provide a principled explanation for the parametrical differences we observe in NR participial constructions.

As I stated at the beginning of this Introduction, the purpose of this study is also to analyse and describe the data in reference w.r.t. the problem of interlanguage variation, in particular in relation to the parametric theory. To be more precise, the goal is to test the data against the different views of parameterization that have emerged throughout the evolution of the internalist and mentalist conception of language, embodied in the tradition of Generative Grammar. As far as the debate on variation and parameterization has revolved around null subjects, a large amount of

verbial constructions with *nužno/nado* ('needed' / 'must') and main clause infinitivals. On the diachronic perspective, the explanations that have been provided for these phenomena rely on areal contacts with Finnic, supported also by the depth of attestation.

space in this book will be devoted to this topic, taking also into account that the explanation I will propose for the status of the inflections *-o* and *-a* in dialects like (1) and (2) respectively will take advantage of a comparison with Romance varieties, equating their behaviour to that of subject clitics and verb inflections in Northern Italian dialects, as to the agreement with the NP. Even though none of the approaches to null subjects that are presented in section 3.3 will be adopted in full in my proposal (I will, instead, build on the formalization of the null subject by Manzini and Savoia (1997; 2002)), the discussion therein establishes the necessary theoretical background for the discussion in chapters 4-6 and is intended as well as an essential complement to the preceding chapter 2 on variation and recent developments in parametric theory.

Hence, the connection between dialectological research and the theory of variation will be explored from the point of view of a specific question, i.e. how to construct parameterization within a model, the Minimalist one, where there seems to be no more room for parameters, at least as was the case in the Government and Binding framework. The analysis of the data, outlining a true microparametric picture, and my proposal, advanced in chapter 5, are therefore meant as a (partial and humble) contribution to the idea of the lexicon as the only source of cross-linguistic variation, as emerged in Generative Linguistics of the last decades. In particular, I will try to show that all permissible options that are realized, at a cross-linguistic level and in a very limited domain (the participial construction), can be adequately captured by a theory within which all variation is entirely derivable from properties of lexical elements.

***

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2

SYNTACTIC VARIATION

2.1 *Functional-typological and formal approaches to variation*

Starting from the sixties of the last century, the problem of interlanguage variation has gained a major role in linguistic theories, whether typology-based or formal, as one of the questions shaping the field of study itself and as a discriminating factor in defining its subject, language. Whether we assume that the Faculty of Language is innate, as the Chomskian tradition does, or we think that linguistic structures are to be explained in functional terms, the unavoidable question for both approaches is why certain features of linguistic structures are possible and actually attested in the languages of the world and, on the other hand, some other features (or clusters of features) are completely missing.

Typologists have approached the question somewhat more softly, the focus being more on an empirical depiction of the diversity among languages, whereas Generative Grammar has explicitly and repeatedly addressed it throughout its development. As a matter of fact, both these approaches, between the 1950s and the 1960s, started to challenge a postulate that had until then gone unquestioned, namely Joos's (1957: 96) famous statement that «languages can differ from each other without limit and in unpredictable ways». Linguistic structures of different languages - it was believed - could not be reduced to common and general categories[1].

[1] From an historical point of view, Linguistic typology was reacting to the relativistic view held by American anthropologists, whose acquaintance with the extremely 'exotic' North American indigenous languages had brought them to reject any expectation of finding in these languages anything that might be comparable to the most familiar European languages. Proceeding on different grounds, Chomsky's position in favour of a Universal Grammar was a firm response to the behaviourist idea of language, which as well ruled out common structures among languages. Behaviourism considered languages to be just collections of imitative processes that children would acquire from zero, without any pre-existing underlying structure, and therefore without any restriction on the variability from one language to another (Croft 2003: 4-6).

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In the typological field, since the notion of Linguistic Universal was introduced by Greenberg (1963), research has mainly aimed at describing and comparing as many languages as possible. The idea of universals as restrictions to variability, either in the form of absolute laws or as implicational rules, was actually fruitful and led to the discovery of many such regularities. The goal, however, was not simply to have a taxonomy of cross-linguistic constants and variants, but to actually capture variation in predicting which types of languages are possible (or more likely to occur) and which ones are not. To this purpose, typologists worked out generalizations from the data - the universals, indeed - as the basis of a theoretical framework, built upon the principle according to which structural phenomena are to be explained in terms of the linguistic function they encode (Croft 2003: 2)[2].

2.1.1 *Early generative linguistics and variation*

Generative Grammar, as a theory explaining syntactic structures in formal terms (entailing a set of unlearned principles in the speaker's mind, with parametric options set during the acquisition of a particular language), has often been blamed by functionalists for being too theory-oriented. Critics of the formal approach have charged it with engaging in *a priori* assumptions, not really grounded in the empirical reality of language diversity, and have complained that it fails to account for languages other than English or the other familiar European languages. Actually, the Chomskyan paradigm, whose foundational basis is an innate Faculty of Language with its core in Universal Grammar, since the beginning had to face the question of variation and in this respect committed itself to the task of investigating the principles underlying every possible natural language, in spite of the fact that some cross-linguistic differences were seemingly irreducible to any conceivable common model.

As a matter of fact, however, in the first developments of Generative Linguistics - Transformational Grammar and Standard Theory later on - grammar was conceived as a set consisting of phrase structure rules and transformational rules, whereas variation apparently remained in the back-

[2] The typological theoretical framework has subsequently evolved further into the definition of linguistic *types*, i.e. clusters of structural properties that *a priori* might be independent from each other but actually appear to show some degree of co-occurrence in natural languages. In this approach, linguistic types are abstract entities acting as patterns that can be approximated to a greater or lesser extent by the structures of natural languages, but not adhered to exactly by whatsoever language. In this sense, their usefulness is related mainly to diachronic research: for example, a reconstruction hypothesis may be tested against a linguistic type to prove whether or not it is plausible. Some general properties in the processes of linguistic change may be captured alike by comparing attested evolutionary patterns with the established linguistic types.

ground. Research was mainly aimed at constructing a device able to generate, by such rules, all the possible constructions in a particular language, and to rule out the ungrammatical ones: there existed nearly universal transformational rules, such as NEG(ation) or PASS(ive), but beside these it was tacitly admitted that some other transformations like *do*-support in English were absolutely language-particular. Nevertheless, as Newmeyer (1996: 80-81) observes, Chomsky already in the 1950s was pointing out that the very final purpose of constructing grammars for particular languages was to arrive at a general theory of linguistic structure of which each of these grammars is an exemplification (Chomsky 1975: 77), in other words, to reduce variability to unity. Such a unity subsequently, already by the time of the Standard Theory, materialized into the idea of Universal Grammar (Chomsky 1965).

2.1.2 *Parameters*

The actual breakthrough, as Chomsky himself emphasizes in a recent survey on the Biolinguistic Perspective (Chomsky 2004), occurs in the 1980s, when the Government and Binding framework emerges: the question of cross-variation is explicitly posed with a clear-cut formalization of the concept of Universal Grammar and, above all, with the introduction of the Principles and Parameters model[3]. Beyond the technicalities of the proposals advanced in the development of the G&B model, the notion of Parameter shifts the focus from the definition of rules needed to generate language-particular constructions to the unvarying element of language and consequently to the mechanisms that make variation possible. Concurrently, an increasing number of languages start to be investigated.

So, if UG consists of a set of innate principles in the speaker's mind/brain and if these principles include parametric options that get set during the acquisition process, the variation among syntactic structures of different languages thus reduces to different settings of parameters. More properly, the interaction of the values of the various parameters is held responsible for producing the constructions that are actually observed in languages. The clear shift from the Standard (Extended) Theory, where grammar was constructed as a system of language-particular rules[4], goes

[3] Henceforth, the Government and Binding framework and the Principles and Parameters model will be abbreviated as G&B and P&P respectively. Universal Grammar will be referred to simply as UG.

[4] Let us recall that pre-G&B models were based, tellingly, on the notion of construction: phrase structure rules, rewriting categorical symbols and introducing lexical elements, create the sentential string (for example: S → NP +VP; NP → Art + N; etc.). Strings can be further handled by optional transformational rules, activated by markers that apply cyclically like NEG(ation), Q(uestion) or PASS(ive).

hand in hand with the advancement toward an increasingly modular conception of language, where separate modules (X-bar Theory, Binding, θ-Theory, movement rules, etc...) preside over different properties of syntax.

Comparative syntax, thus, acquires a central role within the G&B paradigm as a means of exploring the universal properties of language and it is not by chance that in the 1980s generative linguists started reconsidering the work that had been done in the typological field: robust generalizations, despite being relevant only to surface structure, nonetheless require an explanation and are suggestive of further properties that may be part of Universal Grammar. As a consequence, a great amount of work in generative research in this period takes as its starting point data from the typological literature, thereby expanding the inventory of languages that are being investigated, but above all typological generalizations are being discussed extensively and exploited to develop an increasingly more fine-grained view of UG.

2.1.3 *The number and locus of parameters*

Even if the efforts to categorize variation into a system with a limited number of parametric options led to important theoretical developments, as was, for example, the discovery that a set of apparently unrelated properties are dependent on the Null Subject Parameter (see section 3.3.1, p. 42 ff.), the theoretical apparatus of generative grammar by this time was not devoid of problems, which would in turn eventually lead to a change of perspective, ushered in the Minimalist Program.

The very first problem was a sort of 'explosion' of the number of proposed parameters as the analysis of more and more languages was going on, with the discovery of new language-particular phenomena that were seemingly irreducible to already known parameters. As a result, the need to provide structural descriptions for such phenomena led, in most cases, to the introduction of new parameters into the theoretical framework or to recasting previously proposed parameters in a more articulated way, i.e. extending the set of their permissible values in order to include the newly observed constructions into the model. Yet, it was soon realized that proceeding further along this path would have led to a rather improbable system with a number of parameters (the 'switches' the child has to set on a value during the acquisition of his/her native language) much larger than what one could expect in an innate cognitive device as FL was supposed to be. As Newmeyer correctly points out, such a system would have been descriptively accurate at the cost of being explanatorily very weak:

> [...] as investigation of the properties of hundreds of languages around the world deepens, the amount of parametric variation postulated among languages and the number of possible settings for each parameter could grow so large that *the term 'parameter' would end up being nothing but jargon for language-particular rule*. In this scenario, as many different parameters and pa-

> rameter-settings would be needed as there are construction-types in language. Thus doing GB would become nothing more than listing a set of 'parameters', *each one a description of a recalcitrant fact in some language*. [...] [Some parameters proposed in several papers from NELS-15 in 1985] have the appearance of being uncomfortably language-particular, including one that states that Finnish is immune to the Case filter; one which has *wh*-movement pass trough INFL in Yoruba; and a parameter that states that a preposition must be properly governed in Dutch in order to be a proper governor itself. (Newmeyer 1996: 88; emphasis added)

The other critical problem of parameters as they were conceived in the G&B framework is raised by Rizzi (2011) who emphasizes the inadequacy of their *format as specifications on principles,* strictly interacting with the issue of parameter proliferation. In fact, between the end of the 1970s and the following decade, the parameters that were proposed looked like options specified on principles of UG, that is, possible values that general principles, belonging to all modules of grammar, might take, so entailing that UG principles were the actual *locus* of parametric variation. Any principle, under cross-linguistic comparison, appeared to be potentially subject to one or more parameters: locality principles (bounding nodes for Subjacency: Rizzi 1982, chap. 2), the availability of null subjects (Taraldsen 1978; Rizzi 1982), categorial selection properties of some verbal classes (*believe* type verbs select an IP: Chomsky 1981) or of P for case (Kayne 1981), restrictions on head movement (*V-to-I*: Emonds 1978; Pollock 1989), to end with much more general properties like the option for a language to be non-configurational (Hale 1983). The arbitrary character of parameters conceived in this manner was thus obscuring the way the entire device operates during the acquisition: if any aspect of UG can be parameterized, for the child learning a language it would be too difficult a task to determine the values of the parameters only upon positive evidence from the input, making it very unlikely that the acquisition device really works in this way.

2.2 *The lexicon. Parameterization in Minimalism*

2.2.1 *The lexical turn*

A new advancement in the theory of parameterization, at a stage when 'macro-parametric' ambitions were frustrated by the mismatch between the data and the theory, came out approximately in the second half of 1980s, with the hypothesis that will later be the standard in Minimalism, first formulated by Hagit Borer in her book *Parametric Syntax*:

> The availability of variation [is restricted] to the possibilities which are offered by one single component: the inflectional component. (Borer 1984: 3)

> The inventory of inflectional rules and of grammatical formatives in any given language is idiosyncratic and learned on the basis of input data. If all interlanguage variation is attributable to that system, the burden of learning is placed exactly on that component of grammar for which there is strong evidence of learning: the vocabulary and its idiosyncratic properties. (Borer 1984: 29)

This idea, recently labeled by Baker (2008) as the *Borer-Chomsky Conjecture*, in stating that variation is reducible to the properties of the (functional) lexicon, was essentially restricting its locus to one component of Grammar only, namely the lexical one. In a theoretical perspective, the move was toward a more restrictive architecture of UG, where core (general/invariant) properties interact with variable properties of lexical elements. The *Lexical Parameterization Hypothesis* of Manzini and Wexler (1987) formalized this intuition in linking single parameters to specific elements of the Lexicon:

(1) *Lexical Parameterization Hypothesis*

> Values of a parameter are associated not with particular grammars but with particular lexical items. (Manzini and Wexler 1987: 424)

Developing a case study for variation on the different binding properties of reflexives and pronouns in different languages, the authors showed that the different behaviours of Italian *sé stesso*, English *himself*, Icelandic *sig*, Korean *caki* and Japanese *zibun* were all consistent with Principle A of Binding Theory, on condition that an appropriate definition of governing category is provided for each of these lexical items. In addition, the inclusion hierarchy that was emerging among the above languages as a byproduct of the definition of governing category showed that, at least in the domain of Binding Theory, the degree of restrictiveness of a grammar (w.r.t. a single phenomenon) might be explained in terms of a single property of a lexical item. Finally, this had consequences also on the acquisition process in that the fixation of the relevant parameter in the child's grammar was essentially a matter of constraining the behaviour of a lexical item.

Although this hypothesis, as stated, covered all modules of grammar and therefore was potentially able to explain all aspects of syntactic variation, it doesn't come as a surprise that Manzini and Wexler themselves had to append to it a statement like the following:

> Whether the Lexical Parameterization Hypothesis does in fact hold for all parameters, and not only for the governing category parameter, *is an empirical issue that we leave open*. However, we think it is likely that if not parameters,

> at least a consistent subset of them will turn out to obey it, as the governing category parameter does. (Manzini and Wexler 1987: 424; emphasis added)

The authors' caution, shared by most syntacticians, was due to the fact that some aspects of cross-linguistic variation, like the head directionality parameter or the availability of incorporation in a language, seemed to be too general to be ascribed to any lexical item, thus making syntax proper the only possible place where they could be located. However, the Lexical Parameterization Hypothesis was making it possible to avoid postulating many innate 'switches' in UG (thus relieving the core part of syntax of the burden of an unlikely large number of parameters) and therefore it soon became the standard in the literature. Later on, in the spirit of a deep reassessment of principles, Minimalism would eventually radicalize this idea in its scope and consequences.

2.2.2 *The Minimalist Program*

Chomsky, in the first version of the Minimalist Program (Chomsky 1995: 169-171) assumes that there is only one computational system and one lexicon, and that variation points are restricted to few elements, namely:

a) options of the PF (Phonetic Form) component, which include:
   i. Saussurean arbitrariness (association of concepts with phonological matrices);
   ii. properties that hold of lexical items generally, detectable at the interface (e.g. the head directionality parameter);

b) options in the Lexicon:
   i. inflectional properties in general (properties of grammatical formatives, i.e. pertaining to morphology);
   ii. properties of the functional lexicon.

Narrowing the parametric domain down to the Lexicon and to the PF component is supported by language acquisition considerations: if UG actually is an initial state S_0 of the speaker's mind/brain, a function mapping experience (the primary linguistic data - PLD - the child is exposed to) to a language, it must consist only of invariant principles and the range of permissible variation. The latter must be determined by what is somehow visible to the child acquiring language, the PLD, indeed. This entails as well that we must regard it as a highly probable hypothesis that the LF (Logical Form) component does not admit variation at all: for the child acquiring language the evidence from PLD that inside the computation

system or at LF interface there exist parametric options might be, at best, quite indirect. In other words, the child would have to infer the value of a parameter, which by hypothesis is already present at LF or in syntax proper, from the only data s/he has at his/her disposal, that is, data which are relevant for another component, PF. As far as this condition looks rather improbable, and given the conceptual difficulty to admit it if we assume a restrictive architecture of grammar like the one envisaged in the Minimalist Program (with syntax independently and simultaneously feeding the two interfaces), the only option one is left with is to locate variation points only at PF level and in the Lexicon[5].

2.2.3 *Phase Theory. Uninterpretable features*

The idea that the lexicon and PF are the only *loci* of variation is implemented at a detailed level in Phase Theory, in particular in the second version (Chomsky 2008), where parameterization is explicitly formulated as the result of features (and their values) clustering in a lexical item:

> Adopting the P&P framework, I will assume that one element of parameter-setting is assembly of features into lexical items (LIs), which we can take to be atoms for further computation and the locus of parameters, sweeping many complicated and important questions under the rug. (Chomsky 2008: 135)

According to Chomsky a language (what he terms an *I-Language*, corresponding to a state of the Faculty of Language), as a 'cognitive/mental' object, is ultimately a 'biological' entity, produced by the interaction of three factors:

i. external data (experience, that is the language the child is exposed to);

[5] It must be remarked, however, that Chomsky's (1995) position on lexical parameterization is not so clear-cut, on the face of some statements like the following (Introduction to *The Minimalist Program*, p. 6): «I will assume that something of the sort [= the strong proposal that parameters are restricted to formal features of functional categories (Borer 1984; Fukui 1986; 1988)] is correct, but without trying to be very clear about the matter, since too little is understood to venture any strong hypothesis, as far as I can see». Such an assertion is at odds, albeit for the degree of firmness, with the conclusion that variation must be restricted to the PF component and to the Lexicon, as summarized above, and with another excerpt from the Introduction (p. 7), anticipating it: «There is a single computational system CHL for human language and only limited lexical variety. Variation of language is essentially morphological in character». However, this is not surprising given Chomsky's way of approaching theoretical questions in his works, in particular in the book in question, with already discussed theses being reviewed and reassessed over and over again, on the light of new hypotheses. As we will see shortly, in further developments of Minimalism, the approach to parameterization issues changes again.

ii. genetic endowment, which sets limits on the attainable languages (the device which makes acquisition possible, namely UG);

iii. principles of structural architecture and restrictions not specific to the Faculty of Language (including principles of efficient computation).

In view of this, Chomsky introduces a guiding principle to test the interaction of these factors and define the extent of each of them. This principle is called *Strong Minimalist Thesis*:

(2) *Strong minimalist thesis, SMT:*
language is an optimal solution to interface conditions that FL must satisfy; that is, language is an optimal way to link sound and meaning, where these notions are given a technical sense in terms of the interface systems that enter into the use and interpretation of expressions generated by an I-language... (Chomsky 2008: 135)

If the SMT holds, this means that factor II, UG, which is encoded in genes, must be simple and basic to the greatest possible extent, in order for most properties of language to be reduced, as much as possible, to principles of efficient computation and to interface legibility conditions (factor III). The two interfaces, however, do not contribute evenly to the layout of FL with respect to the 'optimality' of its design (the conditions they impose on FL) but, according to Chomsky, there is a substantial asymmetry between LF and PF in this regard. Evolutionary considerations support this hypothesis: if 'linguistic' abilities evolved primarily as a reflex of symbolic thought (creation of possible worlds as a means of thinking and planning) the optimization conditions imposed on FL should pertain mainly to the interface with the conceptual-intentional system, entailing that syntactic objects, generated by the computation, are 'well designed' to satisfy LF requirements. The mapping to the phonological interface, conversely, is of lesser importance in shaping the architecture of FL.

Principles like *inclusiveness* or the *no-tampering condition*, which are fundamental in such a system, restrict the permissible computations in UG to only two basic operations that narrow syntax can do before transfer to the interfaces: *Merge* (that comes in two types: EM *External Merge* and IM *Merge = Move*) and *Agree*, both driven by features intrinsically present in the lexical items that enter the derivation. *(External) Merge* of two items extracted from the Lexicon[6] is made possible by the *Edge Feature*, a feature that lexical elements are universally endowed with, enabling

[6] The concept of *Numeration* introduced in Chomsky (1995: 225 ff.) is apparently abandoned here, in favour of a dynamic access to the Lexicon in the course of the derivation, at every instance of the operation External Merge.

them to enter a computation and merge with an already formed syntactic object or with another lexical item. *Agree*, on the other hand, is driven by φ-features carried by the lexical items: a lexical item that has uninterpretable features acts as a *Probe* looking for a *Goal* that includes the same but valued features; the latter can value the features on the Probe, turning them into interpretable ones and thus making possible the transfer of the syntactic object to the interfaces (if needed, after raising the Goal to the Probe). Transfer operations are possible only at certain points in the derivation, in a cyclic way. These points are called *phases*.

Without entering into the details of the properties of phases and of the devices that are proposed in Chomsky (2008), what seems to make possible points of variation in this system is the existence of uninterpretable features. As far as the transfer to both interfaces occurs at the same stage in the derivation, and since valued uninterpretable features must be deleted at the interface with the conceptual-intentional system C-I (=LF) (upon the assumption that they are redundant as far as they are indistinguishable from the interpretable features that have valued them), at the interface with sensory-motor systems SM (=PF) these features may receive a phonetic realization and are thus preserved:

> Once valued, the uninterpretable features are deleted by the mapping to the semantic component, and given whatever phonetic properties they have in particular I-languages by the phonological component. (Chomsky 2008: 154)

Thus, combining all the above with the primary role of LF as the only interface imposing conditions on the design of FL, a necessary conclusion on the nature of parametric variation is that it is essentially morphological and lexical in character. In other words, if the lexicon of an I-language differs from the lexicon of another I-language w.r.t. the uninterpretable features carried by the lexical items that are included in them, syntax will operate on these features and will hand over to the phonological component different objects for the two I-languages, but the LF component will actually receive identical semantic representations[7].

Even if not explicitly spelled out, the parametric theory grounded in Chomsky (2008) restricts variation to the sole (morpho)phonological component, ruling out parametric options in syntax proper, although

[7] After the transfer to the interfaces, the phonological component, in turn, will further handle the Spell-Out according to specific rules of the relevant I-language: the head-direction parameter, for instance, is straightforwardly derived (along with other possible parameters of linear order) from the hypothesis that the operation Merge creates a set of two lexical items (or of a lexical item and an already formed syntactic object), but doesn't care about their order, which must be decided at the PF level, the only one relevant for linearization options.

computations are somewhat subject to parametric options in being conditioned by the input from the Lexicon, by way of the uninterpretable features attached to lexical items.

2.3 *Micro-comparative syntax and its impact on parametric theory*

Other ideas on parametric variation, beside Chomsky's, have been proposed as alternative or complementary theories throughout the development of the G&B framework and in Minimalism, feeding a debate that has been reawakened in recent years. Questions at issue concern some general problems such as whether all parameters are lexical in nature (Fukui 1988; 1995), or the likelihood of cascade effects yielded by a parameter on apparently unrelated phenomena, but the discussion has extended far beyond these topics up to calling into question the very notion of parameter (see, for example, the Newmeyer vs Holmberg and Roberts debate, cf. note 13, pp. 26-27), thus narrowing parametric 'effects' down to externalization options (Boeckx 2012).

However, a further development that was to have a deeper impact on the theory of variation dates from the mid-eighties, when the idea of lexical parameterization was catching on. Kayne's (1985) comparison between French and Italian and the first papers on Italian dialects (Brandi and Cordin 1981; Benincà 1983; Renzi and Vanelli 1983), in fact, were shifting the focus to the small differences that were being discovered across closely related languages, starting the line of inquiry on so-called micro-variation. As exploration of data was going on, the emergence of a growing number of such differences, hardly reducible to broad and clear-cut generalizations, opened the way to the idea that besides large-scale parameters there could be micro-parameters as well, thus undermining the macro-parametric view, in spite of some attempts to defend it also in more recent times (e.g. Baker 2008). On the other hand, the work on dialectal variation (again, mainly in Romance) gave impulse to the development of another line of research, namely the 'cartographic' one, which exploited the fine-grained variation that was being unveiled to elaborate a theory calling for a very articulated structure of the sentence, seemingly postulated as part of UG.

The investigation of syntactic micro-variation, thus, was crucially intersecting with parametric theory in providing more and more data against which theoretical models could be validated, by empirically testing whether the parameters originally proposed by comparison of a few major languages did also fit a wider range of less studied varieties. Such an enterprise, however, was more and more unambiguously suggesting the macro-parametric view, entailing a UG containing a limited set of options that are left open – the parameters – as the only sources of cross-

linguistic differences, was inadequate to account for a variation that appeared to be quite fine-grained.

Just to provide an example, already in a work like Brandi and Cordin (1981) it was pointed out that for the Null Subject the surface pattern of variation in some Italian dialects could not be related just to the presence, or lack thereof, of a subject NP. In fact, varieties like Trentino or Fiorentino, displaying obligatory subject clitics apparently like French, had properties that were associated with a positive value of the pro-drop parameter of Rizzi (1982), i.e. free subject inversion or lack of *that*-trace effects (see section 3.3.1). On a closer analysis, even these subject clitics were shown to be quite different from their French counterparts, as they had to obligatorily co-occur with a lexical subject (3) and were undeletable under coordination (4), unlike French.

(3) a. *La Maria *(la) parla* (Fiorentino)
The M. she.CL speaks (Brandi and Cordin 1981: 36)

b. *Jean (*il) parle* (French)
J. he speaks

(4) a. *La canta e *(la) balla* (Fiorentino)
she.CL sings and she.CL dances (Brandi and Cordin 1981: 42)

b. *Elle chante et (elle) balle* (French)
she sings and she dances

As is clear from the Trentino and Fiorentino evidence, the model with one point of variation (a parameter) triggering a wide range of collateral 'cascade' effects was much less maintainable than it could be[8]. In addition, the nature of the null subject as a yes/no parameter was compromised by the observation that Romance dialects displayed intermediate gradations, so that a subject might be 'silent' depending on its own person and number features, and on other factors. A natural supposition was, then, that in this area of syntax more than one parameter might be involved and this led, for example, Jaeggli and Safir (1989) to propose the free inversion parameter (cf. 3.3.1, note 12, pp. 59-60).

In the remainder of this section I will briefly discuss some general questions of micro-comparative syntax and their relevance for variation

[8] Brandi and Cordin, however, tried to maintain the classic parameterization (see section 3.3.1, p. 52 ff.) by equating these dialects to Italian, as Null Subject Languages, arguing that the subject clitic is inserted under the Infl node, as the Spell-Out of the inflection pronominal features, with a *pro* cooccurring with the subject clitic. See also Brandi and Cordin (1989).

theory, presenting the most prominent views in the literature. On the basis of the discussion, I will argue in favour of a version of parameterization viewing the vocabulary items (including pieces of morphology) as lexicalizations of conceptual primitives that are differently realized across languages. Anticipating some aspects of the adopted framework (Manzini and Savoia's unification of morphology and syntax) I will thus claim that such a way of dealing with linguistic variation can best account for the intricate cross-dialectal distribution of case and agreement patterns in NR participial constructions.

2.3.1 *Micro-variation as an insight into the nature of language*

The attention paid to micro-variation was due not only to the need to validate the existence of certain parameters that had been previously theorized on the basis of the comparison of English with other well-studied languages, but was arising also as the outcome of some methodological demands that are lucidly pointed out by Kayne (1996; 2011). Kayne's argument, in general, is that in order to single out one or more syntactic properties clustering with other properties (a parameter in the classical sense) it is necessary to compare two languages observing which syntactic differences are arguably linked to other syntactic differences, and in doing so, the higher the number of syntactic differences the more complicated is the task to identify the relevant properties. As a natural consequence it follows that comparing two closely related varieties is generally preferable when testing hypotheses on parametric clustering, since it reduces the 'noise' that can potentially arise from the interaction with other syntactic properties[9]:

> It is easier to search for comparative syntax correlations across a set of more closely related languages than across a set of less closely related languages. If the languages being compared are more closely related, it is almost certain that there will be fewer variables that one has to control for, and there is therefore a greater likelihood of success in pinning down valid correlations. (Kayne 2011: 4)

[9] After all, as Kayne (1996: x-xi) noted, in the actual work of comparison that had been done by the time he was writing the paper in question, many hypotheses on parameters and general principles of grammar that had originated from the comparison of English and French were often giving rise to new and interesting questions when they were being tested on other Romance or Germanic languages. Similarly, at a more 'micro-comparative' level, hypotheses that originated from the comparison of, say, Italian and French could be fruitfully applied to the comparison between the latter standard languages and their dialectal varieties, leading to the discovery of clusterings of syntactic properties that otherwise would probably have gone unnoticed.

The analytical power offered by the study of micro-variation evokes a striking parallel with the 'controlled experiments' that can be performed in other natural sciences, where one can alter the value of a variable and see what happens to the other variables that are arguably connected with it:

> If it were possible to experiment on languages, a syntactician would construct an experiment of the following type: take a language, alter a single one of its observable syntactic properties, examine the result and see what, if any, other property has changed as a consequence. If some property has changed, conclude that it and the property that was altered are linked to one another by some abstract parameter. Although such experiments cannot be performed, I think that by examining pairs (and larger sets) of ever more closely related languages, one can begin to approximate the results of such an experiment. To the extent that one can find languages that are syntactically extremely similar to one another, yet clearly distinguishable and readily examinable, one can hope to reach a point such that the number of observable differences is so small that one can virtually see one property covarying with another. (Kayne 1996: 5-6)

Even if the range of syntactic properties that such an approach can investigate is necessarily restricted by the nature of the set of closely related languages that are being studied, the scope of micro-comparative syntax is only apparently limited to certain phenomena, precisely because the finer characterization it allows contributes to the advancement of general syntactic theory. Secondly, micro-comparative syntax makes the Lexical Parameterization Hypothesis empirically testable in an easier way, a principle that is - as we have seen - the standard hypothesis of variation theory at least from Chomsky (1995) onwards. The connection between micro-variation and lexical parameterization,which is quite easy to grasp intuitively, can be more precisely captured if we recall the terms in which the latter is defined, that is, a restriction on the *locus* of variation to properties of single lexical elements: if we take a certain, well-bounded syntactic context, that can be analogously defined in two languages, and we find a difference emerging from the comparison, it is more likely that we will be able to pin down a lexical item that might be responsible for this difference in two closely related languages than in two distant ones, where most probably other properties of different lexical items might interact in producing the observed difference. In the same manner, clustering properties can be more robustly established if we are able to prove that two dialects that minimally differ from each other in a particular phenomenon also differ, *ceteribus paribus*, for one or more other properties.

2.3.2 *Are there micro-parameters?*

As it becomes more and more clear that many instances of variation, though expressible in terms of discrete properties (as one might expect

in a mentalistic conception of language), are distributed on a very small scale, an idea emerging from the work on micro-variation is that, apart from macro-parameters, UG might leave open options of variation at a much more fine-grained level than was thought in the Principle and Parameters model. The idea, that has been more often suggested than explicitly argued in the literature, is that variation is micro-parametric in nature and therefore the scale of parametric options in natural languages, at least w.r.t. the relative scope of surface effects, is as fine-grained as the one emerging from the comparison of very closely related varieties. Large-scale parameters, like those claimed to exist in G&B, should then be more properly re-stated in terms of aggregates of micro-parameters acting jointly and hence producing a wider range of effects. Alternatively, some dramatic parametric differences might be still attributable to single lexical items, if they have a very prominent character, as might be the case, for example, of the T head for the Null Subject (Baker 2008: 355).

A macro-parameter like the Polysynthesis Parameter proposed by Baker (1996), which essentially has the positive property of requiring an overt agreement morpheme for each argument of the verb (doubling the referential nominal elements that might possibly be not incorporated in the verb), could then be linked to a set of properties that are similar in nature with each other (obligatory agreement) but refer to different relations (the different arguments of the verb). Following an acute observation by Kayne (2005: 7), we might think that obligatory incorporation of pronominal agreement morphemes in the verb is nothing more, apart from the fact that all verb argument are involved, than what we can find in many Romance varieties: subject clitics co-occur with lexical subjects (in all or only some person/number bundles) in many Northern Italian dialects (see ex. (3)-(4), p. 16), while standard Italian has obligatory resumptive object clitics when a lexical direct object is left-dislocated; in Spanish this requirement is extended to all dative arguments even in non-dislocated contexts on the condition that the argument be pronominal, as in (5); Northern Italian varieties, again, are much more permissive than Italian in allowing clitic doubling, for instance with wh-elements, as in the Veneziano example in (6):

(5) *Las*$_i$ *vi* *a* *ellas*$_i$ (Spanish)
them.F.CL saw.1SG to them F.
'I saw them'.

(6) *A* *chi*$_i$ *ti* *ghe*$_i$ *ga* *ditto* *cussì?* (Veneziano)
to who you.NOM.CL him.DAT have.2SG said so
'To whom did you talk like that?' (Poletto 2008: 50)

Thus, the constraint that enforces the insertion of agreement morphemes on the verb in a polysynthetic language like Mohawk might be analysed as an extreme conspiracy effect of different micro-parameters, one of them being the same micro-parameter that in Romance imposes lexicalization of the subject as a pronominal clitic, another one being insertion of a resumptive clitic in left-dislocated structures, and so on. Such a conjecture appears to be even more likely if we consider that a comparable range of variation is found in other areas like the Balkans, where two closely related languages, Bulgarian and Macedonian (among other languages), both have clitics doubling lexical arguments, but with stronger obligatoriness requirements than in Romance and, crucially, with a more extensive use of clitic doubling in Macedonian. Bulgarian, in fact, requires obligatory insertion of a clitic in some classes of predicates (psych- and perception verbs) displaying an Experiencer in dative (7) or accusative case (8) and in other constructions, too (*Clitic Doubling Proper*, cf. Krapova and Cinque (2008), examples taken therefrom).

(7) *Filmăt* **(mu)* *xaresa* *na* *Ivan* (Bulgarian)
film.the him.CL.DAT appealed to I.
'Ivan liked the film'.

(8) *Jad* **(go)* *e* *Ivan* (Bulgarian)
anger him.CL.ACC is I.
'Ivan is angry'.

Macedonian, on the other hand, always requires clitic doubling of a referential definite object DP, in all contexts, irrespective of dislocation (or the lack thereof), and not depending on the class of the predicate or the type of construction, as in Bulgarian:

(9) **(go)* *gledam* *deteto* (Macedonian)
him.CL.ACC see.1SG child.the
'I see the child'.

(10) **(mu)* *ja* *davam* *knigata* *na* *Jovan* (Macedonian)
him.CL.DAT it.CL.F.DAT give.1SG book.F.the to J.
'I give the book to John'. (Fici, Manzini and Savoia 1998: 16)

Facts like those just described suggest that a distinction between micro- and macro-parameters, whatever the way they act in triggering variation (and whether they belong to UG or not) is unjustified at least at a

conceptual level: differences between micro- and macro-parameters pertain just to the size of their surface effects[10].

2.3.3 *'Silent' functional elements and functional hierarchies as the locus of variation. Kayne and the Cartographic Program*

If the amount of parameters that must be postulated, in order to obtain a system capable of generating subtle differences between different grammars, is much higher than in a macro-parametric model, the issues at stake are once again the *locus* and the number of parameters. Even if one accepts the Lexical Parameterization Hypothesis, and thus assumes that parametric options are expressed in natural languages as properties of single lexical elements, what seems to be a prerequisite for it is that UG has to specify parameters anyway by encoding each of them in the form of a possible functional element. Hence, a likely conclusion, largely coinciding with the Kaynean conception, might be that such functional elements are all embedded in the lexicon of any language, but each language makes a choice about which functional elements must to be overt and which ones have be left in a 'silent' form. In other words, languages choose which functional elements are to be pronounced and which are not, besides conferring them different features that can, for instance, trigger movement operations (cf. Kayne 2005: 15-16)[11].

[10] Actually, there is also a minority position in the debate, its main supporter being Mark Baker, that holds that some variation schemes are not reducible to conspiracy effects of micro-parameters and must be regarded as true macro-parameters. The latter, according to this view, do not originate in the Lexicon and are to be attributed to more general principles of syntax (see the discussion in section 2.4, p. 27).

[11] Kayne's working hypothesis is that each functional element made available by UG is associated with a syntactic parameter and that morphological affixes, including derivational affixes, are part of syntax, since they have syntactic effects (irrespective of whether or not they can be considered functional heads or elements triggering movement to a higher functional head). A further restriction imposed by UG on lexical/functional elements is that each of them can be associated with one and only one interpretable feature, in a fully decompositional approach to syntax. This is linked to the idea that there exist 'silent' lexical elements that are licensed by certain modifiers and/or license, on their turn, specific lexical elements: this would account for cross-linguistic differences like the subtle divergence between French and English, where the former has the suffix *-aine* (whose counterpart is apparently lacking in the latter) that selects for numerals and assigns them an interpretation akin to *about*:

(i) *une* *centaine* *d'articles* (French)
a about.hundred of articles
'about one hundred articles'.

Kayne proposes that in this case a silent analogue to *-aine* also exists in English, since a numeral like *hundred* can be nominalized in contexts like (ii) (as opposed to

A similar answer to the questions pertaining to the *locus* and number of parameters is suggested in the cartographic program (Rizzi 1997; Cinque 1999 and subsequent works), for whose supporters UG contains an articulated set of functional projections as the one that is assumed in Cinque's hierarchy derived from the relative order of adverbial positions in the clause: so, there would be three different positions for T (corresponding to the temporal reference w.r.t. the moment of utterance, past, present, and future), three positions for mood (illocutory force/speech act, evaluative and evidential) and many other positions for modality and aspect. The Spec of each head would host the relevant adverbs, giving rise to the structure in (11):

(11) Universal hierarchy of clausal functional projections

[*frankly* $\text{Mood}_{\text{speech act}}$ [*fortunately* $\text{Mood}_{\text{evaluative}}$ [*allegedly* $\text{Mood}_{\text{evidential}}$
[*probably* $\text{Mod}_{\text{epistemic}}$ [*once* T(Past) [*then* T(Future) [*perhaps* $\text{Mood}_{\text{irrealis}}$
[*necessarily* $\text{Mod}_{\text{necessity}}$ [*possibily* $\text{Mod}_{\text{possibility}}$ [*usually* $\text{Asp}_{\text{habitual}}$
[*again* $\text{Asp}_{\text{repetitive(I)}}$ [*often* $\text{Asp}_{\text{frequentative(I)}}$ [*intentionally* $\text{Mod}_{\text{volitional}}$
[*quickly* $\text{Asp}_{\text{celerative(I)}}$ [*already* T(Anterior) [*no longer* $\text{Asp}_{\text{terminative}}$
[*still* $\text{Asp}_{\text{continuative}}$ [*always* $\text{Asp}_{\text{perfect(?)}}$ [*just* $\text{Asp}_{\text{retrospective}}$ [*soon* $\text{Asp}_{\text{proximative}}$
[*briefly* $\text{Asp}_{\text{durative}}$ [*characteristically*(*?*) $\text{Asp}_{\text{generic/progressive}}$ [*almost* $\text{Asp}_{\text{prospective}}$
[*completely* $\text{Asp}_{\text{SgCompletive(I)}}$ [*tutto* $\text{Asp}_{\text{PlCompletive}}$ [*well* Voice
[*fast/early* $\text{Asp}_{\text{celerative(II)}}$ [*again* $\text{Asp}_{\text{repetitive(II)}}$ [*often* $\text{Asp}_{\text{frequentative(II)}}$
[*completely* $\text{Asp}_{\text{SgCompletive(II)}}$ (Cinque 1999: 106)

In cartographic works it is implicitly assumed that a hierarchy like (11) is part of UG and that it is fully represented in the clausal skeleton: while the hierarchical ordering is probably constrained by the interaction be-

(iii)) where the interpretation – an approximation of the quantity expressed by the numeral – is equivalent to that obtaining in French with *-aine*:

(ii) hundreds *(of) articles (English)

(iii) a hundred (*of) articles

The preposition *of* (the analogue of French *de* in (i)) would then be licensed by the silent analogue of *-aine* in such a way that at the certain point of the derivation the structure of (ii) would be as represented in (iv):

(iv) hundred-AINE-s of articles

The fact that the lexical head *-aine*/-AINE is compatible with singular in French but not in English is taken by Kayne to be a further parametric property, that might possibly stem from its nature of silent category in English, that as such must be licensed (and in this case it can only be licensed from an overt element like *-s* of the plural).

tween formal properties of the computational component and interface conditions with other cognitive faculties, in this view parameterization reduces to which functional projections are active in one language, that is, which are (or can be) overtly realized, and to their formal properties in terms of functional features (±interpretable, ±EPP, morphologically realized or unrealized, and so on) whose interaction gives rise to variation.

2.3.4 *An overspecified grammar?*

If UG must contain all the possible projections (or possible functional features) in order to make them available to the computational system, with their number estimated at hundreds (Cinque and Rizzi 2008: 48; Kayne 2005: 11-15), at stake again is the proliferation of parameters that in the G&B model was undermining the conception of UG, which appeared to be too rich and overspecified for an innate device (see section 2.1.3). It is actually quite unlikely that the grammar that is being built by the learner in the acquisition process is already truly specified for an array of functional projections, for each of which the children should determine the values of the relevant features (including their existence, or the lack thereof, in the specific grammar) on the basis of PLD. The model is even more dubious if the hierarchical ordering is semantically motivated (as it actually is in the cartographic model), since it seems equally unlikely that an innate device would be endowed with complex cognitive abilities like the relative scope of Mood over Tense and Aspect in (11), rather than admitting that such relations undergo maturation throughout the overall development of the conceptual-intentional system. In sum, one can hardly think of UG as containing a pre-established arrangement like Cinque's hierarchy, that comes as a sort of ready-made collection of ordered functional projections.

However, the main obstacle to accounting for micro-variation by implementing in UG hundreds of parameters (corresponding to the relevant functional elements and projections) is possibly the fact that this sharply contrasts with the minimalist postulates stated in Chomsky (2001; 2008), which, on the one hand, call for a maximally simple and 'empty' UG, where the complex of properties of the Faculty of Language is largely determined by interface conditions (factor III) and, on the other hand, reduce the structure of the clause to the structure C-T-*v*-V (see section 2.2.3)[12].

[12] Cinque and Rizzi (2008: 50-53) explicitly address possible objections of this sort by recalling, on the one hand, that a simple computational device like that postulated in Minimalism does not necessarily generate impoverished structures, as the simple mechanism of recursion can give rise, instead, to very articulated and rich structures like the cartographic ones, provided that the operation Merge operates as a recursive function

Yet, more recent Minimalism contains at least an implicit theory of variation in presupposing that what really separates the grammar of one language from that of another is, in fact, the different featural composition (with properties like ±interpretable, ±EPP, etc.) of the respective lexical elements, which in turn interact in a necessarily different way with core syntax. As to features, the size of their inventory appears to be quite limited, being arguably restricted to φ-features, *wh*- and Q features, Case, categorial features (N, D, V, T), and to a few others. Thus, such a limited inventory may well be fully specified in the set of primitives that are part of UG, although it is not completely clear, on the other hand, whether this small set of entities could actually be enough to express the cross-linguistic variation that is found in natural languages.

2.3.5 *An alternative view: conceptual space and features as lexicalizations*

In view of the conceptual shortcomings that restrict the explanatory power of frameworks like the Kaynean view or Cartography, as discussed in the preceding section, I will explore in this book an alternative hypothesis to featural composition of lexical elements, namely the conjecture that the very properties of lexical items entering syntactic computation are not values assigned to binary features but, actually, that a feature and its value overlap. Though details will become clearer in chapter 5, where I will introduce the framework and spell out my proposal, the idea, in general, is that the way distinct lexical elements (in most cases, morphological affixes) lexicalize semantic properties varies from language to language, and whenever one such property does not receive a specific lexicalization it is recovered

on an inventory rich in functional/lexical elements. On the other hand - they claim – the granularity of cartographic structures is compatible with the clausal skeleton C-T-*v*-V if the latter is simply taken as a shorthand for more complex structures, with Chomsky's (2001; 2008) Core Functional Categories standing for wider domains, as seems to be the case at least for the C field, the 'left periphery' of the clause. Much stress is laid on the fact that cartography places at the core of its inquiry two major minimalist principles of investigation: the attempt to account for the properties of Faculty of Language as much as possible in terms of restrictions that interface conditions impose on it (Factor III, as recalled above), and general principles of economy and efficient computation. Cinque and Rizzi argue that, given an architecture of Grammar with two interfaces, PF and LF, where it is the latter that actually affects the design of the Faculty of Language, the cartographic attempt to 'syntacticize' as much as possible the interpretive domains is consistent with such minimalist principles. Nonetheless, in the face of the arguments provided by the main supporters of the cartographic approach, one cannot avoid observing that still there is an unjustified proliferation of projections in the architecture of UG. On the questions reflecting a real tension between standard Minimalism and Cartography, see also Shlonsky (2010: 425-427).

at LF by way of an interpretive enrichment operation, as requested by the principle of Full Interpretation (Manzini and Roussou 2011; 2012). I will thus stick to the assumption, underlying the entire work of Manzini and Savoia (2005; 2007; 2008a), that conceptual space is universal with languages cutting it out in different ways, assigning the lexical elements different properties, that is, properties more or less specific w.r.t. the parts of the very conceptual space. As is evident from the preceding discussion, such an approach is maximally lexicalist in taking variation to arise from the diverse realization (or failure to be overtly realized) of conceptual primitives in the form of lexical elements: partitioning of the universal conceptual space is crosslinguistically differentiated in being diversely mapped onto lexical elements. It is worth stressing that, in this respect, such a model is fully consistent, at the theoretical level, with one of the main claims of the Minimalist Program, the reduction of most properties of the Language Faculty to interface conditions, in particular with the conceptual-intentional systems (Chomsky's Factor III). UG is taken to have, in addition to very general principle like the operation Merge, just the ability to link the elements of a particular lexicon to a universal inventory of concepts (that lies on a *continuum* from concrete to abstract) which, as such, is necessarily located *outside* of the Faculty of Language.

In this manner, for example, the contrast between singular and plural nominals is given a different conceptualization than the familiar feature bundle [±sg., ±aug.] simply by stating that only the property of plurality undergoes lexicalization and that inflections of the alleged 'singular' are in fact just nominal class inflections. In other words, there is no singular number, but only a specification of the plural that, crucially, is often lexicalized by a morphological affix that attaches to a bare root (e.g. *-lar/-ler* in Turkish) or to a nominal class suffix (e.g. *-s* in Spanish and other Romance varieties, like the Sardinian or Ladin ones).

In a fully analogous way, one of the core arguments in my proposal will be the discussion of the *-o* morpheme in Russian and in its dialects, which I will take to express properties that make it compatible with both insertion as an agreement inflection of neuter singular and as an element checking the EPP requirement of the clause and granting a definiteness property to the predicative base to which it attaches. To put it another way, I will argue that there is no syncretism between the agreement morpheme and the morpheme that makes a predicative base an 'impersonal adverbial', neither that the impersonal adverbial and participial constructions have an abstract head with underspecified φ-features that are realized at the morphological level by way of a default inflection. Mores simply, the *-o* morpheme will be taken in full as a syntactic category and I will try to show, on the one hand, the syntactic effects that it causes in the environment it is inserted in and, on the other, the way in which it contributes to interpretation.

2.4 *Recent theories of parameterization*

2.4.1 *Interim summary: the core questions*

The questions raised by the study of micro-variation have not ceased stimulating new theoretical insights on the problems of parameterization throughout the development of the minimalist framework, to such an extent that arguments for eliminating the very notion of parameter from the theory have been advanced in recent literature. If we look back at all the issues raised by micro-comparative syntax that we have reviewed in the preceding section, and further back to problems discussed in sections 2.1-2.2, we can thus characterize the development of the theory of variation within G&B and early Minimalism as the formulation and the development of the concept of parameter (and its subsequent critical rethinking) in relation to the form and nature of UG and to the overall architecture of the Faculty of Language. The core questions arising from the developments in the theory as outlined so far, which form the basis of the current debate on variation and parameterization, may thus be summarized as follows:

a) Does it (still) make sense to talk about parameters, in broad terms, as the mechanism generating different I-languages, in the Chomskyan sense?
b) Do we still have evidence that there are long-range and very general macro-parameters, whose essence is not lexical but rests in diverse specifications of syntactic principles?
c) Can micro-variation be reconciled with some sort of macro-tendencies (typological generalizations), which, although not so clear-cut, are quite pervasive in natural languages?
d) How can we formalize the statement, that (most) parameters are located within the Lexicon? Do we really have to postulate the lexical nature of any parameter?

While a fairly negative answer to point a) above is given by Newmeyer (2004; 2005), who casts serious doubts on parametric models which, from his viewpoint, have failed to lead to a real advancement in accounting for cross-linguistic variation[13]. most scholars share the view that some space for

[13] Newmeyer's arguments raised against parameterization include all the issues that we have reviewed in the preceding sections, above all the overload of functional heads and projections that should be contained in a UG that is supposed to be innate, along with the failure to obtain of predicted clustering properties linked to macro-parameters. The micro-parametric approach and the Lexical Parameterization Hypothesis are equally unsatisfactory, in his view, as having many 'small' parameters or variation options in the Lexicon is in essence the same as having the language-specific rules of the

parameterization must be maintained, although this general concern is declined in very different ways[14]. This leads us directly to the answers that are provided to question b), which is explicitly 'yes' for Baker (1996; 2008 and other works), in opposition to the mainstream view in the generative field that holds that variation is essentially micro-parametric and lexical in nature. According to Baker, there are some points of variation in natural languages that are not reducible at all to properties of whatsoever lexical elements and even to the cumulated effects of several micro-parameters (as discussed in section 2.3.2, p. 18 ff.). Baker strongly endorses the view that some points of variation in natural languages are not reducible at all to properties of whatsoever lexical elements and even to the cumulated effects of several micro-parameters, although – as we have already observed (cf. section 2.3.2, p. 19) – he admits that some phenomena with large-scale effects like the null subject may well be triggered by specific properties of certain lexical elements, if the latter are particularly prominent, as the T head appears to be[15].

pre-G&B models, but with the unpleasant corollary that they should be part of the innate component, overloading UG with an unwanted burden. The alternative he puts forward, thus, is indeed to come back to language-particular rules of the type 'in English heads precede complements' (and, conversely, 'in Japanese heads follow their complements'), adopting a general format as that stated in (v):

(v) Language L has a rule R specifying the existence of functional category F (with feature content F'). (Newmeyer 2004: 211)

Adopting Hawkins's (1994; 2004), *Performance-Grammar Correspondence Hypothesis*, he claims, too, that many structures of particular grammars may be just conventionalizations of performance preferences that are rooted in language usage. The case of consistent head-initial languages, for example, for Newmeyer is but a reflex of a more general preference for right-displacement of the 'heaviest' phrase (witnessed by well-known phenomena like heavy-NP shift), given the fact that heads are generally 'lighter' than complements. Although Newmeyer's claims have stimulated much discussion and controversy (Roberts and Holmberg (2005) and Newmeyer's (2006) subsequent rejoinder.), they have gained limited consensus within the generativist field, also in view of the fact that, in sum, they do not provide a robust and convincing alternative for explaining cross-linguistic variation in the framework of a mentalist and internalist conception of language. Above all, it is not very clear what the link between 'performance preferences' (are they language-specific, like pre-G&B rules?) and syntactic structures should look like, and, consequently, this model fails to provide clear-cut answers to the fundamental questions pertaining to the functioning of the syntactic component.

[14] As we will see shortly, Boeckx (2012) sides with Newmeyer in advocating the elimination of the concept of parameter from the theory. However, his proposal holds that some sort of 'parametric space', restricting variation within certain limits, has to be maintained; this obtains by resorting to different arguments (PF-externalization, etc.), not by simply reverting back to rules, which actually amounts to a theoretical involution.

[15] Baker criticizes the micro-comparative approach (Kayne's 'controlled experiment') also on methodological grounds, claiming that two close varieties might be very

Although a micro-parametric and lexicalist viewpoint is adhered to in the present work (my account of the NR participial constructions is indeed meant as a contribution in support of this idea), it is worth taking into consideration nevertheless an interesting observation about typologically 'pure' and 'mixed' languages that Baker makes in support of the macro-parametric view. The reasoning goes as follows: if one could define all 'strong' language typologies like polysynthesis or the head-complement order as aggregates of (freely combining) micro-parameters, then languages would fall on a typological continuum ranging, for example, from pure head-final languages (Japanese) to pure head-initial ones (English), these being the special cases in which all of the categories happen to be set for the same complement-head order. On a normal Gaussian distribution one would find many more mixed languages than pure (or nearly pure) ones, with a peak in the middle, i.e. with the majority of languages being roughly halfway between the pure head-initial type and the pure head-final type, with a mix of discordant properties (e.g. O-V along with P-NP, and so on).

The situation that is observed in natural languages – Baker notes – is in fact the opposite one, a bimodal distribution having peaks near the two ends of the range of variation that correspond to the 'pure' types, but – crucially – not exactly overlapping with them and with 'mixed' languages much rarer than nearly-pure ones but nonetheless attested[16]. Such a dis-

similar as E-languages (i.e. have roughly the same string of grammatical words) but be quite different as I-languages: mutual intelligibility might just hide different settings of the same macro-parameter(s), which would be possibly obliterated by the cumulated effects of several micro-parameters. The conjecture, however, seems quite unlikely and it is not clear, at this point, why considerable differences between two languages should arise from the setting of a macro-parameter and not from a bundle of micro-parameters, if the latter is potentially able to deactivate the effects of a macro-parameter.

[16] To illustrate this point, the frequency of two orders associated with the head directionality macro-property (V-O vs O-V languages and prepositional vs postpositional language) is cross-tabulated in (vi) below:

(vi) Co-variance across verb-object ordering and noun-adposition ordering

	Postpositional languages: **NP-P**	Prepositional languages: **P-NP**
	(577)	(512)
Verb-final languages: **OV** (713)	**472**	14
Verb-initial languages: **VO** (705)	42	**456**

The data slightly differ from those presented in Baker (2008: 361-362) reflecting an update in the database from which it is taken, the *World Atlas of Syntactic Structures*

tribution, he argues, shows what one would actually expect in a model where macro-parameters interact with micro-parameters, with the effects of the latter creating a sort of 'noise', preventing pure types (all heads precede complements, or vice-versa) to occur in natural languages, an event that would otherwise happen if there were only one head directionality macro-parameter.

We thus reach the third question posed above, on how to integrate typological macro-tendencies with the micro-parametric view. This will be the focus of the following subsections, in which I will discuss two approaches that seek to embed parametric variation into the insights of the Minimalist Program and the Biolinguistic Perspective. The first one is Boeckx's (2010; 2011; 2012) criticism of the idea that parameters reside in the Lexicon and his proposal to reduce parametric variation to externalization options at PF (so dealing with question d) above). The second one is the line of inquiry pursued by Holmberg and Roberts (2010) that contend the effectiveness of the parametric approach in explaining linguistic variation. In their effort towards organizing the 'form' of parameters into hierarchies of parametric choices that learners have to select, they arrive at theorizing a very interesting general principle, the Generalization of the Input, which converges with Boeckx's Superset Bias and may and potentially conciliate the macro- and micro-parametric views. Finally, I will elaborate further on these proposals to arrive at a more general version of the Generalization of the Input, consistent with the view of morphological affixes as lexicalizations of features that I have sketched in section 2.3.5. In the final chapter of this book, this generalization will be shown to operate in the case of NR participial construction with respect to other areas of grammar.

2.4.2 *Post-syntactic lexicon and PF-externalization (Boeckx 2010; 2011; 2012)*

Boeckx's (2010; 2011; 2012) criticism is directed, in general, towards maintaining the notion of parameter within current theory in the light of the changes that the idea of the biological foundations of language has undergone (a maximally 'empty' UG and Factor III considerations that shift away much of the innate component to other modules of cognition, like interface conditions). For Boeckx even the popularity of lexical parameterization is due more to the shortfalls of 'syntactic' pa-

(Dryer and Haspelmath 2011). As far as for some languages it is not possible to determine the basic verb-object order or whether they are prepositional or postpositional, their cross frequency is not calculated and therefore the total number of languages for each row/column (indicated in parentheses) is not exhausted by the sum of coherent and incoherent languages in each row/column.

rameters (proliferation of parameters, failure of clustering predictions, etc.) than to an actual theoretical superiority: equating parameters to values of features in particular items like functional heads has, *de facto*, reduced the Lexicon to a syntactic component, with all the consequences this entails, whilst the Lexicon is the part of 'Language Organ' that is less understood, even more so since we still do not have a complete and satisfactory theory of it.

As an exemplification of the shortcomings that lexical parameterization faces, Boeckx cites the recourse to multiple feature bundling into a single lexical item to account for the presence of points of variation: if the inventory of syntactic features is universal (i.e. is made available by UG), two features in a language can occur on one lexical head or be disjoint and on two heads, taking the form of (12).

(12) *'Bundling' Parameter*

> Given two lexical features f_1 and f_2, drawn from a universal repertoire (UG), does a given language L project f_1 and f_2 as a bundle or do f_1 and f_2 function as distinct heads in syntax? (Boeckx 2012: 12)

If feature bundling is active on features – Boeckx says – then it is nothing more than the operation Merge acting in the pre-syntactic Lexicon, that is, a derivational operation that builds feature trees (cf. Harley and Ritter 2002) and is therefore syntactic in nature; all proposals that implicitly or explicitly make reference to feature bundling have to rely on an 'active' Lexicon, which is more than a list of items. Hence, bundling parameters turn the Lexicon into a component of syntax proper and, consequently, lexical parameters into syntactic ones, nullifying the explicative superiority of lexical parameterization. Given this state of affairs, lexical parameterization turns out to be as problematic as the G&B-style parameterization (specification on principles).

In order to escape this vicious circle, the only option left according to Boeckx is a radical extension of Chomsky's (2001) Uniformity Hypothesis («in the absence of compelling evidence to the contrary, assume languages to be uniform»), which he calls Strong Uniformity Thesis (SUT). The SUT states that narrow syntax principles are not subject to parameterization and therefore not affected at all by lexical parameters. In other words, there would be only one invariable syntax, the core of the human Faculty of Language underlying all of its particular manifestations, i.e. natural languages. The intuition standing behind the SUT concerns again Factor III: principles of efficient computation cannot be parameterized, since if they were they would not be such. The logical consequence of a syntax totally immune from variation points is therefore a shift of the locus of variation to the morpho-phonological component, as stated in (13).

(13) *Locus of variation*

All 'parameters' reduce to realizational options (i.e., PF decisions rendered necessary by the need to externalize structures constructed by an underspecified syntactic component). (Boeckx 2012: 14)

The reduction of the parametric space to externalization options, amounting to rephrasing those parametric effects that are usually ascribed to lexical elements in terms of morpho-phonological realizational options[17], prevents syntax from following lexical instructions. Points of cross-linguistic variation, thus, arise in virtue of the interaction of two systems, syntax – the invariable module – and morpho-phonology, and by this interaction are highly constrained. In acquisitional terms, this relates to the construction by the learner of his/her own grammatical vocabulary, that is achieved by learning which options of the universal syntax to pronounce (morphologize/lexicalize/idiomatize) and how[18].

[17] For example, movement can be restated as a decision, taken at PF level, on which copies are to be pronounced. Feature bundling takes place at Spell Out, where features on lexical heads get assembled in different ways in each language. This idea is clearly reminiscent of the notion of Late Insertion in Distributed Morphology (Halle and Marantz 1993) or of Borer's (2005) 'exoskeletal' conception. There are plain analogies, as well, to the solution offered by Starke (2011), who proposes, within his own 'nanosyntactic' framework, that parameterization essentially reduces to the size of sub-morphemic structures and to the heads and features contained therein.

[18] A similar point is made by Richards (2008), who argues that head directionality does not belong to the domain of UG, on the assumption that the SMT holds of LF only (language is an optimal solution for the mapping to the semantic interface but not to the phonological interface, which is 'imperfect' and thus open to variation). Syntax really 'doesn't care' if heads precede complements or the other way round, as Merge (which has the third-factor property of being maximally unspecified) creates a set of two objects without ordering them, in such a way that PF must necessarily choose between two competing orders and delete one of them at Spell-Out. More precisely, the PF rule is conceived as the deletion of one of the two symmetrical c-command instructions holding in narrow syntax, insofar as c-command relations at PF entail precedence: if two objects (a Merge-pair) mutually c-command each other, the precedence instructions would be contradictory, hence a 'desymmetrization' operation must take place, as defined in (vii).

(vii) Parametrized desymmetrization:

Given Merge $(\alpha, \beta) \rightarrow \{<\alpha, \beta>,<\beta, \alpha>\}$:

a. Head-initial = Delete all Comp>Head [i.e.$\{<\alpha, \beta>,<\beta, \alpha>\} \rightarrow \{<\alpha, \beta>\}$]

b. Head-final = Delete all Head>Comp [i.e.$\{<\alpha, \beta>,<\beta, \alpha>\} \rightarrow \{<\beta, \alpha>\}$]

(Richards 2008: 149)

Within such a system, there remains a question to be answered as to the typological tendencies that, albeit never being clear-cut, appear to be a true property of natural languages (the point made by Baker on the frequency of 'pure' and 'mixed' languages, p. 28-29). To this end, a principle named Superset Bias is proposed, which, according to Boeckx; is able to capture the relative harmony that natural languages display when it comes to very general tendencies like head-complement ordering or morphological makeup (synthetic vs analytic). The principle, stated in (14), formalizes (in rather generic terms) the idea that the Faculty of Language favours the alignment of parametric values (viz. realizational options at PF) as cross-categorial alignment.

(14) *Superset Bias*

Strive for parametric-value consistency among similar parameters.

(Boeckx 2011: 217)

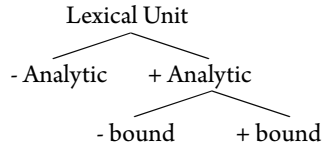
The benefits of a generalization like (14), which resembles in many respects Holmberg and Roberts's (2010) Generalization of the Input (see next subsection 2.4.3), are to be found mainly in accounting for those regularities that, albeit not exceptionless, are quite pervasive w.r.t. certain properties (linearization, etc.) and in being at the same time explicatively adequate in acquisitional terms: the child stops to generalize a principle to different categories once she finds positive evidence pointing in the opposite direction. In this respect, this principle is the reflex of economy metrics applying in the domain of the acquisition process.

If there are no more 'parameters', in the sense of options that affect syntactic operations, with some sort of 'parametric space' surviving in the post-syntactic domain only, the implementation of PF-externalization options must take the form of parameter schemata encoding realizational options for a lexical unit as (15); parameter schemata – it is claimed – must be of limited depth, with maximum two hierarchically ordered options[19]:

The PF linearization rule in (vii) is assumed to interact with the phase-cyclic transfers to the interface determined by the phase heads, in order to derive the shape-breaking or shape-preservation effects (resulting in complement-head order or conversely, i.e. VO or OV) observed under Holmberg's Generalization (object shift, cf. note 21 in next chapter, pp. 59-60). For reasons of space, I refer the reader to Richards (2007; 2008: para. 3) for details.

[19] The reasons employed to postulate two-level hierarchies modelling 'parameters' are mainly theoretical ones, at a quite abstract level. In particular, Boeckx resorts to the properties of natural systems as Boolean networks investigated by Kauffman (1993: p. 182 ff.) to support the presence of (exactly) two binary options in the structure of parameter schemata. The argument goes as follows: the only way a system can be dy-

(15)



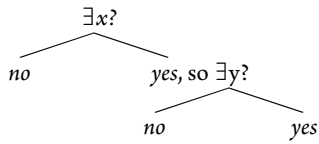
2.4.3 *The format of parameters and possible grammars. Typological tendencies in Roberts and Holmberg's approach*

Roberts and Holmberg (2010) (hereafter R&H), taking as a starting point the debate which followed the standard formulation of the Null Subject parameter and the typological correlations argued for by Rizzi (1982), endorse the view that the parametric model of variation in essence still holds true. Their proposal aims specifically at reconciling micro-parameters, whose nature lies in the lexicon and whose existence is widely accepted, with macro-parameters, which are credited – as we have discussed – with a much more dubious ontological status within the Minimalist Program, that does not admit of options as specifications on principles of UG[20].

In support of the lexicalist view on parametric variation, R&H observe, in addition to the usual arguments (learnability, factors external to the Faculty of Language proper, etc..), that stating that variation is lexical means imposing certain restrictions on the format of parameters, and that such restrictions can be formulated in very simple terms: a parameter

namic but not chaotic is when the value of each element (variable) of the network is determined by two inputs, that is, when it depends on the connection with two other elements of the network; this in turn correspond to a parameter schema with only two options as (15), which can be restated in more general terms as (viii).

(viii) *Right 'molecule' of variation*



(Boeckx 2012: 33)

The details of the connection with Kauffman's Boolean networks are not extensively discussed and the argument is raised mainly to refute Holmberg and Robert's multiple-levels parameter schemata (see the relevant discussion in subsequent section 2.4.3). As far as I can judge, it is not very clear what the link between Boolean networks and parameter schemata amounts to, if the latter seem to have values (variables) that are set independently and not in reliance on other parameter schemata.

[20] This is explicitly ruled out by Chomsky's *Uniformity Hypothesis*, recalled in the preceding subsection (p. 30).

P can be formulated as having two values, v_i and v_j, where the former is, for example, a movement-triggering/attraction property, while the latter simply denotes the lack of this property. This perspective translates naturally into a parametrical structure with binary options assigned to different formal features F, which, above all, can be disjointly ordered in the process of parameter setting, thus setting up markedness relations among parameters.

As far as the null subject is concerned, this finds a correspondence in Robert's principle of Deletion under feature-identity and in Alexiadou and Anagnostopoulou's account of expletive null subjects (see subsections 3.3.2.1, p. 63 ff.; 3.3.2.2, p. 67 ff.): irrespectively of whether or not a *pro* category is postulated, the null subject parameter can be easily reformulated in the format of a yes/no question w.r.t. the presence of a feature/property D on T, which is able to check the corresponding uninterpretable feature on *pro* and attire it to Spec,TP (Roberts 2010), or to be itself interpretable as a pronominal element, thus entering the derivation as such and fulfilling the EPP requirement by V-to-T raising (Alexiadou and Anagnostopoulou 1998) Celtic/Arabic, Romance, and Greek. The languages under investigation divide into two main groups with respect to a cluster of properties, including the availability of pro-drop with referential subjects, the possibility of VSO/VOS orders, the A/A' status of subjects in SVO orders, the presence/absence of Definiteness Restriction (DR)[21]:

(16) *The Null Subject Parameter*
Does T bear a D-feature? (R&H 2010: 14)

2.4.3.1 *Markedness and options*

A format for lexical parameters construed as (16) can be fruitfully implemented, according to R&H, into a mechanism able to account for macro-parametric variation (which they take to have an uneliminable heuristic value) on the basis of the lexicon and no longer on the basis of

[21] Clustering properties of the null subject (free inversion, lack of *that*-trace effects, rich inflection), within such an understanding, are not innately specified but follow as a by-product of the structural configuration that obtains in virtue of the fact that the subject must not necessarily raise to Spec,TP in a language that has D on T: the subject can stay *in situ* in the position where it is generated (free inversion) and this obviates the ban on subject-extraction from embedded clauses (the *that*-trace filter, see further considerations in section 3.3.2, note 14, pp. 61-62); on the other hand, a 'rich' inflection, i.e. a complete set of φ-features, is the precondition for the D feature to appear on T in Roberts's (2010) theory of *pro* as a 'weak' pronoun (cf. p. 66).

specifications on principles of UG. The idea is that there are macro-parametric effects that depend on aggregates of micro-parameters, an intuition that was already quite widespread (see the discussion in 2.3.2, p. 19), but crucially enriched by markedness considerations, which would be the key to account for why some aggregates of micro-parameters are favoured over others. The first step in this direction is the formalization of an acquisitional principle, termed Generalization of the Input, that gives the learner a strategy to set parameters in the most efficient way:

(17) *Generalization of the Input:*

If acquirers assign a marked value to H, they will assign the same value to all comparable heads. (Roberts 2007: 275)

The formulation of a principle like (17), on the one hand, makes the observation explicit that macro-parametric effects are (most likely) due to the combined effects of several micro-parameters and, on the other hand, associates the reason why they act harmonically with markedness: the value of a property of a certain head extends to other heads of the same class as the non-marked value.

At this stage, if one relates all this to another fundamental question on the nature of parameters, viz., whether all parameters are applicable to all languages (as we have seen, a major controversial issue for the theory of variation), it is finally possible to derive a theory unifying micro- and macro-parameters in an explicative manner, which has the advantage of freeing UG from the unwanted burden of a large inventory of innate parameters that should be postulated to account for possible variation in all languages.

A proposal in this direction is advanced by Gianollo, Guardiano and Longobardi (2008), who tabulate a large set of parameters in a limited domain (the internal structure of DP) and put forward the hypothesis that each of these parameter be defined by the interaction of five parametric schemata only, listed below, where F is a functional feature and X and Y are categories:

(18) a. Is F, F a functional feature, grammaticalized?

b. Is F, F a grammaticalized feature, checked by X, X a lexical category?

c. Is F, F a grammaticalized feature, spread on Y, Y a lexical category?

d. Is F, F a grammaticalized feature checked by X, strong (i.e. overtly attracts X)?

e. Is F, F a grammaticalized feature, checked by a category X^0?

(Gianollo, Guardiano and Longobardi 2008: 119)

Gianollo, Guardiano and Longobardi's hint is that, if the schemata in (18) are correct, it is no longer necessary to suppose that UG, as the initial state S^0 in the mind/brain, contains many fully specified parameters, but, conversely, it may contain just a much smaller set of parameter schemata, out of which the first one crucially specifies the existence of a certain parameter in connection with a feature[22]: Primary Linguistic Data that the learner is exposed to serve as a trigger to combine these innate parametric schemata with lexical elements (features and categories), giving rise both to the necessary parameters (question a.) and their values (the answers to questions b.e.).

Assuming that UG only specifies parametric schemata of this kind, and connecting this intuition to Roberts and Roussou's (2003) claim that the options available for the definition of a formal feature are hierarchically and disjunctively ordered[23], R&H propose that each parameter is defined by a set of tree-ordered multiple options that are decided by the learner on the basis of the available input. Parameter schemata like (19) are thus potentially able to define any feature that has a parametric correlate:

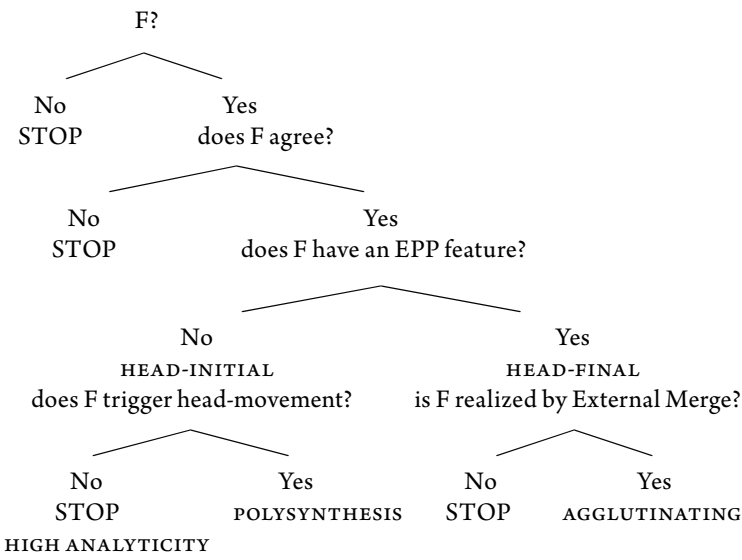
[22] As far as one can understand, formal features here are intended to have semantic correlates like determinacy, topic/focus, etc, and thus belong to the domain of conceptual-intentional systems, rather than to the Faculty of Language in narrow sense (Hauser, Chomsky and Fitch 2002). To this end, we note that removing semantic primitives from UG is consistent with Chomsky's (2008) Factor III that we have repeatedly called into question.

[23] Roberts and Roussou (2003), within their discussion of grammaticalization as a diachronic operation affecting the realization of functional categories, propose that a given formal feature be defined by a set of hierarchically and disjunctively ordered options as in (ix):

(ix) a. is F realized by (external) Merge (i.e. does it correspond to an overt grammatical formative?)
b. does F enter an Agree relation?
c. if so, does F attract?
d. if so, does F attract a head or an XP?
e. if (c), does F attract both a head and an XP?
f. does F combine realization by external and internal Merge?
g. if so, does F attract a head or an XP?

The set of options in (ix) is plainly convergent with the series of parametric schemata by Gianollo, Guardiano and Longobardi in (18); actually, the two lists are integrated in the tree structure in (19).

(19)



(R&H 2010: 48)

Looking closer at the structure of (19), we see that the most embedded options are the more marked ones, since they need more questions to be answered; in this sense, then, the longer the description of a parameter (i.e., of the choices affecting a feature), the more marked it is, with the 'STOP' branches being the relatively less marked ones. A parameter schema thus reduces to a network of options, with clear acquisitional correlates, as it can naturally represent a 'learning path': the learner's conservatism is such that preference is given to the less marked option (the shorter one, in terms of the network just outlined), unless the input points in the opposite direction[24].

[24] In the schema in (19) emphasis is put on macro-parameters or 'typological tendencies' such as, for example, agglutination, that result as dominant in a language if the features $F_{k\ldots n}$ on heads are all, or mostly, set up this way by applying the parameter schema to each of them, according to the principle of the Generalization of the Input, as will be clearer later. The 'high analyticity' macro-parameter, mentioned in the schema, has been identified by Huang (2006a; 2006b) and is defined by the co-occurrence of several properties (among which are: radical pro-drop, tenselessness, lack of morphological case, wh-in-situ, generalized bare nouns denoting kinds, no plurals, and other properties) that occur in language like Chinese, making it 'highly analytical' at three levels: the level of lexical categories, functional categories and argument structure (see also Huang 2008).

2.4.3.2 *Building macro-parameters*

Assuming, in accordance with Gianollo, Guardiano and Longobardi (2008), that UG specifies both a small set of parameter schemata (containing options for the definition of features) and a much larger set of possible features, R&H aim at the integration of micro-parameters with macro-parameters (or better, with macro-parametric effects) via a quantification over formal features in specific classes of functional categories, that is carried out according to the Generalization of the Input. Thus, they illustrate the overall functioning of the machinery in the following way: if one takes, for example, the EPP principle that in (19) is embedded two levels down under the option of existence of F, it is possible to generalize this property to other features and heads, so as to obtain a markedness statement like (20).

(20) There is a preference for the EPP feature of a functional head F to generalise to other functional heads G, H … (R&H 2010: 39)

In Kayne's (1994) Antisymmetry, the head-complement order is universal and consequently in the verbal domain VO is the underlying order, with OV always deriving from it by way of V-to-*v* raising, combined with remnant VP-fronting to Spec,*v*P:

(21) [$_{vP}$ v [$_{VP}$ V O]]
[$_{vP}$ *v*+V [$_{VP}$ ~~V~~ O]] V-to-*v* raising (head movement)
[$_{vP}$ [$_{VP}$ ~~V~~ O] *v*+*V* [~~$_{VP}$ V O~~]] remnant VP-fronting

If [+EPP] movement is a marked option, as stated in (19) (but Roberts and Roussou 2003), *v* in (21) has a marked value of the parameter. Now, one may immediately wonder why rigid head-final systems like Japanese or Turkish, that in this sense are extremely marked, more than mixed-type languages like Latin or German, are more common among the languages of the world. If it is more likely for a language to have all (or almost all) classes of heads with a marked value [+EPP] for the corresponding feature than having this value set up just for some heads, this may only mean that it is an entire system, or subsystem, of parameters, linked to a feature, that should be thought of as marked or unmarked; hence, there must be some principle at work that makes all heads have the same value of a feature F in accordance with the value it has on a certain head. Taking this head to be *v*, a markedness convention as (22) obtains:

(22) For a class of heads H, uEPP for $H_{[F:--]} \neq v \rightarrow$ { [+EPP] / $v_{[+EPP]}$; }
{ [-EPP] elsewhere }

(if *v* has a [+EPP] feature, then the unmarked value of the EPP feature for a class of heads H is [+EPP], else [-EPP])

What (22) says is that in an OV system the other heads, unless they are not marked, will have a [+EPP] feature, triggering the raising of their complement to their Spec and producing the complement-head order. In other words, if it is the value of the EPP-feature on *v* that dictates the value of the same feature on other heads, coherent systems like Japanese or Turkish are less marked than mixed systems like Latin or German[25]. Languages, thus, can be ordered on a hierarchy, ranging from no markedness to maximal markedness:

(23) a. movement-triggering features [+EPP] absent from all probes → head-initial languages

b. movement-triggering features [+EPP] obligatory on all probes → head-final languages;

c. movement-triggering features [+EPP] present on one or some probes (T, *v*,…) → 'mixed' languages.

Developing formally the markedness relation in (22) and generalizing it to all possible features, what is obtained is then a quantification over formal features, that defines the form of parameters:

(24) $Q(f_{f \in C})$ [P(*f*)]

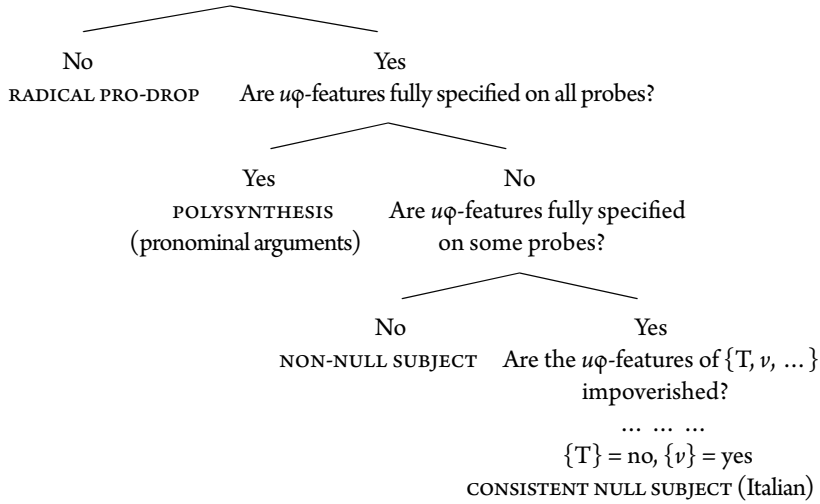
In (24), Q is a quantifier, *f* is a variable standing for a formal feature, which in turn belongs to a class C of grammatical categories (f∈C restricts of the scope of the quantifier), and P is a set of properties, specified as a *predicate* defining formal operations of the system ('Agrees', 'has an EPP feature', 'attracts a head', etc.). As R&H (2010: 48) put it, «the longer the characterization of either C or P, the more deeply embedded in a network/schema the parameter will be, the more marked it will be, and the

[25] Incidentally, it is interesting to notice that Baker's observation on the prevalence of coherent ordering patterns in the languages of the world (if macro-parametric effects would result from micro-parameters freely combining with each other, languages would not tend to conform to typological prototypes, as actually happens) is approached from the reverse end: there are no micro-parameters causing some degree of 'noise' that prevent 'pure' types of a macro-parameter from occurring, but there are, on the other hand, some micro-parameters acquiring a marked value w.r.t. the bundle of micro-parameters they belong to.

further along the learning path it will be». In slightly different terms, the two constituents of (24) correspond to the Generalization of the Input and to the network of parametric schemas, respectively: if the class C is empty and does not include any grammatical category, the macro-parameter has the less marked value (corresponding to (23a)); if C includes all the grammatical categories, the quantification is universal and results again in a macro-parameter, but with a marked value (23b); finally, if the quantification is restricted to some categories or to one category only (that is, over a limited class C), we get more markedness and a more 'micro-' parameter. To the overall degree of markedness of a parameter the markedness of the description of the parameters also contributes, as recalled, i.e., how many levels one has to go down a tree like (19) before reaching a 'STOP' branch.

According to R&H, besides (19), there would be other sets of parameter schemata/hierarchies of options, able to generate further parametric networks. In particular, the hierarchy in (25), pertaining to the availability and obligatoriness of φ-features on probes, would be able to capture the partition of languages w.r.t. null subject phenomena.

(25) Are *u*φ-features obligatory on all probes?



2.4.3.3 *The number of possible grammars (and some problems in Roberts and Holmberg (2010))*

R&H claim that a system based on hierarchies of options for the definition of features can restrict the upper bound of grammars that a given set of parameters can generate: if the cardinality of the set of formal features specified in UG is $n = |F|$ and every feature is binary (it has two possible

values), the cardinality of the set of parameters is $|P| = 2n$. Assuming that features can freely combine with each other (i.e. all parameters are independent of each other) the cardinality of the set of possible grammars is then $|G| = 2^{2n}$. On the hypothesis that UG specifies 15 formal features, we get:

(26) $n = 15 \rightarrow |P| = 30 \rightarrow |G| = 2^{30} = 1{,}073{,}741{,}824$

As we have seen in the preceding subsections, hierarchies have the faculty of restricting the application of properties to formal features $F_{k...n}$. This is consistent with the statement by Gianollo, Guardiano & Longobardi (2008: 116-117) that the interaction among different parameters occurs frequently and probably many such combinations are excluded, thus reducing the number of possible grammars. Hence, R&H propose that the cardinality of the G set should be calculated taking into account the restrictions imposed by the hierarchical ordering of parametric choices, as follows:

(27) $|G| = (|P| + 1)^n$ (where $n = |H|$, the number of hierarchies)

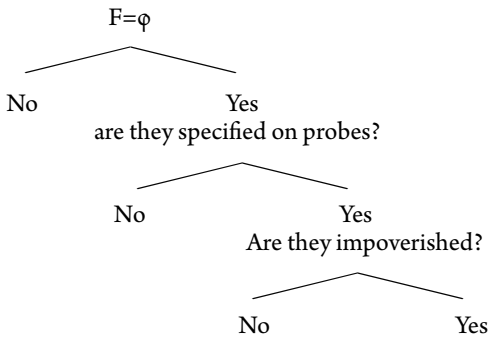
Considering that, according to R&H, there might plausibly be 5 hierarchies (the two previously discussed, one for word order and two more possible ones) the overall number of grammars would then be 28,629,151, which, although still being a large number, is much less than the over a billion grammars calculated with unhierarchized micro-parameters in (26).

The development of the formula given in (27) is not provided by R&H, but as each hierarchy might likely be intended as exhausting all the possible options given by UG, and since the latter are disjunctively ordered, the overall number of combinations for the values of features is equal to the number of options multiplied by two and increased by one (i.e. the number of terminals in the tree, which amounts to the number of branching nodes, plus one); in turn, this number must be raised to the power of n ($= |H|$), given that any parameter defined in a hierarchy can freely combine with any parameter defined in another hierarchy. However, R&H's calculation of the upper bound of possible grammars is not immune from some lack of clarity that immediately arises if we look back at the hierarchies they propose and if we consider the solution they adopt to derive macro-parameters from micro-parameters, i.e. the Generalization of the Input.

The first problem stems from the fact that the options specified in UG as properties of a certain formal feature (say, 15 options, generating 30 parameters) are assumed to be all present in each hierarchy, but actually the proposed hierarchy in (19) seems to employ just four features (±Agree; ±EPP; ±*head-movement*; ±*Ext.Merge*). The whole picture is made even more obscure by the second hierarchy that is proposed (25), that on a closer examination appears to have a different format from (19), as it does not display only disjunctive options for the properties of a single formal feature, but also has scope over the

set of grammatical categories, whereas it should characterize just a single feature. In fact, (25) contains yes/no options that are relevant w.r.t. the fact they (do not) affect either all categories or some of them: for example, the circumstance that the first branch on the left («Are uφ-features obligatory on all probes?») triggers radical pro-drop is essentially a universal quantification over the set of categories that holds of the non-existence of φ-features[26]. Actually, if a parametric hierarchy should contain only options affecting a formal feature (φ in this very case), (25) could be rewritten in a slightly simple way as (28) in order to conform to the format of (19). Again, out of 15 conjectured universal options involved in the definition of a feature, here we have only three.

(28)



The typological/macroparametric effects entailed by (28) are still those listed in (25), but do not originate directly from the answers of a single hierarchy of options, but rather from the multiple application of this hierarchy to different categories: so, polysynthesis arises if the relevant answers (F=φ? 'yes'; are they specified on probes? 'yes'; are they impoverished? 'no') hold of all categories that can act as probes, while a null subject language like Italian is produced when the last question on impoverishment has a negative answer for the category T and a positive one for other probes; radical pro-drop represents the less marked choice, since all categories have no φ-features at all, i.e. the first question in every hierarchy reaches a no/stop branch in the very first step.

The point just made leads directly to a further problem in the mathematical formalization of (27), namely the fact that the formula does not consider the number of different categories, i.e. the cardinality of the C set, which, instead, is brought into play in the system by the quantification operation generating macro-parameter (24). In fact, as pointed out above, if a hierarchy defines the properties of a certain formal feature (or

[26] Recall that radical pro-drop languages are generally assumed not to have φ-features at all (Rizzi 1986) or, in a similar fashion, to lack an AGR projection (see section 3.3.1).

even its non-existence) for all categories, conforming to the Generalization of the Input (17), we get a macro-parameter (or typological tendency) but nothing prevents a category from behaving differently w.r.t. the characterization of that formal feature, yielding a micro-parameter that generates further possible grammars. This shows that the number of possible grammars, if one follows the lines of reasoning outlined above, would also depend on the number of categories that UG is assumed to specify[27].

In general, what seems to be rather problematic with a system of this sort is the definition of 'formal feature', that in some instances appears to be the element that is subject to be characterized via cascade options (e.g. φ-features in (25) ≈ (28)) whereas in other circumstances it is apparently construed as a property of another feature (e.g. ±EPP in (19)). This ultimately results in an ambiguity that substantially weakens R&H's model (in principle a very abstract and powerful one) although it does not undermine the value of hierarchies as conceptual entities capturing, to some extent, the limits of variation on the basis of restrictions that are intrinsic to the principles of grammar.

On the other hand, the problems arising from the ambiguity of the notion of 'formal feature' basically affect only the calculation of the upper bound of the number of grammars, which on its own is of modest interest, and the proposal put forward by R&H has several other qualities that can barely be denied, first of all the attempt to conflate micro- and macro-variation by way of the Generalization of the Input.

The Generalization of the Input as stated in (17), in fact, relates general tendencies, which have been long noted as being fairly pervasive in languages, with micro-parameters, whose existence is best grounded in current theory ascribing variation to lexical elements. To this end the Generalization can potentially extend its scope if reformulated in such a way that reference is made to lexicalization of universal conceptual-semantic properties (as briefly discussed in 2.3.5), so as to capture a wider range of typological phenomena that are observable in languages. Anticipating some conclusions I will draw from the results of my analysis in chapter 6, I would like, then, to propose a 'broadened' formulation of the Generalization of the Input as follows:

(29) If acquirers (do not) lexicalize a certain specific property in a context, they will (not) lexicalize the same property in all comparable contexts.

[27] A further remark should be made on the question of the number of hierarchies, as the mention of a hierarchy for word order appears to be redundant, since this seems to be actually what the hierarchy in (19) is supposed to do: if one accepts Kayne's Antisymmetry, as R&H do, and all head-final orders are derived from movement operations, it is not necessary at all to postulate a further device to get the desired word order.

Within the range of variation of the constructions dealt with in chapters 4 and 5, a principle like (29) can straightforwardly account for the fact, for example, that NR varieties that have the invariable (masculine) ending *-n/-t* also display invariable masculine endings in the simple past, in existential constructions with quantified DPs and in adjectival predication. In the terms of the proposal presented herein (cf. section 6.1, p. 151 ff.), the failure of lexicalizing the D/EPP property in a distinct morphological element acting as an argumental placeholder (the *-o* neuter ending) is reflected in comparable contexts like the ones just mentioned, where in Standard Russian we find, instead, a *-o* neuter ending.

2.4.4 *A case of variation*

I conclude here this overview on syntactic micro-variation and the perspectives it opened for linguistic theory. The survey I have given is far from being complete nor is it conclusive in any way, but I hope it has been ample enough to outline the main topics that have dominated the field at least from the Eighties, in the effort not so much to provide answers but to ask the proper questions about a problem that is at the core of linguistic theory. In chapters 4-6 I will investigate an instance of cross-linguistic micro-variation presenting complex patterns of case and agreement, the 'perfect' construction in NR (and in Standard Russian for comparison). With regard to the questions that have been approached in this and the preceding chapters, the analysis I will propose will therefore be aimed at bringing evidence in favour of the idea that the parameterization of natural languages can only be of a 'micro-' type and wholly lexical in nature. In particular, what I will stress is that even very fine points of cross-linguistic variation can be given a principled explanation by endowing lexical elements (pieces of morphology crucially being included in the set thereof) with properties that refer to a handful of basic conceptual primitives. Put another way, I will try to show that, at least for the limited domain that will be considered, the universal conceptual space is differently lexicalized by different dialects (i.e. the lexicon of each dialect maps differently on the conceptual space), and this is enough to account for the large number of different patterns that the constructions under investigation display.

In this respect, the account I am going to propose is consistent with the minimalist idea of a maximally empty UG, where conditions imposed on it by the interface with the conceptual-intentional systems, jointly with few essential formal properties of the computational component, shape the human Faculty of Language.

3

THEORETICAL QUESTIONS: SUBJECTHOOD, EPP REQUIREMENT AND THE NR CONSTRUCTIONS

3.1 *Problems for current generative approaches: the research questions*

In treating the variation that is found in the participial constructions of NR varieties, the questions one has to deal with revolve around a few topics intersecting each other: agreement, subjecthood and EPP-checking, Case.

If we look back at the NR examples in the Introduction (ex. (1), (2), (3), (4), repeated below), they seem to differ from each other only w.r.t. single properties that can be clearly identified: participle not agreeing in φ-features with the argument in nominative case in (1) *vs* participle agreeing with *snoxa* (and with the auxiliary) in (2); internal argument in nominative case in (1), (2) *vs* accusative in (4); invariable participle marked as neuter in (1), (4) *vs* masculine in (3); presence, or lack thereof, of an external argument of the verb expressed by a locative phrase (*u*+NP.GEN and the like).

(1) *u* *lisicy* *unese-n-o* *kuroč̌k-a*
PREP fox:GEN carried_away.PFV-PTCP-N.SG chicken-F.SG.NOM
'A fox has carried off a chicken.' (K&N: 27)

(2) *U* *nej* *by-l-a* *privede-n-a* *snox-a*
PREP 3S.F.GEN AUX-PST-F.SG brought.PFV-PTCP-F.SG daughter_in_law-F.SG.NOM
'The daughter-in-law was brought in by her.'/'She brought the daughter-in-law in.' (K&N: 20)

(3) *Prjalka* *ne* *by-l-Ø* *ešče* *postavle-n-Ø* *na mesto*
spinning_wheel NEG AUX-PST-M.SG yet put.PFV-PTCP-M.SG in place
'The spinning wheel was not yet put back in its place.' (K&N: 79)

(4) *U* *dedka-to* *merëž-u* *ostavle-n-o*
PREP grandpa.GEN-DET fishnet-F.SG.ACC left.PFV-PTCP-N.SG
'Grandpa left a fishnet.' / 'A fishnet has been left by grandpa.' (K&N: 38)

A. Civardi, *Linguistic Variation Issues: Case and Agreement in Northern Russian Participial Constructions*, ISBN (online) 978-88-6453-326-1, ISSN (online) 2420-8361, CC BY-NT-ND 3.0 IT, 2016 Firenze University Press

However, even though (1), (2) and (3) might apparently be treated as passive clauses with no further discussion (with some remaining questions for (1) and (3), where there is no agreement in φ-features with the nominative argument), from the point of view of null subject typology and clause structure an initial issue arises with (4), for which the standard theory would postulate an expletive *pro* or a PRO_{arb} in sentence-initial position (at least if we assume that Accusative case on the internal argument is incompatible with a standard formulation of the passive). Yet, this account of (4), with *pro*/PRO_{arb}, would clash quite strongly with the account given for the other examples, where the internal argument is in subject position and not in object position as in (4), in an identical environment with a the middle-passive inflection *-n-*. Another issue immediately arises once we consider another instance of the participial construction, the intransitive one, shown in (5): again, something like a PRO_{arb} should be posited for EPP reasons. If we assume the standard view of null subjects (Rizzi 1982; 1986), which requires the verb inflection to be specified for φ-features in order to license a *pro* (cf. the discussion in 3.3.1, p. 52 ff.), postulating a *pro* in front of *rabotano* would be equally problematic, given the lack of person features in the participial inflection.

(5) *Rabotat'-to* *xvatit* – *rabotano*
work:INF-DET be_enough.PRS.3SG worked:IPFV.PTCP.N.SG
'Let's stop working, we've worked (enough)' (K&N: 109)

Thus, the research questions that should be posed in working out a structural explanation for the NR participial constructions (in a cross-dialectal perspective), can be summarized as follows:

(6) What is the subject of sentences like (1)-(5) (if they actually have a subject)?

(7) How is the EPP requirement satisfied in these sentences (on the supposition that the EPP requirement is universal)?

(8) How is the EPP requirement satisfied in these sentences (on the supposition that the EPP requirement is universal)?

In order to assess these questions (which will be directly addressed in chapters 4-6 in laying out my proposal) I will preliminarily discuss in this chapter some theoretical issues that bear directly on them. So, the next section is devoted to the EPP requirement, while in section 3.3 I will briefly discuss the different views on the satisfaction of these requirements in null subject languages. I will then conclude the chapter with some remarks that will serve as the theoretical preliminaries to the discussion presented in the subsequent chapters.

3.2 *The Extended Projection Principle*

3.2.1 *From Principle P to the EPP*

Chomsky (1981) stipulates that there is a requirement that every clause have a subject, a condition that in the phrase structure rules of Standard Theory is formulated as (9), where an NP is required as the necessary expansion of S, in a position that is also associated with (nominative) Case:

(9) S → NP Infl VP

The *Principle P*, required to account for expletive constructions in English-type languages, is connected by Chomsky with another requirement, the Projection Principle, requiring that if a given head is lexically specified as assigning a θ-role, that role must be assigned to a syntactically realized constituent, which must be present at all levels of representation. This ensures that the θ-criterion is preserved, avoiding, for example, that in the course of a derivation a θ-role disappears or that one element may receive two θ-roles. The two principles get conflated into a single principle, the so called *Extended Projection Principle* (EPP), that subsequently, with the development of X-bar Theory and the analysis of the sentence as headed by I(nfl), is further spelled out as the requirement that Spec,IP (or Spec,TP, under Pollock's (1989) Split-Infl Hypothesis) be obligatorily filled not only in English or French but most likely in all languages, as a universal property.

Although the connection between the two principles has remained rather mysterious, an intuitive reason for linking the obligatoriness of subjects to the representation of θ-roles at all levels may be that verbs, which usually have θ-roles to assign, require at least one argument, and this argument will frequently surface as a subject. Be this as it may, on the assumption that the EPP is universal, in those languages that do not show overt subjects, a null argument must be present in the Spec of IP/TP, otherwise the Projection Principle would be violated. Moreover, in the G&B model it was further assumed that the property of requiring a subject should be extended from IP/TP to the other syntactic categories, in such a way that the requirement of having a filled Spec could be plausibly a property of any phrase. Nevertheless, it was maintained that for IP/TP the EPP always holds, whereas for other phrases it might be optional, depending on various factors.

In the move to Minimalism, the EPP changes and acquires, in some sense, an ontological status, in that it shifts from a general principle holding of the sentence (or of types of phrases other than IP/TP) to a feature functional categories are endowed with. In Chomsky (1995: 232-235), in

fact, the EPP is implemented as a D(efiniteness) feature that is universally present in I, a 'strong' feature that must be checked by a corresponding categorial feature before the derivation reaches the interfaces, attracting a category[1], in this case a DP, to Spec,TP. In the same fashion, *wh*-movement is reduced to an operation driven by a strong D-feature in C.

Within the system of categories and features of Phase Theory, where syntactic operations are driven by probe/goal relations (Chomsky 2000; 2001 and subsequent works, see section 2.2.3), the EPP is then quite naturally equated to an uninterpretable feature on a head, acting as a probe looking for an appropriate goal and then triggering movement of the goal to its Spec. Although the D-feature in this framework is still connected to EPP, these two notions no longer coincide (as was the case in Chomsky (1995)), one reason being the introduction of Long-distance Agreement as a permissible option in syntax, with feature-checking not necessarily entailing movement operation any longer, unless there is indeed an EPP feature on the relevant head. Thus, the EPP is retained as the requirement that the Spec of a head be filled, but in reliance on other uninterpretable features – such as for T, the φ-features.

> For movement of a nominal to T, for example, the φ-set and EPP-feature of T serve the functions (a) and (b), respectively:
>
> (a) to select a target/probe P [=T] and determine what kind of category K [=a nominal] it seeks;
>
> (b) to determine whether P [=T] offers a position for movement [i.e. its Spec].
>
> (Chomsky 2001: 4, with slight adaptations)

> Note that the EPP-feature alone is not sufficient to identify a target; the φ-set (or comparable features, for other probes) is required to determine what kind of category K is sought. (Chomsky 2001: 42)

As Sheehan (2006: 141) notes, the EPP feature construed as the requirement for the Spec of a head to be filled is actually a feature of a feature, since to identify a goal it must necessarily be associated with another feature present on the same head. In a somewhat misleading way, at least for the terminology, such a 'generalized' EPP, conceived as a property of functional categories at large (not only for I/T), is then reduced to an instance of the Edge Feature for phase heads, whose set includes C and *v** only. The Edge Feature, in fact, only has the function of enabling a lexical item LI to enter the computation and to combine by (External) Merge

[1] It must be noted that formulating the EPP in such a way, with the explicit mention that what is attracted to Spec is a *category* (not Case or the φ-features), has the effect of separating the EPP, on the one hand, from properties of Case and agreement on the other.

with another LI or with an already formed syntactic object SO, which becomes its complement. On the assumption that only phase heads can trigger syntactic operations, the option of Internal Merge (i.e. Merge of a SO with the copy of an element that is already contained within the structure of this SO) is available only when triggered by the Edge Feature of phases, that is by C or *v**, even if also T, although not a phase head, 'inherits' from C (the head of the phase to which it belongs) its Edge Feature and the agreement features, thus producing the effects of the 'ordinary' EPP. The principle forcing any clause to have a subject, the mysterious EPP, may then be a byproduct – Chomsky suggests – of a primitive notion, the Edge Feature, when operations take place in T:

> Suppose that E[dge]F[eature] can be inherited from the phase head along with the Agree-feature. Not being a phase head, T need have no option for second-Merge by I[nternal]M[erge], but rather inherits it from C, and by some kind of feature-spread, this extends to all T's in the phase. Operations then proceed as before. If there is no accessible NOM[inal], then T will have default morphology, as in Icelandic and the Slavic constructions discussed by Lavine and Freidin; or null morphology, as in Miyagawa's Japanese examples. And there are a few other options. If nothing is raised, then the inherited edge feature of T must be satisfied by E[xternal]M[erge], necessarily of an expletive since no argument role can be assigned. (Chomsky 2008: 157)

3.2.2 *Two kinds of EPP*

The development of the EPP, as sketched in the preceding subsection, clearly splits into two rather different concepts: the 'original' EPP – the requirement that Spec,TP be projected and filled («every clause must have a subject») – and a 'broadened' EPP – the EPP feature of recent theory, much more general in that it does not hold of the T head only.

Butler (2004: 3) insightfully notes that the split into two different conceptions of the EPP is mirrored in two general questions, which are connected but, plainly, not overlapping: the first question, the most commonly addressed in the literature, is why the EPP is required on T, that is, whatever formalization of the EPP we choose, why T should always need a filled Spec (and, if it is true, whether it holds for all languages). The second, more general, question is how EPP features should be formalized (on the assumption that they are a real entity in grammar) and what the relation is to the fact that they cause arguments to be introduced or re-introduced into the structure, jointly with the impact this may have on interpretation.

While the latter question is a very interesting one both *per se* and for the impact it has on whatever architecture of grammar one wants to assume (since introduction of arguments into the structure may be considered, without exaggeration, as the most pervasive operation in grammar), the former one, I believe, deserves more discussion than it receives in the

way it is posed by Butler. The way in which the EPP requirement for the clause is formulated, in fact, is not neutral for the correlates it has in explaining the various phenomena of *pro*-drop or alternative realization of the 'subject', as is the case for so-called quirky subjects and even more for the NR constructions investigated here. More specifically, it is not fully correct to refer to the clausal EPP as the reason 'why TP should need a filled Spec', at least in view of the fact that, for instance in Chomsky (1995), the requirement of a filled Spec for TP/IP is just a consequence of a strong D-feature of I. Indeed, many lines of inquiry within the so-called pronominal agreement approach to null subjects try to obviate the need for a filled Spec,TP by resorting to alternative ways of checking such D-feature (as will be discussed in section 3.3.2).

On the other hand, the nature of the subject requirement has been the object of much debate, especially in connection with which one of the interfaces it has effects on (or it is constrained by); so, for example, Holmberg (2000) argues that the EPP has an essentially phonological nature in being triggered by a [P] feature that requires Move or Merge of a phonological feature matrix to Spec,IP, but this operation nevertheless takes place in narrow syntax, since, on his account, the position that is created (Spec,IP) is visible to covert operations at LF. For Roberts and Roussou (2002), the EPP boils down to the existence of a temporal variable on T that must be bound, coupled with the requirement that in the dependency tree that contains T, the highest head or its Spec must be filled with PF-interpretable (i.e. pronounceable) material.

So, even to judge just from a couple of papers like the cited ones, we can see that, on the PF side, although the EPP is generally intended as the requirement that some material surfaces overtly, implementations of such a constraint vary extensively among scholars. Furthermore, the nature of EPP, originally conceived as irreducibly syntactic, seems instead to reflect some semantic requirement, given the reflexes it appears to have on the LF side.

This leads us to the next important question, namely whether the EPP-requirement holds for all languages or is somewhat parameterized, with some languages obeying it in full or in parts of their grammar, and other languages doing without it.

3.2.3 I*s the EPP-requirement universal?*

In the G&B paradigm that was being developed in the Eighties, the EPP as the requirement that every clause have a subject was assumed as cross-linguistically valid and all languages were held to be subject to it. For languages like Italian, which do not require overt referential subjects and lack expletive subjects, the most shared view, developed in works by Taraldsen (1978), Chomsky (1981) and Rizzi (1982; 1986), was that

they have anyway an empty category in the subject position, licensed by the rich agreement inflection of the verb. The existence of such null, unpronounced subjects, an intuition that was already present in Jespersen's (1984: 30, 137) idea of 'latent' subjects, was claimed on the basis of much evidence pointing to the fact that something was arguably present in the gap left by the missing subject NP or pronoun (control into embedded infinitives, binding facts, etc.).

However, the view that the EPP requirement for the clause is a universal one, at least as the requirement that Spec,TP be always filled, was not entirely uncontroversial. For example, doubts were cast by McCloskey (1996), on the basis of data he observed in Irish. McCloskey argues that in a clause like (10), where the verb belongs to a particular class of unaccusatives, the internal argument does not raise to the inflectional domain and remains in its internal VP position (with Case licensed by the preposition *ar* 'on'), in such a way that TP does not project a Spec. In other words, according to McCloskey, (10) can be considered a genuinely subjectless clause[2].

(10)	*Mhéadaigh*	*ar*	*a*	*neart*	(Irish)
	increase.PST	on	his	strength	
	'His strength increased'.				(McCloskey 1996: 243)

Another problem in admitting a universal EPP requirement for the clause came from languages like Chinese, that allow pro-drop despite having bare verb forms only. If *pro* is licensed by the 'rich' verb inflection, i.e. a pronominal AGR, as the standard Rizzi (1982) model has it, the existence of null arguments in Chinese is left unexplained under a theory that has both the EPP and the requirement that *pro* be licensed[3].

Finally, as Svenonius remarks, the status of the EPP requirement has remained, since its inception, in a rather precarious position due to the equally unstable position occupied by the notion of subject, which is on the one hand an essential concept at the descriptive level, but, on the other hand, has suffered from the lack of a univocal and cross-linguistically valid definition.

[2] The standard account with a null expletive is refuted by McCloskey for (10), as he argues that there is no evidence that such null expletives really exist in Irish, whereas there would be other reasons to exclude impersonal expletive subjects in this language. The absence of agreement morphology on the verb (in the so called 'analytic' form), in his account, rules out a possible analysis in terms of pronominal inflection.

[3] As we will see shortly, Rizzi (1986) and Huang (1984; 1989) offer accounts for the licensing of *pro* in languages without AGR, accommodating it under G&B theory of empty categories. However, since this book is not directly concerned with these issues, I will only briefly touch on the topic and just mention some of the existing literature.

Notwithstanding all these issues, the EPP requirement has remained, within the Minimalist framework, as a legitimate principle (though probably not a primitive of grammar) and the focus of much current theorizing. Actually, the main approaches that currently guide the debate on null subjects crucially differ from each other in the way they take the EPP to be satisfied in NSLs and in the very nature of the EPP requirement. Thus, in the next section I will outline these approaches and briefly discuss them.

3.3 *Null subjects*

3.3.1 *The Null Subject Parameter*

Within the G&B framework, the standard formulation of the Null Subject Parameter, as a bundle of syntactic features that come associated with the omission of a (pro)nominal element in subject position in the languages that allow it, was provided by Rizzi (1982: chap. 4). Building on previous works (notably Taraldsen 1978; Perlmutter 1971) he gave the most generally accepted explanation of the co-occurrence of such properties, namely:

a) *free subject inversion:* if a language has null subjects, then it allows freely a process of subject inversion, where the latter can occur in post-verbal position:

(11) *Ha telefonato Gianni* (Italian)
Has telephoned John

(12) **Telephoned John* (English)

(13) **A téléphoné Jean* (French)

b) *No overt COMP-trace effects*: in a null subject language (hereafter, NSL) *wh*-extraction of the subject from a clause embedded under a *that/che* complementizer is allowed, whereas this option is always ruled out in non-NSLs[4]:

(14) *Chi dici che* t_{chi} *verrà?* (Italian)
Who say.2SG.PRS that come.3SG.FUT

(15) **Who do you say that* t_{who} *will come?* (English)

(16) **Qui dis-tu que* t_{qui} *verra*? (French)

[4] For ease of exposition, in all examples (14)-(16) the extraction site t (trace) appears on the left of the verb. Actually, Rizzi proposes that in Italian the wh-element is extracted from a postverbal position, as we will see shortly; for the sake of uniformity with the other examples, in (14) I have put the trace of chi in preverbal position, with the only purpose of comparing the Italian example with the French and English ones, without any theoretical claim.

c) *Expletive (non-referential) null subjects* in inversion contexts and with meteorological verbs[5]:

(17) a. pro_{expl} *vengono dei ragazzi* b. pro_{expl} *piove* (Italian)

(18) a. **(there) come some boys* b. **(It) rains* (English)

(19) a. **(il) vient des enfants* b. **(Il) pleut* (French)

Intuitively, in a language like Italian the option of dropping the subject of a clause is correlated with the richness of verbal inflection, which makes the information about the reference of the dropped argument recoverable. Rizzi formalizes such an intuition by postulating a pronominal feature [+pron] in the inflectional head INFL, which on its turn licenses an empty category *e* in subject position. The latter is in a proper government relation with INFL (*e* is properly governed by INFL, as request by the ECP[6]) and can therefore be bound by it.

[5] Another property seemingly correlated with the availability of null subjects in a language, not mentioned by Rizzi but quite familiar in the literature on null subjects, is the fact that resumptive pronouns in embedded clauses can (must) be null, as in the following example (taken from Taraldsen 1978):

(i) *Ecco la ragazza*$_i$ [*che mi domando* [*chi crede* [*che* [e$_i$] *possa venire* (Italian)

'This is the girl who I wonder who thinks that she may come'

Chomsky (1981: 241) claims that the phonetically unexpressed subject of the embedded clause introduced by *possa* is not the trace of *wh*-movement (since the subjacency condition would be violated) and therefore it must be a null resumptive pronoun, generated in its base position accordingly with the resumptive pronoun strategy that usually operates in Italian. In non-NSLs like English and French an analogue of (i) would not be possible and the resumptive pronoun should compulsorily surface, albeit without being obligatorily interpreted as co-referent with the nominal in the matrix clause.

[6] The *Empty Category Principle* (ECP) is formulated by Chomsky (1981: 250) as (ii):

(ii) *The Empty Category Principle*

An empty category must be properly governed

The notion of proper government assumed by Rizzi is as follows and is derived again from the discussion in Chomsky (1981: 250-275):

(iii) *a* properly governs *β* if and only if *a* governs *β* and

I. *a* is a lexical category, or

II. *a* is coindexed with *β*

Lastly, the definition of government goes back to Chomsky (1980: 25):

In a sentence like (20) the empty category *e* in subject position has the nature of an anaphor and as such is subject to Principle A of Binding Theory: INFL, being endowed with a [+pron] feature, has the capacity of binding *e*, as the latter is c-commanded by the former, and they are coindexed with each other.

(20) e_i $\begin{matrix}\text{INFL}_i \\ [+\text{pron}]\end{matrix}$ $[_{VP}$ *ha telefonato*$]$

On the other hand the c-command relation is reciprocal, since *e* is also c-commanding INFL, whereas coindexing is by definition a mutual relation; thus, in this configuration, *e* would also be able to bind INFL, violating Principle B, since INFL is pronominal in nature. However, INFL receives its θ-role precisely from the 'empty' subject *e* by the θ-criterion[7]: given an appropriate restatement of the binding relation[8]; this rules out binding of INFL by *e*, thus complying with Principle B. Free subject inversion in NSLs, then, follows naturally from all the above: in (21) the post-verbal subject is inserted by adjunction to the VP,[9] but the sentential

(iv) *α* is governed by *β* if α is c-commanded by *β* and no major category or major category boundary appears between α and *β*.

[7] Recall the formulation of the θ-criterion given in Chomsky (1981: 36):

(v) *θ-criterion*:
Each argument bears one and only one θ-role, and each θ-role is assigned to one and only one argument.

In the case under discussion, in (20) *e* as an empty NP cannot keep the Agent θ-role and must transmit it to the coindexed pronominal INFL, which in this sense is θ-dependent from the empty NP.

[8] Without entering into the details of Rizzi's reasoning and careful analysis of several examples in English and Romance, the point at stake is that even if the structural requirement of the definition of binding relation is met, when an element α c-commands and element β and at the same time the latter is θ-dependent from the former (see previous note 7), this rules out binding of β by α:

(vi) α binds β iff α c-commands and is coindexed with β, and β is not θ-dependent from α. (Rizzi 1982: 137)

[9] In Rizzi's discussion, the exact status of e_i in the context of (21) is not fully clear and in some sense ambiguous: while in (20) the empty category *e* is unambiguously assumed as an anaphoric element with no phonological realization, bound by the pronominal inflection, in this case it might as well be intended as the trace of the moved

structure is the same as (20), the only difference being that the pronominal INFL must acquire a specific feature [+dummy], in order for it to be non-referential and allow assignment of the θ-role to *Gianni*.

(21) e_i INFL_i $[_{VP}\,[_{VP}$ *ha telefonato*$]$ *Gianni*$_i]$
[+pron]
[+dummy]

In Rizzi's account, the post-verbal subject position is precisely what obviates the ban on *wh*-extraction from an embedded clause headed by a *that*-type complementizer. (15) and (16) are ungrammatical because the ECP is violated, as the trace of the *wh*-element, moved from the pre-verbal position, is not properly governed: in (14), under the hypothesis that the *wh*-element is generated is the post verbal position, this violation can be avoided. Assuming the derivation in (22) for ex. (14), the operator *chi* is first moved rightward inside the embedded clause, then gets extracted by *wh*-movement from the post verbal position; this way, in the embedded clause the preverbal trace ① is properly governed and is bound, as an anaphor, by INFL [+pron, +dummy], exactly as happens in (21); the post-verbal trace ② is properly governed by the verb (no ECP violation) and is free in its domain, as required by Principle C.

(22) $[_{CP}$ ***Chi***$_i$ [dici $[_{CP}$ che $\mathbf{e}_i$ INFL_i verrà $\mathbf{e}_i$?
③ ① ②

The idea that a rich verb inflection is what makes it licit to drop the subject in NSLs was subsequently refined in Rizzi's (1986) work, where the licensing of *pro* is divorced from its identification in order to capture more adequately the fact that some languages have referential null subjects while others have only nonargument or 'quasi argument' null subjects, as in (23):

(23) *Classes of (non) Null Subject languages*
a. no pro: non-NSL: English;

NP that gets inserted above the VP by adjunction. W.r.t. Rizzi's account that I have presented herein, the question whether *e* stands for an anaphor deprived of phonetic content or for the trace of a movement operation is completely irrelevant when it comes to the congruence with the ECP or with Binding Theory. However, it must be noted, incidentally, that the analysis in terms of movement would be ruled out in a minimalist framework, as adjunction would be to a constituent lower than that the departure site.

b. non-argumental pro: languages that allow dropping of 'true' expletives (not carrying a θ-role) only: German, Dutch;

c. non-referential pro: languages that allow dropping of both non-argumental and quasi-argumental expletives (e.g. arguments of meteorological verbs): Icelandic, Yiddish;

d. non-argumental, quasi-argumental and referential pro: languages that license null pronominal elements, both referential and non-referential: Italian, Spanish, Greek.

Rizzi (1986) develops a theory of *pro* arguing that in Italian it may also occupy the object position, at least in sentences having an infinitival clause complement and an object control matrix verb like (24) or in some sentences like (25) where the anaphor is apparently without an antecedent:

(24)	*Questo*	*conduce*	___	*a*	[PRO	*concludere*	*quanto*	*segue*]	(Italian)
	This	leads		to		conclude	what	follows	

(25)	*La*	*buona*	*musica*	*riconcilia*	____	*con*	*se stessi*	(Italian)
	The	good	music	reconciles		with	themselves	

For Rizzi the gaps signalled by a subscript line are simply object *pro*'s with obligatory arbitrary interpretation, that roughly correspond to an expression as *people*: in (24) the object *pro* serves as a controller for PRO, whereas in (25) it is the antecedent of *se stessi*. Rizzi proposes that object *pro* and subject *pro* are both licensed by the rule in (27).

(26) *Licensing schema:*
pro is governed by X^0_y.

In Italian the licensing head for object *pro* is V, since it governs *pro*, whereas a subject *pro* is licensed by INFL, hence both INFL and V are X^0_y items, where *y* defines the class of heads that have the ability of licensing *pro*. (26), then, contains a parameter, given that in Italian $X^0_y = \{INFL,V\}$ (while in English $X^0_y = \{\emptyset\}$ since *pro* is never licensed in English); in French, where the same conditions of Italian hold for null objects and probably there are also null prepositional objects, the *y* class can be defined as $X^0_y = \{V,P\}$.

The recovery of the content of *pro*, which in Italian is dependent on the licensing head (INFL) when it stands in subject position, but not when appearing as an object, is regulated by the rule in (27)[10].

[10] The split between licensing and interpretation of *pro* is argued for by Rizzi also on grounds of theoretical consistency. In the standard theory of *pro*, its formal licensing and the identification of its content are surprisingly unified while elsewhere, where it comes to null categories, licensing and interpretation are separate: a trace is formally licensed

(27) *Convention for the recovery of the content of pro:*

Let X be the licensing head of an occurrence of *pro*: then *pro* has the grammatical specification of the features on X coindexed with it.

(27) is essentially a binding relation: the features on the licensing head X are able to bind the corresponding features of *pro* coindexed with them, making this relation the abstract equivalent of control, and of A- or A'-chain formation. For subject *pro* in finite clauses, φ-features (person, number and gender) specified on INFL get coindexed with those of *pro*, enabling the latter to act as a definite pronoun, whereas for object *pro* a preliminary step to the operation of feature matching is a convention that assigns an arbitrary interpretation (features [+ human, + generic, + plural]) to the argumental (θ) slot of the direct object. As is obvious, φ-features (their presence or lack thereof) are involved in the referentiality of nominal expressions (including pronouns and expletives, hence also *pro*), in such a way that

(28) An NP is referential only if it has the specification of person and number.

(29) An NP is argumental only if it has the specification of number. (Rizzi 1986: 543)

Then, (28) characterizes a referential *pro*, while (29) is sufficient to define a quasi-argument *pro* that is required for meteorological verbs or in temporal predicates like (30). Conversely, a completely expletive (non-argumental) *pro* is devoid of both specifications of number and person.

(30) pro *è* *presto* (Italian)
is early
'It is early'.

If one is to acknowledge that even rule (27) for the recovery of the content of *pro* is parameterized, (i.e. with a language being free to use or not use the option of binding by X^0_{γ}, or to use it partially, allowing the recovery of some features only), the interaction of this rule with the degree of inflection richness (the φ-features that are actually specified) and with the ±*licensing* parameter for INFL makes it possible to derive the full range of variation represented in (23). In a language where INFL *formally licenses* null pronouns (cf. (27)), if the recovering algorithm (27) is not active, *pro* will be restricted to nonargumental use (e.g.: German, (23b)); if number

by the ECP, but its content is recovered through the formation of an A-chain), PRO is licensed only in ungoverned contexts, but its content is recovered through the theory of control, which designates an antecedent for it or assigns *arb* interpretation.

specification only is recovered, *pro* will be limited to nonreferential use (e.g.: Icelandic, (23c)); if both specifications of number and gender can be recovered, *pro* will display the widest range of use as in Italian (23d). Rizzi[11] further speculates that if *pro* is defined this way, this may also poten-

[11] The conditions formulated by Rizzi (1986) for the recovery of the content of *pro* in radical NSLs were left rather vague and some issues persisted, including how to account for the restrictions that appear to constrain the reference of the null subject in embedded clauses, as Rizzi himself (1986: n. 44) acknowledged. The most comprehensive attempt to maintain the '*pro* module' is in Huang (1984; 1989), who proposed a parameter opposing sentence-oriented to discourse-oriented languages like Chinese, Japanese and Korean, which allow the deletion of a topic NP in a sentence under identity with a topic in a preceding sentence (Tsao 1977). Discourse-oriented languages are also topic-oriented, as pointed out by Li and Thompson (1976), in that they seem to make reference much more often to the topic-comment relation than to the subject-predicate relation, (witness the overt grammaticalization in Japanese, with the 'topic particle' *wa*), plausibly allowing topics to be base-generated in the clausal front position where they surface (not dislocated as in the familiar European languages) and to act as binders for anaphors. Hence, in discourse-oriented languages zero (deleted) topics are able to license and bind (i.e. recover the content of) *pro* in the same way as the latter is bound (identified) by the 'rich' pronominal AGR in a NSL like Italian. This goes hand in hand with a reform of the set of empty categories of the G&B framework, with the unification of *pro* and PRO: all null pronominals are subject to the same licensing conditions, subsumed in the *Generalized Control Rule* (Huang 1989: 193):

(vii) *Generalized Control Rule*
An empty Pronominal is controlled in its control domain (if it has one)

(viii) *Control domain:* α is the control domain for β iff it is the minimal category that satisfies both (a) and (b):

a. α is the lowest S or NP that contains (i) β, or (ii) the minimal maximal category containing β,

b. α contains a SUBJECT accessible to β.

(vii) unifies government by INFL and control in the classic sense: in a NSL like Italian, S (=α) is the control domain for *pro* (=β) in finite clauses, as S contains *pro* and has and accessible SUBJECT, namely AGR, which is rich enough to control *pro*; in English AGR is not sufficient to control an empty pronominal in such a way that it is never licensed in a finite clause. However, if it occurs within a nonfinite embedded clause (i.e. as PRO) it has a control domain in the matrix clause, which is the minimal maximal category containing it and endowed with a subject, and is thus licensed since the subject or the object of the matrix clause can control it. In Chinese, according to rule (viii), a subject *pro* in a simple clause does not have a control domain since there is no AGR (hence there is no SUBJECT) in S and thus S cannot fulfil the requirement in point *b*: as far as the empty category escapes control, its referential content is fixed on the basis of pragmatic factors or is antecedent-based, as is clearly the case in (ix), whose interpretation is ambiguous and can match any of those indicated in the glosses, if no context is provided.

tially account for radical NSLs like Chinese, Japanese and Korean, that have *pro* (as shown by Huang 1984) and do not make use of φ-features at all. If actually UG offers both options of using or not using φ-features in the grammar (as a parameter), for a language without φ-features (hence without AGR) defining an NP as referential or argumental is not possible and therefore (26)and (27) are vacuous; this entails that in such languages every licit occurrence of *pro* can be used as non-argumental, quasi-argumental and referential. In turn, the identification of the referential content of a *pro* rests on pragmatic and discourse factors, since the absence of φ-features makes the recovery procedure in (27) inoperative[12].

(ix) e *lai* *le* (Chinese)
come PST
'She/he came' (*but also*: 'I/you/we/they came'). (Huang 1984: 537)

In a sentence like (x), apparently an ordinary control construction, the interpretation where the reference of the empty category corresponds to the matrix clause subject actually obtains if the sentence is uttered out of the blue, but if an antecedent (a topic) different from *Zhangsan* is found in the discourse the empty category must compulsory co-refer to it and not to *Zhangsan.*

(x) *Zhangsan* *shuo* [e *bu* *renshi* *Lisi*] (Chinese)
Z. say not know L.
'Zhangsan$_i$ said that [he$_{i/j}$] did not know Lisi'. (Huang 1984: 537)

[12] By the end of the 1980s, an attempt to synthesize the most influential proposals on null subjects was made by Jaeggli and Safir (1989). While pointing out the questions still open, they also offered a proposal of their own towards a more comprehensive coverage of pro-drop phenomena in the world's languages. In particular, following Safir (1985: chap. 6), they argued against the monolithic notion of 'Null Subject Parameter' and claimed that it should be split, instead, into at least two different and independent parameters, the NOM-drop parameter (±NDP) and the free inversion parameter (±FIP). The ±FIP parameter allows or disallows postverbal subjects, with a set of related properties like long-distance *wh*-extraction of subjects, lack of *that*-trace effects (that is, in general, apparent failure to show ECP violations, as pointed out by Rizzi) and no definiteness effects in postverbal position (found, conversely, in expletive constructions with inverted subject in French and English). The 4-way typology that obtains in Romance is the following:

(xi)

Standard Italian	+NDP,	+FIP
French	-NDP,	-FIP
Trentino and Modenese	-NPD	+FIP
Standard Portuguese	+NDP,	-FIP

3.3.2 *Minimalist approaches*

In the framework of the Minimalist Program, some parts of the theoretical apparatus that had made it possible to formalize the classical null subject parameter were being abandoned. The very notion of parameter, as we have seen in the previous chapter, was gradually shifting from grammars to choose from to variation points driven by properties of specific lexical elements (cf. section 2.2), while the elimination of DS and SS and the copy theory of movement was increasingly suggesting that variation might be reduced to distinct Spell-Out options at PF (the reduction of the parametric space to externalization options invoked by Boeckx, see 2.4.2, p. 26 ff.).

The copy theory, as a fact, also dismisses two sets of empty categories foreseen in the G&B paradigm, NP-traces and *wh*-variables. If we take as an example the minimalist derivation of a passive sentence, the operation Merge takes first V and its internal argument, then applies recursively adding further categories extracted from the lexicon to the structure, until it applies to an element which is already in the structure (Internal Merge), the internal argument of the verb. The two copies of the internal argument of the verb are equivalent, but only the highest one is spelled out at PF: there is no longer a trace, i.e. there is not an empty category defined by features [+anaphoric, -pronominal], which behaves according to its featural content at any point of the derivation and which is subject to the ECP, a principle that is *de facto* eliminated from the theory. The same happens with *wh*-movement: a *wh*-element is inserted in subject or object position, or as an adverbial, and subsequently is copied (possibly more than once) and merged with CP. The only surviving empty categories are thus *pro* and PRO, so that the symmetry between lexical and empty categories that obtained in G&B no longer holds.

Another problem stems from the increasingly acknowledged VP-internal subject hypothesis (Koopman and Sportiche 1991): if any themat-

Without entering further into the details of Jaeggli and Safir's theory, in particular their conjecture that the availability of null subjects in a language is dependent on a morphologically uniform inflectional paradigm (Jaeggli and Safir 1989: 29), it is interesting to note that, as pointed out by Franks (1995: 291-292), the situation in Slavic reinforces the hypothesis that null subjects and free inversion be dissociated. In fact, the four possible theoretical outcomes given by the arrangement of the features [±NDP, ±FIP], as shown in (xi) w.r.t. Romance, are all displayed within the Slavic domain as in (xii) below.

(xii)	Serbo-Croatian	+NDP,	+FIP
	Ukrainian, Standard Russian	-NDP,	-FIP
	Colloquial Russian	-NPD,	+FIP
	Polish	+NDP,	-FIP

ic subject is generated within the maximal projections of the verbal head assigning it a θ-role (as generally accepted in Minimalism), a theory like Rizzi's, where the parametric difference between NSL and non-NSL is built upon the class X^0_y of heads containing or not containing INFL, can hardly be maintained. Indeed, if subjects are base generated under the VP node, one cannot keep on claiming that *pro* is licensed by INFL, since it is not generated within the projection of this category[13].

Finally, problems like those emphasized by Gilligan (1987) in the empirical coverage of the G&B Null Subject Parameter as a bundle of properties associated with the availability of null subjects in a language, urged for a reassessment of all the questions related to null subjects.[14]

[13] Moreover, as Camacho (2013: 24) notes, the availability of a post-verbal subject position can no longer be maintained as the trigger for properties like *that*-trace filter violation, since both English and Italian are now assumed to have a VP-internal position, which is, by definition, a post-verbal position w.r.t. IP, and in both types of languages there are deleted copies of the overt subject in that pre-verbal position, as shown in (xiii)-(xiv):

(xiii) English: [IP DP [I [*v*P ~~DP~~ V]]]

(xiv) Italian: [IP DP [I [*v*P ~~DP~~ ~~V~~]]]

[14] Gilligan's thesis surveyed the properties connected to the Null Subject Parameter according to Rizzi's classical theory of pro-drop on a sample of one hundred languages, balanced by language families and geographical areas. Gilligan showed that none of the relations between the availability of null subjects and other properties (free inversion, lack of *that*-trace effects, etc.) is a biunivocal one, but only some uni-directional implications hold, namely:

(xv) A language with null thematic subjects also has null expletives.

A language which allows free subject inversion also has null expletives.

A language which allows free subject inversion also allows (apparent) violations of the *that*-trace filter.

A language which allows (apparent) violations of the *that*-trace filter also has null expletives. (Gilligan 1987: 147; cit. in Johns 2007: 5)

As we will recall later, Roberts and Holmberg (2010), among others, take it that such conclusions do not compromise the validity of the parametric model, both *per se* and w.r.t. the null subject parameter. They argue, instead, that Gilligan's findings show that null subject phenomena cannot be related to one parameter only. In particular they contend that the circumstance that violations of the *that*-trace filter occur only in languages with subject free inversion is consistent with Rizzi's conjecture that the ban on *wh*-extraction from an embedded clause introduced by a C element is in fact exceptionless and can only be circumvented if extraction is from the post-verbal position. Holmberg and Roberts notice, to this end, that the explicatory force of Rizzi's proposal is very clear if we look at the acquisition process, since the learner would not be able, on the basis of PLD only, to infer the ban

Among the mass of works on null subjects in the post-G&B era, three approaches, summarized below in a)-b), have emerged:

a) the *pro* approach, straightforwardly adopted from the G&B framework, is endorsed by Chomsky (1993: 10) in the first version of the Minimalist Program essentially by briefly recasting it into the new framework with slight modifications; *pro* as a truly existing category in syntax is revived also by Speas (1995), who appeals to economy of derivation principles, arguing that null arguments occur wherever such principles allow them to occur, on the basis of a theory where agreement can be 'strong' (listed in the lexicon with each affix having an individual lexical entry) or 'weak' (listed attached to its verbal host in a paradigm) and thus different configurations of AgrP may give rise to obligatory or non-obligatory filling of its Spec by a lexical category prior to Spell-Out;[15]

b) the deletion approach considers null subjects - or at least a subset of them - as the result of an ellipsis and/or as *pro*, which is maintained not as an independent category, but as a pronoun without phonological content; this approach underlines the problems that would arise if *pro* would be totally removed from the theory, in particular w.r.t. referential subjects and bound subjects in embedded clauses; the requirement that is taken to be indispensable is that Spec,IP (or Spec,TP) be filled by some material with overt or null phonological content, but nevertheless that it be not empty; (Holmberg 2005; Roberts 2010)

c) The pronominal agreement approach, originally proposed by Jelinek (1984) within the G&B framework for non-configurational languages[16], takes Agr (or, in broader terms, the set of φ-features in I) as interpretable, hence with a pronominal status and endowed with a θ-role; such an approach, then, tends towards limiting the range of usage of *pro* (Barbosa 1995; Alexiadou and Anagnostopoulou 1998; an influential anticipation of this idea is also Borer 1986) or even to eliminating it at all. (Manzini and Savoia 1997; 2002; Platzack 2003 among others)

What distinguishes the two main approaches competing with each other, the cancellation approach (b) and the idea of pronominal agreement (c),

on the *that*-trace configuration, whereas he/she can easily decide whether in the language that is being acquired subject free inversion is allowed or prohibited.

[15] In a nutshell, Speas stipulates that phrases can only be projected if they have content, that is either their head or Spec must be filled by lexical material: when it comes to AgrP, in 'weak' agreement languages like English, the agreement inflection (if any) is generated already attached to its host as the head of V, thus there is no head for AgrP and something else must give content to the AgrP projection. This obtains by filling Spec,AgrP either with a moved NP or with an expletive. Speas also notes that stipulating such a rule has the consequence of making the EPP redundant: languages with 'weak' agreement must have Spec,AgrP which has content, hence they will always have a surface subject, even if no θ-role is assigned to an external argument. On further attempts to eliminate the EPP from the theory, see some remarks in section 3.4.

is, among other things, the way the EPP requirement is assumed to operate. In the following subsections I will outline the basic assumptions made by these two models, exposing Alexiadiou and Anagnostopoulou's (1998) theory as the prototypical representative for approach (c). For ease of exposition, the elimination approach to *pro* advocated by Manzini and Savoia (1997; 2002) will be presented and discussed at the beginning of chapter 5, as far as their theory is the one I will assume as part of the framework within which I will work out my proposal on NR participial constructions.

3.3.2.1 *The deletion approach. The D-feature in T*

The difference between the pronominal approach and the deletion approach is captured by Holmberg's (2005) observation that Rizzi's (1986) system cannot be straightforwardly translated into the minimalist framework, which makes a crucial distinction between interpretable and uninterpretable features w.r.t. their role in syntactic operations: as φ -features in T are, by definition, uninterpretable, it is not possible to maintain a notion like the 'traditional' *pro*, i.e. an inherently underspecified pronoun, licensed by a pronominal INFL head from which it receives its φ-features. Hence, according to Holmberg, a theory of agreement that makes use of ±interpretable features necessarily gives rise to two alternative hypotheses on the status of null subjects:

> *Hypothesis A*
> There is no pro at all in null subject constructions. Instead, Agr (the set of +-features of I) is itself interpretable; Agr is a referential, definite pronoun, albeit a pronoun phonologically expressed as an affix. As such, Agr is also assigned a subject θ-role, possibly by virtue of heading a chain whose foot is in vP, receiving the relevant θ-role. […]
>
> *Hypothesis B*
> The null subject is specified for interpretable φ-features, values the uninterpretable features of Agr, and moves to Spec,IP, just like any other subject. This implies that the nullness is a phonological matter: the null subject is a pronoun that is not pronounced. (Holmberg 2005: 537-538)

While hypothesis A is the one developed within the pronominal agreement approach, Holmberg argues that strong evidence in favour of hypothesis B comes from the situation found in partial NSLs, where subject dropping is allowed only under restricted conditions determined by both the morphological and syntactic context, typically only when licensed by specific sets of person, number and tense/mode/aspect features and in the case of 3rd person impersonal constructions. One such language is actually Finnish (whose data are employed by Holmberg to develop his theory), where 1st and 2nd person subject pronouns may be left unexpressed in the same way as they can be dropped in most Romance, 'consistent' NSLs:

(31) *(Minä) puhun / (Sinä) puhut / (Me) puhumme / (Te) puhutte englantia* (Finnish)
'I / you / we / you speak English.'

3rd person subjects, instead, must obligatorily surface as in (32), unless they are interpreted as generic/impersonal (33) or are bound by a higher argument in the matrix clause (34).

(32) **(Han) puhuu / *(He) puhuvat englantia* (Finnish)
'He/she speaks / They speak English'

(33) *Täällä ei saa polttaa* (Finnish)
here not may smoke
'One can't smoke here.'

(34) *Pekka$_i$ väittää [että hän$_{i,j}$/Ø$_{i,*j}$ puhuu englantia hyvin]* (Finnish)
Pekka claims that he speaks English well

The differences between a null subject of the Italian/Spanish kind, on the one hand, and a null subject of the Finnish kind, on the other, according to Holmberg can be captured by parameterizing the presence of the D-feature (a pronominal feature essentially encoding definiteness, as in Chomsky (1995)) on the T head of finite clauses, present in the former kind of languages and absent in the latter. This feature would interact with other properties of null pronouns, which belong to two different classes:

- 'strong' null pronouns, specified for D (thus, true DPs);
- 'weak' null pronouns (φP[ronoun]s), specified for φ-features but lacking D.

The lack of a D feature makes a weak φP incapable of (co)referring, in such a way that it must necessarily enter agreement with a T head containing the D feature in order to be interpreted as a definite pronoun. While this is what actually happens in languages like Italian, in the familiar way, in Finnish a 3rd person null φP does not find a D feature on T and hence it is licensed only if bound by a QP or logophorically connected to a DP in a higher clause, as is clearly visible in (34), where the null element is dependent on *Pekka* in the matrix clause. If even these conditions (a binding QP or DP) do not hold, this does not lead to ungrammaticality, but the null φP pronoun in such case can be interpreted only as a generic/impersonal subject, as in (33)[16]. Conversely, consistent NSLs have to resort

[16] Discussing data from Finnish and Brazilian Portuguese, Holmberg argues that 3rd person null definite subjects raise to a higher position in Spec,TP, whereas null generic subjects would stay within the *v*P, concluding that null φPs in these languages are accessible by a higher, binding DP only if raised outside the *v*P; if they do not move higher, they are not accessible and the generic reading is the only available interpretation.

to the introduction of a non-null element (as *si* in Italian) to express the meaning of a generic subject pronoun, precisely because a null φP subject, entering agreement with T, necessarily receives a definite reading.

If T in Finnish lacks a D feature, how can 1st and 2nd person pronouns be dropped in (31)? Holmberg's clue is that they are actual instantiations of DPs deleted in the phonological component. This deletion is licensed by a recoverability condition due to the richness of the verb inflection that allows an ellipsis operation to take place (construed, in standard analyses, as a filter blocking the Spell-Out of a part of the structure at PF) or, as an alternative option, to delete multiple copies created by Internal Merge.

In this manner, the interaction between the two kinds of null pronouns mentioned above with the properties of T (±D) gives rise to two types of NSLs (Italian/Spanish *vs* Finnish): in the former type of languages, weak φP pronouns enter agreement with T containing D in order to receive a definite interpretation, whereas in the latter type, where there is no D on T, φP is interpreted as a bound or logophorically anchored pronoun; if no binding element is available, φP is interpreted as a generic pronoun. 'Strong' null pronouns, instead, are simply DPs that are deleted at PF, or, in other words, that are not pronounced. The characterization of Finnish 1st/2nd person pronouns as deleted DPs is supported, according to Holmberg, by the observation that in this language, contrary to consistent NSLs, a *there*-type phonologically overt expletive may co-occur with a 1st or 2nd person subject, but in case the latter is omitted the sentence is ungrammatical. Given that the only function of an expletive is checking the EPP, this leads to the necessary conclusion that hypothesis A (Agr checks the EPP) must be ruled out and, conversely, that the EPP is satisfied either by a PF-deleted 1st/2nd person pronoun or by an expletive; in the latter case, however, the 1st/2nd person pronoun is focalized, occupying an Ā-position, and thus must necessarily be overtly realized.

Other proposals entailing some form of non-realization of the subject at PF are also articulated in works by Roberts (2004; 2010), where reference is made to an operation of 'deletion under feature-identity' that applies shortly after Agree, when the featural content of the pronoun matches that of T:

(35) *Deletion under feature-identity:*

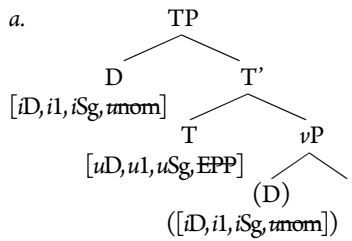
α deletes under identity of features with β only if β Agrees with α[18].

(Roberts 2004: 2)

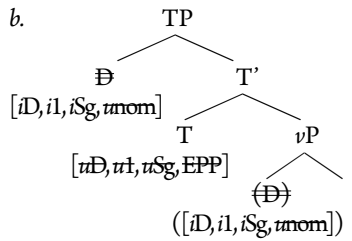
Roberts (2004) argues that in NSLs T has an uninterpretable D-feature, which in turn is interpretable in a pronoun that is generated in Spec,*v*P: according to the mechanism of feature-checking of Chomsky (2000), the EPP-feature on T is deleted once it has been checked by raising of the pronoun to Spec,TP, as much

as the [nom] Case-feature of the latter gets deleted under Agree. This gives rise to a configuration where T and the pronoun raised to its Spec have the same featural composition and thus deletion under feature-identity (35) applies, with the effect that at PF the pronoun is deleted or, in other words, not pronounced[17]:

(36) *a.*



b.



Roberts (2010) adds the extra assumption that *pro* is a 'weak' pronoun in the sense of Cardinaletti and Starke (1994), that is, a DP whose distribution is restricted to certain positions (in the case of subjects, Spec,TP). A property characterizing weak pronouns is that they delete upon the presence of a D-feature on T, since they are defective goals[18]. The idea, roughly, is that *pro* completely exhausts its features (φ-features copied onto T and D-feature checked by T) once Agree has taken place and it has raised to T; more precisely it incorporates with its host T, in a clitic-like fashion. However, while only the highest copy of a clitic (the one incorporated with the inflected verb) is realized, in the case of *pro* both copies remain can be deleted at PF since all features have been copied onto T and therefore it is enough to spell-out just T, i.e., as usual, the agreement inflection of the verb. On the other hand, T can be only endowed with the D-feature if none of its φ-features has undergone pre-syntactic impoverishment, that is, if its φ-set is complete, or, in other words, if its agreement inflection is 'rich'.

[17] For ease of exposition (36a) and (36b) refer to subsequent stages of derivation; the null pronoun is noted simply as D; double-strikethrough indicates PF-deletion (non-pronunciation of the two copies of the pronoun) while a single strikethrough is applied to features that have to be deleted before the structure is sent to LF; using the usual notation, the letter in italics before each feature indicates whether it is *i*nterpretable or *u*ninterpretable.

[18] In Robert's (2010) system, which still makes use of a probe-goal mechanism driven by features on heads (in this case Chomsky's (2001) Phase Theory, cf. 2.2.3) a defective goal is defined as follows:

(xvii) A goal G is defective iff G's formal features are a proper subset of those of G's Probe P.

Summing up, for supporters of the deletion approach null subjects can essentially be dealt with as a matter of PF: *pro* is a deleted pronoun or a feature bundle that does not have a phonological realization. On the other hand, in narrow syntax, the question reduces to the presence (or lack thereof) of a D-feature on T. This leads the deletion approach to converge with the other line, the pronominal agreement approach, within which the most influential work is Alexiadou and Anagnostopoulou (1998), that I am going to present in the following subsection.

3.3.2.2 *Alexiadou and Anagnostopoulou (1998)*

Alexiadou and Anagnostopoulou (1998) (hereafter A&A) take as their starting point the asymmetries found in the behaviour of subjects w.r.t. their relative order with the other constituents in Germanic, Celtic, Semitic, Greek and Spanish, claiming that they can be explained in terms of different ways of checking the EPP, under the view that the latter is associated with a categorical D-feature in AGR_S (Chomsky 1995, see preceding sections for discussion). In particular, they argue against the treatment of VSO order in NSLs postulating an expletive *pro* (equating such constructions with the overtly realized Expl-VS(O) configuration in Germanic languages), proposing that the EPP can be satisfied by checking the D feature not only by way of Move/Merge XP (Spec,AGR_SP filled by a raised subject or insertion of an expletive) but also via Move/Merge X^0, that is, raising of V.

Germanic languages, thus, would be representatives of the Move/Merge XP type, whereas the other languages under discussion (Celtic, Semitic, Greek and Spanish) would instantiate the Move/Merge X^0 option without projecting Spec,AGR_SP, in accordance with Bare Phrase Structure, that states that the Spec of a functional category is only projected if the latter has a strong nominal feature forcing (Internal or External) Merge of an XP to its Spec. The distinctive property of the Move/Merge X^0 type, according to A&A, is connected with the nature of their agreement morphology, having the categorical status of a pronominal element as in Rizzi's (1982) proposal, from which, however, they diverge substantially: while for Rizzi it is the [+pron] feature on INFL that licenses an empty category (that is, *pro*, a pronoun), in A&A's sytem the agreement morphology of NSLs is an affix bearing a strong, interpretable, feature [+D], which independently enters the derivation and, in other words, is a pronoun on its own. The consequence is the elimination of *pro*, albeit as a preverbal expletive in VSO configurations that occur in NSLs.

From such a conception of INFL as a derivationally independent pronoun there follows an interesting corollary, i.e. that the canonical position of subjects in NSLs is the post-verbal one, since the Spec of the position associated with the EPP, AGR_S, is not projected. Proofs of this state of affairs, according to A&A, are given by various properties that preverbal sub-

jects display, which would demonstrate that they are associated with an Ā-position and have thus been left-dislocated from their base-generation site. In other words, preverbal subjects in Greek and Romance would be true instances of Clitic Left Dislocation (CLLD):

a) *Adverbial placement facts:* SVO orders in Greek and Spanish seem not to involve any Spec-head relation between the subject and the finite verb, as adverbial phrases may intervene rather freely between the preverbal subject and the verb:

(37) *O Petros xtes meta apo poles prospathies sinandise tiMaria* (Greek)
the. P. yesterday after from many efforts met the M.
'After many efforts, Peter met Mary yesterday'.

b) *Scopal effects*: in preverbal position quantified and indefinite subjects always have unambiguous (wide) scope over subjects, whereas in postverbal position two readings are possible (wide and narrow scope); given the assumption that scopal properties are preserved when a quantifier is moved to an A-position, the preverbal position appears to behave as an Ā-position in this respect:

(38) *Kapjos fititis stihiothetise kathe arthro* (Greek)
some student filed every article
$[= \exists x.\textsc{student}(x) \wedge (\forall y.\textsc{article}(y) \rightarrow \textsc{file}(x,y))]$

(39) *Stihiothetise kapjos fititis kathe arthro* (Greek)
$[= \exists x.\textsc{student}(x) \wedge (\forall y.\textsc{article}(y) \rightarrow \textsc{file}(x,y))]$
$[= \forall y.\textsc{article}(y) \rightarrow (\exists x.\textsc{student}(x) \wedge \textsc{file}(x,y))]$

[19] To account for such restrictions he first observed in Spanish, Montalbetti (1984) proposed a filter, the OPC, which was supposed to be operative in any NSL and therefore part of UG:

(xviii) *Overt Pronoun Constraint (OPC)*
Overt pronouns cannot link to formal variables [=WH- and QR traces] iff the alternation overt/empty obtains. (Montalbetti 1984: 94)

Actually, as discussed above, this constraint seems to only hold for non-dislocated pronouns.

c) *Binding properties*: in an embedded clause an overt personal pronoun in preverbal position cannot be construed as a variable bound by a quantifier in the matrix clause: in the Catalan example (40), the 'Montalbetti effect'[21] prevents *ells* from being interpreted as a variable bound by the quantifier expression *tots els estudiants* ('for every *x*, *x* a student, *x* thinks that *x* will pass') and the only possible readings are the disjoint one or the co-referential interpretation (where *ells* points to the entire set denoted by *tots els estudiants*, i.e. the so-called *group reading*); if the subject is placed after the verb, as in (41), this restriction does not hold anymore and the bound variable reading becomes available; since the bound reading is also ruled out for object or oblique pronouns only if they are dislocated (Solà Pujols 1992: 289-290), the restriction must depend on the pronoun being in an Ā-position and this further supports the view that preverbal subjects in Catalan, Spanish and other Romance NSLs are in an Ā-position:

(40) *tots els estudiants*$_i$ *es pensen que ells*$_{*i/j}$ *aprovaran* (Catalan)
all the students CL.3P think that they will_pass

(41) *tots els jugadors*$_i$ *estan convençuts que guanyaran ells*$_i$ (Catalan)
all the players arepersuaded thatwill_win they
[= $\forall x$.PLAYER(x) → PERSUADED(x,WIN(x))]

The fact that post-verbal subjects in these languages do not exhibit definiteness restriction effects (which occur, instead, in expletive constructions in Germanic) according to A&A provides further evidence that the basic word order for NSLs is VSO and thus that an expletive *pro* in sentence-initial position, postulated for EPP reasons, can be dispensed with.

The differences among languages belonging to the VSO group, that is, Greek/Romance on the one hand and Celtic/Arabic on the other hand, are ascribed by A&A to another parameter, originally proposed for Germanic (Jonas and Bobaljik 1993; Bobaljik and Jonas 1996), that relies on the availability at PF of a Spec for TP[20]: in Romance and Greek subjects stay within the VP, since the position they could be raised to (Spec,TP) is not projected, whereas in Celtic the +Spec,TP parameter forces the latter to be projected and consequently the subject must raise to this position, potentially triggering object shift phenomena, which are shared altogether by Celtic and Germanic (with the exception of English)[21]. The interac-

[20] The Spec,TP parameter is attributed by A&A to the presence of a strong N feature, or lack thereof, in T, connected with Case checking.

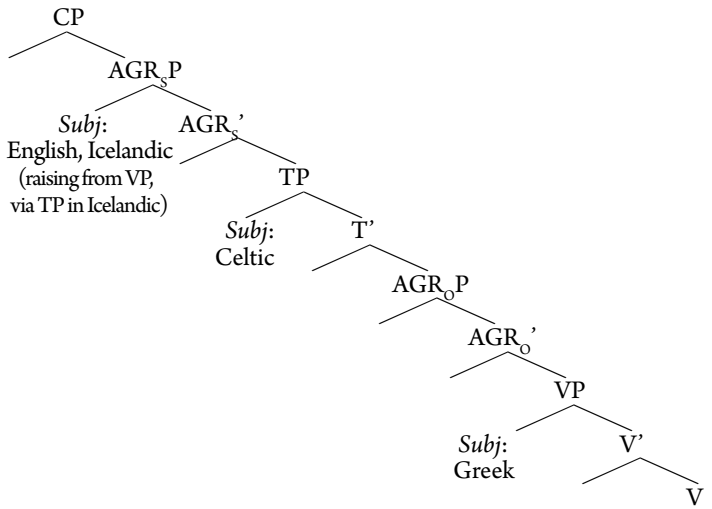
[21] In the literature, the label of object shift is commonly employed to refer to operations that displace the direct or indirect object of a verb from its VP-internal θ-position to a higher position. A piece of evidence generally brought to support the view that this displacement actually

tion between the EPP (X^0/XP) parameter with the ±Spec,TP parameter gives rise to a four-way partition, represented in (42), while the different subject positions are exemplified accordingly in (43):

(42)

EPP (XP)	Spec,TP	
+	-	English
+	+	Icelandic
-	-	Greek
-	+	Celtic languages (Irish, Welsh)

(43)



takes place is the position of negation in Icelandic in a sentence like (xix), showing that the object has clearly raised over the Neg projection, generally assumed to be adjoined to the left of *v*P:

(xix) *Jón*$_i$ *las*$_j$ *bækurnar*$_k$ [VP *ekki* [VP t_i [V' t_j t_k]]] (Icelandic)
J. read books.ACC NEG
'Jon didn't read the books'. (Collins and Thráinsson 1996: 392)

The connection between object raising and verb movement (marked by the trace t_k in the example above) in Scandinavian languages is known as Holmberg's Gerneralization:

(xix) *Holmberg's Generalization*

Object shift of an element α from the complement domain of a verb β occurs only if β has moved out of VP. (Holmberg 1986: 176; cit. in Zwart 1994)

In Holmberg's original explanation object raising was motivated by the need of the latter to receive Case in the object agreement projection (AgrOP), but only if it cannot receive it *in situ*, hence only if the verb has also raised higher.

As Slioussar (2007: chap. 4) observes, a clause structure like (43) has two potential positions for the subject (if it raises out of the VP): Spec,AGR_SP and Spec,TP, and the EPP is associated to AGR_SP, a projections which is eliminated in the minimalist structure of the clause since Chomsky (2000) onwards; thus, in order to maintain such a system in a minimalist framework, it would be necessary to assume that the higher projection (formerly AGR_SP) is now some projection belonging to the left periphery, so entailing that the EPP is associated (also) with the C field, with related theoretical shortcomings. However, beyond the technical details that prevent A&A's system from being implemented in the current minimalist model, this proposal has been very influential and many ideas expressed therein have been widely employed elsewhere in the literature (cf., for example, Adger and Ramchand 2003; Bailyn 2004; Frascarelli 2007 on the preverbal position as an Ā-position). At the same time, the idea that the EPP can be checked by the verb inflection or by other non-NP elements is an important step towards totally eliminating *pro* from the theory, the latter being a category that appears to be quite redundant in a minimalist conception of grammar.

3.4 *Concluding remarks*

The discussion on the problems related to the EPP and the theories of null subject that I presented in the preceding sections form the necessary background to the points at issue in dealing with the variation that is found in the constructions investigated in this book, i.e. the participial constructions of NR varieties.

If we come back to the research questions posed at the beginning of this chapter (the problem of subjecthood and EPP in the NR constructions, the hypothesis that their agreement morphology is a head, i.e. pronominal) and we consider the issues discussed thus far, we first need to clarify the view of the EPP that should underlie any possible answer to question (7) (and of course, indirectly, to question (6)). My choice will be for a conception of the EPP (in the sense of the subject requirement for the clause) closer to the one outlined in Chomsky (1995) than to his later works, for the reasons that I will detail below.

The first advantage of the EPP formulated as a strong D-feature of I (1995: 232-235) is that even if the EPP is a problematic notion (but still an ineliminable one, though) the formulation given therein has the theoretical advantage of identifying it with Definiteness, which is an indispensable notion at LF. The divorce between the D(efiniteness) property and the EPP (subsequently, the Edge Feature), assumed from Chomsky (2000) onwards, appears to be justified, indeed, only for reasons internal to Phase Theory[22]. Thus, at a

[22] Among the stipulations one has to do for the sake of consistency with Phase Theory is the optionality of the 'broadened' EPP, that is, a strong phase need not necessarily have

theoretical level, it seems to be again a stipulation that should be avoided, as many scholars have remarked, trying to dispense at all with the very notion of EPP and bring back its effects to other primitives of syntactic theory (see, among others, Castillo, Drury and Grohmann 2000; Sigurðsson 2010).

A second, more practical reason why I will implement the EPP as the obligatory realization of a D feature is that the hypothesis I will put forward on NR participial constructions predicts that if D is not lexicalized in any way within the clause the EPP requirement is not satisfied. The prediction is fulfilled in that the only missing pattern of cross-dialectal variation ('bare' participle in *-n-/-t-* with no external or internal argument overtly realized, cf. Table 1, p. 89) is precisely the one that is excluded if D cannot be lexicalized either as an 'expletive' by the *-o* neuter inflection or as a full DP in the clause[23].

As to the EPP-feature of Chomsky's most recent theory (the 'broadened' EPP, as I have dubbed it in 3.2.2), I will not be concerned with it all, as far as the modalities of EPP-checking that I will propose to hold in the NR constructions leave aside (or better, are independent from) Phase Theory. Since the discussion will start from the assumption that arguments are inserted in the position where they actually surface and that features are lexicalized directly by agreement (or nominal class, etc.) inflections, separating the D(efiniteness) property from the EPP feature would be an unnecessary extra stipulation, and as such it will be avoided. In view of this, even Chomsky's (2008) proposal, aimed at dispensing with the EPP by reducing it to an epiphenomenon produced by the conspiracy of the Edge Feature and T inheriting features from C (where T is always overt in finite clauses), cannot be adopted for the same reasons, leaving aside the fact that it is not very clear why T should inherit agreement features and the Edge Feature from C[24].

a Spec as it can enter an Agree relation at a distance, and this requires that uninterpretable features on the head have the option of being or not being associated with an EPP-feature.

[23] In anticipating some aspects of my proposal, I have also indirectly given a positive answer to question (8), posed at the beginning of this chapter (whether the agreement inflection in the NR constructions can be considered a syntactic head). In chapter 5 I will actually show that taking the agreement inflections as part of the syntactic structure makes it possible to derive the different dialectal patterns in a straightforward fashion.

[24] C-to-T inheritance of Edge Features faces another contradiction, if one takes into account that Chomsky seems to further dissociate the Edge Feature from the Agree Feature of a head, both being endowed with the property of attracting an XP to a Spec. For a wh-question clause like that in ex. (xxi) Chomsky (2008: 149), in fact, proposes the derivation in (xxii), where the Agree Feature as well as the Edge Feature of C act as a probe, seeking the goal *who* in Spec,*v**P: the Agree Feature, inherited by T from C, raises it to Spec,TP, while the Edge Feature of C raises it to Spec,CP.

(xxi) *who saw John?*

(xxii) a. C [T [who [*v** [see John]]]]

b. who_i [C [who_j [T [who_k *v** [see John]]]]]

As is clear from the preceding discussion, the existence of a universal EPP requirement for the clause (in the sense that languages are not subject to a ±EPP parameter) will be tacitly admitted throughout the analysis, leaving aside the doubts raised against the EPP as the obligatory filling of a Spec,TP position (e.g. McCloskey (1996), see section 3.2.3) or, in general, as a principle that can be dispensed with (the work by Castillo *et al.* (2000) and Sigurðsson (2010)). In doing this, I will follow the approach adopted in most current research, which, on the one hand, takes the EPP as a property of the clause arguably derivable from other primitives of grammar but, on the other hand, takes it that its effects must be taken into account by any structural proposal one wants to put forth.

This is exactly the stance taken by the two main lines of inquiry on null discussed in 3.3.2, the deletion approach and the pronominal agreement approach. As has been remarked, they converge on the idea that the availability of null subjects in a language reduces to the presence of a D-feature in T (so assuming the EPP of Chomsky (1995)), while they are at variance on the modalities in which this feature is checked. To this end, I would like to briefly present now the reasons why I will favour the pronominal agreement line over the deletion approach. First, given their shared view on the EPP as D-checking in T, I believe that, on grounds of economy and simplicity of the theory, a theory that dispenses with empty categories (be it a matter of non-realization at PF or deletion before reaching the interface) is to be preferred. Secondly, as a corollary, the accounts in terms of deletion (Roberts (2010), as recalled, but also Holmberg (2005)) crucially rely on the tripartion of pronouns in three classes (strong, weak and clitc) proposed by Cardinaletti and Starke (1994), which, despite having being very influential, has been criticized, for example, by van der Velde (2002) for the pronominal system of Dutch and by Manzini (2014) in reference to Italian *loro*.

Lastly, the conceptualization of the EPP requirement as a D(eterminer) feature that needs to be checked, coupled with a pronominal agreement approach, makes it possible to work out a device for its satisfaction that avoids redundant structure. Thus, the view of the EPP that will be underlying the discussion in chap. 5 (which I essentially borrow from Manzini and Savoia (2007; 2008a), see section 5.1.2, pp. 110 ff.) will not be strictly positional in the sense of an obligatory Spec for TP, but will be in the spirit proposals like Alexiadou and Anagnostopoulou's (1998). Interestingly, it will bear some resemblance, too, to Borer's (1986) idea of I-Subjects within the G&B framework, in which the requirement of a compulsory subject front posi-

The two features appear to do different things and actually only the Agree Feature is claimed to be inherited by T from C, contrary to Chomsky's statement cited above (p. 16) where he clearly proposes that both features are transferred from C to T.

tion in the clause [NP, S] is replaced by an obligatory coindexing between INFL and an NP in the domain of INFL[25].

As an essential aspect of the EPP is its connection with the argumental structure: in this respect, the idea that the introduction of arguments is essentially λ-abstraction over variables (Adger and Ramchand 2005) and that the 'clausal' EPP requirement may be satisfied in the same way as suggested by Butler (2004)[26] for the general feature will be taken on in relating thematic structure and EPP checking in analyzing the constructions under investigation.

Before closing this chapter, one last question remains, namely whether there is an available alternative to the analysis of the subjecthood of NR constructions in terms of EPP as D-checking under a pronominal agreement approach. One such candidate for it is radical *pro*-drop, i.e. an analysis of cases like (5) whereby it is precisely the lack of φ-features on the verb that licenses a null subject, which in this example has the most salient interpretation as 1st person plural, but might actually be interpreted also as any other person/number combination. This is indeed an appealing hypothesis, if one takes into account that there is evidence for a categorization of Russian as a discourse-oriented language, like Chinese and Japanese (Yokoyama 1986). Moreover, in informal registers of Russian, there have been identified several (contextually restricted) cases of *pro*-drop that can be brought back to discourse-dependent ellipsis facts (cf.

[25] Borer proposes principle (xxiii) to replace the EPP as formulated in Chomsky (1981):

(xxiii) Coindex NP with Infl in the accessible domain of Infl

The coindexed NP is named I(nfl)-Subject and is not associated anymore to the positional requirement of Spec,TP. The accessible domain of Infl is defined as in (xxiv):

(xxiv) *Accessible domain of Infl*

α is in the accessible domain of $Infl_i$ iff $Infl_i$ c-commands α and there is no β_j, β_j I-subject of $Infl_j$, such that $Infl_i$ c-commands $Infl_j$ and $Infl_j$ c-commands α.

The identification of the NP I-Subject of the clause can obtain by identification by a 'strong' Infl in the familiar way we have discussed in the preceding sections, or depending on other factors. In this manner, a post-verbal subject in Italian or Spanish gets coindexed with Infl as per (xxiii), with no need to postulate a pro in the front position of the clause. The fact that an expletive like there in English is an I-subject even if it is in a θ-position (and that it must obligatorily surface, if the argument of the verb stays in post-verbal position) follows from a different property of English, for which an I-subject appearing in the VP could never be assigned nominative Case. Without entering the details of Borer's (1986) system, it is important to note here that the obligatoriness of subjects it imposes is not formulated in positional terms.

[26] Both the cited works will be briefly introduced in section 5.2.2, see notes 6 and 7, pp. 117-119.

Franks 1995: 307-308; Erteschik-Shir, Ibn-Bari and Taube 2012). However, if we recall that for Rizzi (1986) the reason for *pro*-drop in Chinese or Japanese is the lack of φ-features at every level of Grammar in these languages, and Huang's hypothesis that the lack of Agr entails the lack of a control domain for the empty subject category (cf. note 11, p. 58), we would also have to explain why the Russian varieties under examination would make use of φ-features in a part of their syntax (the present/future tense and past tense inflections) and do without them in another part of it. Finally, the patently participial nature of the verb in these constructions makes quite unlikely an explanation of the NR 'perfect' in terms of radical *pro*-drop.

With these remarks, that will serve as the theoretical background to the analysis, I now pass on to the description of the data in the next chapter.

4

THE -N(O)/-T(O) CONSTRUCTIONS IN NORTH RUSSIAN DIALECTS

4.1 *Areal distribution*

Perfect participial constructions are one of the distinctive features of many dialects of the Russian subgroup within East Slavic, their distribution encompassing all Northern European Russia up to the White Sea. The area where these constructions are attested is approximately bounded to the South by a line stretching in the Northeast direction from the present border between the Russian Federation and Estonia, at the latitude of approximately 56th degrees north, up to the Ural Mountains, at about the 60th parallel.

The NR participial construction area embraces the regions of Pskov, Novgorod, St. Petersburg, Novaja Ladoga, Belozersk and the rest of the Vologda *oblast'* to the north, the Republic of Karelia and Arxangel'sk *oblast'*. While the phenomenon of participial perfect is, in general, almost uniformly attested in this area, the range of its cross-dialectal variation is quite extensive, as different patterns are finely scattered throughout the territory and can occur side by side in neighbouring villages or even in the same dialect. Conversely, identical patterns can be found in small and isolated areas far from each other.

A very rough idea of the area affected by phenomena of participial constructions can be obtained from Figure 1 which is based on Maps 1 and 2 in Kuz'mina and Nemčenko (1971), to which I refer the reader for more details on the distribution of the different patterns. To this end, it is interesting to note that some of the distinctive features of these constructions, which I will shortly describe, are lacking in the peripheral regions of the area affected by this phenomenon: virtually overimposing the first map onto the second one, it is clearly visible that southernmost dialects generally lack the intransitive construction, whereas only in the dialects of a limited area do the participial construction turn out to be compatible with the reflexive *sja*, so that many varieties are completely devoid of these two features. Thisseems to indicate that at the core of this phenomenon lies the meaning of perfect, which is crucially defined by the participial inflection, and the presence of an internal argument of the verb. I will return to this point in subsection 4.2.2 and in the discussion of my proposal in section 5.2.

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Figure 1: Southern boundary of NR participial constructions

The productivity of the NR participial construction, albeit with these areal differences, has been widely noticed in the dialectological literature on NR varieties and has been considered by many scholars a major isogloss dividing the northern and north-western dialects from the central ones (Avanesov and Orlova 1965: 246-248; Kasatkin 1999: 87-89; Zaxarova and Orlova 2004: 85-89). As already remarked in the Introduction to the present book, the largest body of data and the most complete description of NR participial constructions come from Kuz'mina and Nemčenko's (1971) book, where data from previous dialectological surveys (in particular, data gathered in the 1930s for the realization of the Russian Dialectological Atlas) are merged with data from Irina Kuz'mina's intensive fieldwork (see also Kuz'mina and Nemčenko 1961; 1962a; 1962b; Kuz'mina 1972). Other works worth mentioning as valuable resources are Obnorskij (1953) and, in particular, Trubinskij (1984), an outstanding monograph not only for the data contained therein but, above all, for outlining the structural features of the NR participial constructions in their cross-dialectal relationships[1].

[1] I will come back to the observations made by Trubinskij in my analysis (cf. subsection 5.2.3.1, p. 121 ff.) by assuming his view that the construction with the non-agreeing participle and the noun in nominative case is more akin to the agreeing construction than to the construction with non-agreeing participle and the noun in accusative case. As I will try to show, there is strong evidence to suggest that in the reading of the noun in

Even though the dialectological works mentioned above date back to the 1930s to the 1960s, NR dialects and consequently the use of participial constructions also seem to be widespread nowadays, as witnessed by their occurrences in the dialectal subcorpus of the Russian National Corpus[2], whose data were collected much more recently, in the last twenty years.

4.2 *Morpho-syntactic features*

In order to identify the morpho-syntactic distinctive features of the NR participial constructions, it is useful to contrast them with the syntactic behaviour of the past passive participle (with the *-n-/-t-* inflection) in Contemporary Standard Russian (henceforth CSR). The use of the latter in predicative function is confined to the passive voice and is subject to the restrictions usually affecting, at a cross-linguistic level, non-active non-finite forms. In what follows we will observe, however, that some kind of 'perfect' construction with the *-n-/-t-* ending does also exist in CSR, although it is not yet grammaticalized and is strictly limited to perfective transitive verbs.

The next subsection is thus devoted to the syntactic contexts where past passive participles occur in CSR, while in the immediately following subsection I will discuss its properties in NR dialects, highlighting the differences among the different varieties and with CSR.

4.2.1 *Past passive participles in standard Russian*

The properties defining the nature and syntactic behaviour of the past passive participle in CSR with *-n-* (or *-t-*)[3] morphology, are listed below in points a) - c).

nominative case as the internal argument of the non-agreeing participle there is an existential involved; this exactly matches Trubinskij's arguments, on a diachronical plan, to explain the grammaticalization of this kind of participial construction.

[2] The Russian National Corpus is maintained and contributed to by the Russian Academy of Sciences and other research centers and academic institutions in Russia, and can be accessed at <http://www.ruscorpora.ru>.

[3] It is important to stress that the two suffixes, *-n-* and *-t-*, are in complementary distribution and the choice of either one form or the other is determined by the verb inflectional class: as a general rule, verbs with infinitive ending *-at', -jat', -jet'* select for *-n-*, and the same suffix occurs with verbs in *it'* or *-ti*, by insertion of a thematic vowel *-e-* (*ë-* if stressed) after he verb root; verbs with infinitive endings *-nut', -ot', -eret'* and verbs with monosyllabic stems select for *-t-*. Moreover, when the participle is used in the 'long', adjectival (attributive) form, reduplication of *-n* occurs: *pročitannyj* 'read', *unesë-nn-yj* 'carried away'. In NR dialects the selection of either *-n* or *-t* is different than in CSR, but since this a matter of allomorphy, this circumstance does not bear upon the discussion of the syntactic properties of these constructions.

a) Past passive participles in CSR can be formed only from perfective transitive verbs, denoting, in general, a state resulting from a preceding action:

(1) *Polja* *pokry-t-y* *snegom*
fields:N.PL.NOM overed.PFV-PTCP-N/M.PL snow:INS
'The fields are covered with snow'.

Past passive participles with imperfective stems as (2) are thus ungrammatical in CSR; the passive voice can be only expressed by way of the reflexive *-sja* (or its allomorph *-s'*), as shown in (3)[4]

(2) * *Polja* *pokryva-n-y* *snegom*
fields:N.PL.NOM covered.IPFV-PTCP-N/M.PL snow:INS

(3) *Polja* *pokryva-jut-sja* *snegom*
fields:N.PL.NOM covered.IPFV-PRS.3PL-REFL snow:INS
'The fields are covered with snow'.

b) Past passive participles with *-n-/-t-* in CSR allow the expression of the external argument of the verb stem by way of a DP[5] in instrumental case (cf. *snegom* in (1)). This argument, as is in the nature of passive voice, has a purely optional character.

[4] Although in Russian there exists a present-tense passive participle in *-m* that attaches to imperfective stems, it is generally restricted to attributive contexts, occurring only in the 'long', adjectival form with agreement inflections *-yj/-aja/-oe/-ie* (m./f./n./pl.), as in the following example, taken from the Russian National Corpus:

(i) *Realizacija predlagae-m-yx idej ne trebuet special'nyx prisposoblenij*
realization proposed.IPFV-PTCP-PL.GEN ideas.GEN NEG requires special.GEN adaptations.GEN
'Realizing the proposed ideas does not require any special adaptation'. (CSR)

In spoken language past present participles are *de facto* restricted to crystallized expressions as *ljubimyj* 'loved', *tak nazyvaemy* 'so-called' and to few others. Peripherally, they can surface also in predicative contexts, especially in written language, but mostly in the 'long' form and only accompanied by the copula *byt'*, thus in the past and future tenses. Example (ii) is taken from a conversation between a linguist with an informant and, remarkably, it has the 'short' form of the participle:

(ii) *Vot teatry opjat' že byli poseščae-m-y / da kino uže suščestvovalo*
here theaters again FOC were attended.IPFV-PTCP-PL.NOM and cinema already existed
'The theaters were again well attended, even if cinema already existed'. (CSR)

c) In predicative contexts *-n-/-t-* past participles have the syntax of a canonical passive, whereby the promotion of the internal argument is achieved through assumption by the DP of all the properties that are usually found in subjects of declarative active clauses. Thus, the DP promoted to subject position:

   i. has nominative case (cf. *polja* in (1));

   ii. triggers gender and number agreement with the participle (*pokryty* agreeing with *polja*);

   iii. has the ability of binding anaphors within the clause[6]: in (4) the reflexive adjective *svoj* obligatorily occurs to indicate co-reference with the 1st person singular subject of the clause:

(4)	*Ja*	*byla*	*zanjata*	*svoimi*	*problemami*
	1s	was.AUX:PST.F	occupied:PTCP.F.SG	REFL:PL.INS	problems:PL.INS
	'I was busy with my problems'.				(CSR)[7]

Constructions with past passive participles in CSR, thus, display properties that can be defined canonical w.r.t. the cross-linguistic features of the passive voice: the DP carrying the Theme/Patient θ-role, which in the active voice is marked by accusative case, acquires in the passive voice all the morpho-syntactic properties of subjects (nominative case, agreement triggering, anaphor binding).

[5] From now on, I will refer to all nominals surfacing in argumental position as DPs, abstracting away from the question whether in Russian (and in most Slavic languages, which do not have definite articles) nouns without a determiner are NPs or DPs. For the purposes of the present discussion this question is in fact irrelevant.

[6] Recall that this property (binding of anaphors by syntactic subjects) is predicted by Principle A of Binding Theory, which states that an anaphor X must be bound (c-commanded by an element Y coindexed with X) within its Governing Category. Consider the following definition of Governing Category (Rizzi 1990: 35):

(iii) Z is the governing category for X iff Z is the minimal category with a subject containing X, a governor G for X, and where the binding requirements of X and G are satisfiable.

The simple clause is the governing category Z inasmuch it is the minimal functional complex endowed with a subject, a governor G (the verb) and a position, the subject one, that can potentially act as a binder for the anaphor X (the phrase *svoimi problemami* in (4)).

[7] Example taken from the Russian National Corpus, spoken sub-corpus.

4.2.2 *The past passive participle in the dialects: distinctive features of NR 'perfect' constructions*

In NR dialects, the equivalents of properties a) - c) for CSR that have been discussed in the preceding subsection are listed below in points d) - f). This illustrates both the particular syntactic behaviour of past passive participles in the dialects and its large cross-dialectal variation, that allows (almost) all possible case/agreement patterns.

d) In NR dialects the verb does not display restrictions on the selection of participial passive *-n-/-t* morphology as to aspect (i) and transitivity (ii, iii).

i. Passive participles in *-n-/-t-* can be formed from imperfective verbs, as well as from perfective ones, as in examples (5) and (6):

(5) *Koše-n-o* *l'* *sen-a* *u* *tja?*
mowed.IPFV-PTCP-N.SG COMP hay-N.SG.GEN at 2SG.GEN
'Did you mow some hay?' (Obnorskij 1953 [=OB]: 157)

(6) *S* *molodych* *god* *vezde* *ži-t-o*
From young years everywhere lived.IPFV-PTCP-N.SG
'Since childhood, we have lived everywhere'. (K&N: 101)

ii. Intransitive verbs are compatible with the participial morpheme *-n-/-t-*, which therefore in NR cannot be truly qualified as passive. This is illustrated in the below examples with the verbs *vstat'* 'to get up' (7) and *uexat'* (8) 'to go away':

(7) *U* *menja* *uže* *vsta-t-o* *by-l-o*
at 1SG.GEN already got_up.PFV-PTCP-N.SG was.AUX-PST-N.SG
'I had already got up'. (K&N: 99)

(8) *U* *ego* *davno* *uexa-n-o*
at 3SG.M.GEN long_time_ago gone_away.PFV-PTCP-N.SG
'He's gone away since a long time ago'. (OB: 157)

iii. Inherently reflexive verbs (i.e. verbs not having a non-marked counterpart without the clitic reflexive pronoun in *-sja*) like *bojat'sja* 'to be afraid' in (9) can form an *-n-/-t-* participle. At large, *-n-/-t-* participles are always compatible with verbs having the reflexive marker *-sja/-s'* as witnessed by examples (10) and (11), with *oborvanas'* '(self-)ripped' and *napečenos'* '(self-)baked' (see also *vzja-t-os'* in (12) and *zapisa-n-o-s'* in (13)).

(9) *Bojano-s'* *vsex:* *ne* *smeeš'* *ni* *poest'* *ni* *popit'*
Be_afraid:IPFV.PTCP.N.SG-REFL all.PL.GEN NEG dare.2SG NEG eat NEG drink
'One is afraid of everyone: you dare not eat, you dare not drink.' (K&N: 114)

(10) *Vsja* *oborvana-s'* *byla*
all.F.SG ripped:PFV:PTCP.F.SG-REFL was.AUX-PST-F
'It was all ripped up.' / 'It had been all ripped up.' (K&N: 26)

(11) *Xleba* *napečeno-s'*
bread:M.SG.GEN baked:PFV:PTCP.N.SG-REFL
'Some bread has been baked.' / 'The bread is baked.' (K&N: 84)

As I have observed, some peripheral dialects lack properties ii. (intransitive selection) and iii. (reflexives). For the purposes of the proposal I will put forth in the next chapter, such cross-dialectal differences do not bear on the mechanism I will assume in order to explain variation in case/agreement patterns across the different dialects, described in the next subsection. In fact, the proposed device is based on the properties (varying across dialects) of the agreement morphemes attached after *-n-/-t-* and actually it does not interact with properties that are arguably relevant only for the reflexive morpheme *-sja* and are as well different across dialects. However, as I will try to show, the insertion of a reflexive morpheme (in the varieties permitting it) is licensed by the presence of an agreement morpheme.

e) The external argument (or the internal argument of unaccusatives), can optionally surface as a *by*-phrase, exactly as happens in CSR; still, the latter has the properties i.-iv., which makes it a quasi-subject. (Timberlake 1976)[8]

   i. Control over PRO: the null subject pronoun PRO in an infinitive embedded in a participial matrix clause is co-referent with the entity expressed by the *by*-phrase, i.e. 'he' conveyed by *u nego* in (12):

[8] In addition to the properties that qualify the *by*-phrase as a quasi-subject, Timberlake (1976) notes also that adverbials of space and time, which in the active voice are marked with accusative case, can acquire nominative case and trigger agreement in the participial predicate:

(12) *[U nego]*$_j$ *bylo* *vzjato-s'*$_j$ *PRO*$_j$ *skosi-t'* *gektar*
at 3SG.M.GEN was.PST.N.SG taken.PFV:PTCP.N.SG-REFL mow.PFV-INF hectare
'He undertook to mow the hectare'. (K&N: 99)

ii. Deletion in embedded clauses under co-reference with an argument higher in the structure: the external argument, in other words, can be 'represented' as PRO; in (13) the external argument of *zapisanos'* is compulsorily understood as co-referent with the subject *oni* 'they' of the matrix clause:

(13) *Oni*$_j$ *živut* *PRO*$_j$ *ne* *zapisa-n-o-s'*$_j$
3PL.NOM live.3PL.NOM NEG registered.PFV-PTCP-N.SG-REFL
'They live together, not having registered themselves'. (K&N: 8)

iii. Binding of anaphors: the *by*-phrase can bind an anaphoric element as the reflexive possesive svoj in (14):

(14) *A* *u* *menja* *svoj* *rebënok* *byl*
and at 1SG.GEN REFL:M.SG.NOM child:M.SG.NOM was: PST.M.SG
vzja-t-o *v* *Slancy*
taken.PFV-PTCP-N.SG in S.
'By me my own son was taken to Slancy'. (K&N: 36)

iv. Deletion of co-referential DPs under co-ordination: the *by*-phrase controls the deletion of a subject DP in a clause with which its clause is in coordination; in (15) the *pro* in the second conjunct can only be coindexed with the PP *u tebja* and cannot refer to the DP in nominative *udočka*:

(15) *Vot* *udočk-a*$_j$ *u* *tebja*$_k$ *by-l-a* *by* *vzja-t-a,*
here fishing_pole-F.SG.NOM at 2SG.GEN was.PST-F.SG SBJV taken.PFV-PTCP-F.SG
vot *by* pro$_{*j/k}$ *nalovil* *togda*
here SBJV caught:PFV.PST.M.SG then
'Had you taken a fishing pole, you would have caught a lot'. (K&N: 25)

(iv) *U* *menja* *odna* *zima* *xože-n-a*
at 1S.GEN one:F.SG winter:F.SG walked.IPFV-PTCP-F.SG
'I have been walking all winter long (to go to school)'. (K&N: 26)

The 'downgrading' of the time/space adverbials to nominative would thus represent the counterpart of the promotion of the *by*-phrase to the role of quasi-subject.

It must be stressed that the *by*-phrase does not have a single realization at a cross-dialectal level, being subject to three possible variants:

- 'locative' PP with the preposition *u* + DP.GEN; this is the most widespread variant (witness the examples provided so far, all with this *by*-phrase),
- 'ablative' PP with the preposition *ot* 'from' + DP.GEN in fewer dialects than the locative PP:

(16) *Ej* *adres* *by-l* *da-n-o* *ot* *Vani Griškina*
3S.F.GEN address.M.SG was.PST:M given.PFV-PTCP-N.SG from V. G.GEN
'Her address was provided by Vanja Griskin'. (K&N: 18)

- DP in instrumental case (like in CSR), though frequently alternating with the more common locative PP; the following example is from the variety of Šamokša, otherwise displaying *u* + DP.GEN[9]:

(17) *Tak* *sudom* *prisužo-n-o*
so court.INS sentenced.PFV-PTCP-N.SG
'The court so decided'. (K&N: 18)

As far as the first type is highly prevalent, and in view of the relevance it has for the discussion of my proposal, I will use only examples with *u* for ease of exposition and I will often refer to such PPs as the *u*-phrase. On the other hand, for the approach I will be pursuing in the explanation of the morpho-syntactic makeup of the participle, it will be of minor importance whether the Agent is expressed through a locative-possessive PP, an ablative PP or a DP in instrumental case.

[9] A word of explanation is in order about this tripartition: to be fully precise, these three ways in which the external argument is expressed have different syntactic features within a single dialect and, conversely, the locative phrase *u*+DP.GEN does exist also in CSR (where it occurs in the possessive construction) with the same properties it has in NR. Merely, the instrumental form of Standard Russian (and of some dialects, as recalled) is a specialized form for the Agent, that most NR dialects do not have or cannot use within participial contexts with *-n/-t*. The locative PP *u*+DP.GEN lexicalizes a different semantic property that corresponds to a wider portion of the conceptual space and that can be termed a zonal inclusion property (cf. subsection 5.2.6.1, p. 16 ff.); in certain contexts, like those of participial constructions, the denotation of the locative PP can correspond to the agentive reading, as we will see later. The less widespread ablative form with *ot* + DP.GEN can be thought of as a hyper-specialized form to point at the Agent that, too, is alien to most dialects and to CSR or, at least, is subject to restrictions that prevent it from appearing within participial constructions.

f) The NR past passive participle in predicative position has different properties, varying across dialects, w.r.t. agreement with the DP that expresses the Internal Argument of the verb, as it can agree in gender or number with the latter (i.) or acquire a non-inflected form (ii.).

i. Participle - Internal Argument nominative DP agreement: this kind of 'canonical' passive, which occurs is CSR, is the less widespread configuration; it is exemplified by (2)in the Introduction (repeated as (2) in section 3.1 and below again as (18)) and can appear side by side, in some dialects, with the non-agreeing construction (see next point ii.). The varieties having this kind of agreement can be termed, for ease of exposition from now on, as **AGR-dialects.**

(18) U nej by-l-a privede-n-a snox-a
at 3S.F.GEN was.-PST-F.SG brought.PFV-PTCP-F.SG daughter_in_law-F.SG.NOM
'The daughter-in-law was brought in by her.' / 'She brought the daughter-in-law in.'
(K&N: 20)

(19) Cerkvi-to vse sloma-n-o a ėta ne slomana
churches:NOM-DET all broken.PFV-PTCP-N.SG but this:F.SG NEG broken.PFV-PTCP-F.SG
'Churches are all destroyed, but this one is not'. (K&N: 42)

ii. Non-agreement with invariable participle[10] (**NONAGR-dialects**), displaying two variants:

ii.a. zero (masculine singular) inflection in *-n-/-t-* (***n*-dialects**), as in example (25);

ii.b. neuter singular inflection in *-no/to* (***no*-dialects**), as in example (1) in the Introduction (repeated as (1) in section 3.1 and below again as (20)):

(20) *U lisicy unese-n-o kuročk-a*
at fox:GEN carried_away.PFV-PTCP-N.SG chicken-F.SG.NOM
'A fox has carried off a chicken'. (K&N: 27)

[10] Constructions with non-agreeing participles display some affinity, at least at surface level, with another non-finite construction in the Northern varieties, the gerundial *-vši* construction, that in some works (e.g. Lavine 1999) is in fact dealt with along with the *-no/to* constructions.

The latter configuration with *-no/to* displays further cross-dialectal variation as to the morphological case of the Internal Argument DP, which can surface:

ii.b.1. in nominative case, as in (14) (**NOM-dialects**);

ii.b.2 in accusative case[11], as (21) (repeating (4), chap. 1 and (4), section 3.1) (**ACC-dialects**); when discussing this configuration in section 5.2.7 (p. 108 ff.), I will point out that, crucially, the accusative case can be associated only with participles having the invariable neuter ending *-no/to*.

[11] The Internal Argument DP can also surface, in certain contexts, in genitive case, as in examples (5) and (11), or in dative within a PP with the preposition *po*, as in (v) below, where *po* functions as a distributional operator w.r.t. the denotation of the predicate scoping over the External Argument of the latter ('one for each'):

(v) *Po* *korzink-e* *v* *ruki* *da-n-o*
PREP basket-F.SG.DAT in hands given.PFV-PTCP-N.SG
'Everybody was given a basket'. (K&N: 27)

Cases like this, however, do not represent case patterns different than those with nominative or accusative, but reflect regular alternations that hold, in CSR as well as NR, between structural case, on the one hand, and the genitive under negation or the distributional *po*-phrase, on the other hand. The CSR counterpart of (v) is, in fact, example (vi) with the *po*-phrase surfacing in a position where, in the absence of a distributional operator, the DP would receive structural (accusative) case.

(vi) *Každ-omu* *da-l-i* *po* *korzink-e* *jablok* (CSR)
each-M.SG.DAT gave.PFV-PST-PL PREP basket-F.SG.DAT apples:F.PL.GEN
'Everybody was given a basket of apples'.

Finally, as shown in the below example (from Harves 2003: 235), even the subject position of an inaccusative predicate can be occupied by a *po*-phrase:

(vii) *Po* *jablok-u* *upa-l-o* *s* *každogo* *dereva.* (CSR)
PREP apple-DAT fell.PFV-PST-N.SG from each tree
'A (different) apple fell from each tree'.

Taking all these facts into account, and as far as there are further complications affecting the behaviour of *po*-phrases in subject position (Harves 2003), I will abstract away from such cases and exclusively focus on the cross-dialectal alternation between nominative and accusative in the realization of the External Argument of the participial clause.

(21) *U* *dedka-to* *merëž-u* *ostavle-n-o*
at grandpa.GEN-DET fishnet-F.SG.ACC left.PFV-PTCP-N.SG
'Grandpa left a fishnet.' / 'A fishnet has been left by grandpa.' (K&N: 38)

Agreement with the auxiliary *byt'* 'to be' (in gender/number in the past tense and in number only for the future tense)also has different cross-dialectal realizations. This variance gives rise to further sub-types, listed below in points iii.-v.

iii. Auxiliary-DP-participle agreement, as in (18) above; this pattern fully matches the one found in CSR, where the DP triggers agreement both on the participle and auxiliary verb, hence it must be related to the typology described in point i.

iv. Auxiliary-DP agreement, lack of agreement with the participle (appearing in neuter as in (22)below and in (14) and (16) above; or in the non-agreeing masculine form as in (23) below): the DP triggers agreement in the auxiliary, but besides that this configuration is still to be considered as a sub-type of NONAGR-dialects (ii.):

(22) *Krovat'* *by-l-a* *kuple-n-o* *u* *ej*
bed.F.SG.NOM was:PST-F.SG bought.PFV-PTCP-N.SG at 3S.F.GEN
'The bed was bought by her' / 'She had bought the bed.' (K&N: 43)

(23) *Krugom* *by-l-a* *ograd-a* *obnese-n-Ø*
around was:PST-F.SG. fence-F.SG enclosed.PFV-PTCP-M.SG
'A fence was built around.' (K&N: 79)

v. Auxiliary-participle agreement, lack of agreement with the DP (cf. (24) with neuter participle; an example with the masculine participle is (3)of chap. 1, repeated as (3) in section 3.1 and below again as (25)): the complex auxiliary-participle is untied from the DP, as agreement is induced by the participle; this pattern is another sub-type of NONAGR dialects (ii.) and represents the counterpart to type iv., where agreement is triggered by the DP. It must be emphasized that this is the only possible configuration when the DP surfaces in accusative case (ACC-dialects, see point ii.b.2. above), as shown in example (26):

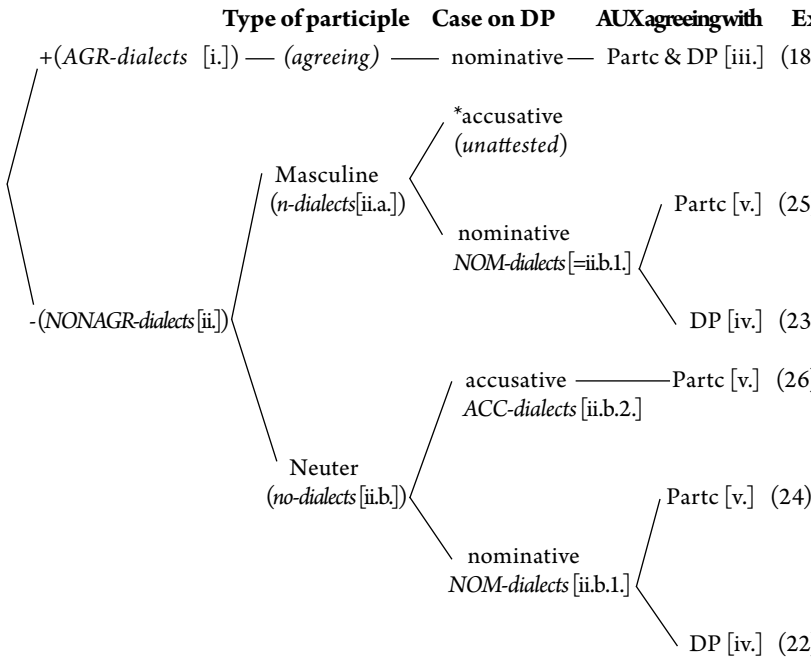
(24) *Pereexa-n-o* *by-l-o* *dorog-a* *tut*
crossed.PFV-PTCP-N.SG was-PST-N.SG road-F.SG.NOM here
'The road was crossed here.' / 'We crossed the road here.' (K&N: 36)

(25) *Prjalka* *ne* *by-l-Ø* *ešče* *postavle-n-Ø* *namesto*
spinning.wheel NEG AUX-PST-M.SG yet put.PFV-PTCP-M.SG in place
'The spinning wheel was not yet put back in its place'. (K&N: 79)

(26) *Vs-ex* *by-l-o* *vzja-t-o* *v vojnu*
all-M.PL.ACC was-PST-N.SG taken.PFV-PTCP-N.SG in war
'Everyone was sent to war'. (K&N: 38)

The vast range of possible options that have been described in point f) gives rise to a multi-branched set of variation points that characterizes the complex of NR dialects. Table 1 provides an overview of the relationships among the different sub-types that have been detected above, so as to show the range of variation affecting the syntax of the participial construction within this group of dialects. As recalled above, the lack of one configuration, namely the one with an accusative DP and a masculine invariable participle with zero ending, is of capital importance for the proposal that will be advanced; for this reason this unattested combination, too, is show in the schema, marked with an asterisk.

Table 1: agreement (participle-DP-AUX) and case (NOM/ACC) patterns in NR dialects



The picture emerging from Table 1, a complex system of case and agreement patterns, requires a structural proposal that might best account for any attested option, as well as for the one unattested (invariable zero-ending masculine participle with DP in accusative). In this respect, accounting for all the options will involve identification of all the parameters and all the properties of lexical elements that enter into play. Before turning to my analysis in the next chapter, however, I will review in the following sections the previous proposals that have been advanced on some of the paradigms just described and will discuss them in the light of the considerations I have made so far on the problem of variation.

4.3 *Previous analyses of participial constructions in NR*

As already remarked herein, the NR 'perfect' has repeatedly attracted the attention of researchers outside the restricted field of Russian dialectology, where fieldwork research had been carried out and data first described. Both the functional-typological school[12] and the generative field, in fact, have investigated these constructions for their relevance for linguistic theory, especially in regard to very broad notions like voice, case and subjecthood.

What follows is essentially a survey of the main arguments that have been deployed in accounting for the NR data w.r.t. the problems they pose for these notions, while there will be no space for another major line of inquiry, the diachrony of NR perfect, which has been particularly fruitful for the issues related to the theory of grammaticalization. However, since the main concern of the present work is not diachrony, which will be touched upon only in a cursory way, I will concentrate on works (mainly

[12] As remarked in the introductory chapter, in functionalist works the analysis of these constructions has focused more often on diachronic issues, in particular on the question whether the 'possessive perfect' is the outcome of the internal development of (Western and Eastern) Slavic varieties, possibly with some Baltic connection, or a by-product of Finnic and Scandinavian substrata or superstrata (Heine and Kuteva 2004; Danylenko 2005; Seržant 2012; see also Matthews 1955). In more recent times interest in the diachronic evolution of these constructions has been renewed by the discovery of new data from Old Russian. Actually, a point deemed of great importance (in reference to the 'internal' or 'external' origin of the possessive perfect) is fixing the period when the locative construction (*u* + genitive) started to express the external argument of the verb and, consequently, the newly discovered attestation of locative constructions used as by-phrases in birch-bark letters from Novgorod (Zaliznjak 2004: 245; Faccani 1995; Bjørnflaten 2000) has provided new evidence in favour of the Slavic-internal origin of the construction. Finally, it has to be recalled that in the generative field the diachronic evolution of these constructions has not gone unnoticed and one study in particular (Jung 2007) is fully devoted to this issue.

within the generative approach) offering structural proposals on these constructions and, at the end of the chapter, expose the reasons why an alternative explanation of their functioning is necessary.

4.3.1 *Partial demotion of the subject*

The idea of addressing the locative phrase *u* + NP_{GEN} in terms of an oblique or quirky subject has undoubtedly been the leading idea in the approaches to NR perfect, since the appearance of Timberlake's (1976) work. In this well-known paper, where the uncommon features of the NR participial constructions were approached in a typological perspective, the author first uncovered the properties of the locative PP described in the preceding section (point e), p. 63 ff.), arguing that its nature is that of a quasi-subject rather than of a true *by*-phrase of a passive clause.

Timberlake also noted that the behaviour of the element that should have been the syntactic subject of the clause, the 'underlying object' (i.e., the object of the corresponding active clause), was somewhat uncommon within constructions that appeared to be, at a morphological level, passives. In fact, the underlying object was failing most subjecthood tests, exactly those tests that were fulfilled, instead, by the locative PP. Hence, given that the underlying subject (the external argument of the verb) was behaving as a subject in accordance to all rules of grammar except for those involving case and agreement, the author's thesis was that NR constructions were not true passives because the distinctive feature of the passive voice, the operation demoting the subject of the clause, was missing. The subject of the active clause, thus, could not be taken as fully demoted since almost all its properties were also preserved in the passive construction. The counterpart to such an unfinished demotion of the subject was located in the defective promotion of the object to the role of subject: in the operation of passivization, in reality, the acquisition by the underlying object of properties typical of subjects (predicate agreement and nominative case) was infrequent and irregular, in such a way that the promotion of the underlying object to the status of subject could be considered, at best, as optional.

It was precisely the degree of such optionality that was responsible, according to Timberlake, for the different case and agreement patterns found in the different dialects; variation was conceived, thus, as the result of different diachronic stages, diverging from each other. In the dialects with non-agreeing participles (NONAGR-dialects, according to the taxonomy introduced in the preceding section) the sub-type with the internal argument in nominative and the one with accusative are held to be different outcomes of a preceding common diachronic stage, where case

assignment was governed by the type of nominal receiving it: accusative for pronominal forms and for DPs of the masculine declension having an animacy feature, nominative for all remaining nominals. Some varieties would have then diverged from this shared stage of development towards extending accusative to other nominal classes, whereas other dialects would have gone along the reverse path, by abandoning the marked option (accusative case) for animated masculine nouns and generalizing nominative to all nominal classes. AGR-dialects, in this picture, would display a slightly higher degree of promotion of the underlying object to the role of subject, as the latter is assigned nominative case and the ability of triggering agreement, but basically all remaining properties are still owned by the Agent, surfacing as the locative PP *u* + DP.GEN.

4.3.2 *Voice alternations*

In pre-minimalist literature, an alternative account to the quirky subject approach is offered by Franks (1995: 343 ff.) in the first analysis of NR participial constructions, which is framed within a more general inquiry of voice alternation phenomena in Slavic languages. The classic view on passive in the G&B framework is revisited in the light of Slavic data, by speculating that case alternations in the non-agreeing constructions (NOM-dialects *vs* ACC-dialects) obtains in virtue of parametric variation affecting the passive morpheme and in particular its ability to absorb structural case (nominative or accusative) in reliance on the position where it is generated[13].

Franks proposes that there is a Case Absorption Parameter, whose value is related to lexical (morphological) elements triggering voice shifts: for a sentence like (14), *-t-* in *vzjato* absorbs nominative case and therefore *svoj rebënok* moves to the subject position in order to receive nominative case. In an ACC-dialect like that exemplified by (21) the parameter for *-n-/-t-* is set, instead, on 'absorb nominative case' so that the verb keeps on assigning accusative case to its internal argument, which need not

[13] The analysis pursued by Franks is crucially based on the structure of the clause proposed by Chomsky (1993) entailing two AGR heads, AgrS and AgrO, for the agreement with subject and object respectively. The proposed parameterization is related to the position in which the passive morpheme is generated: the higher head, AgrS (= n / t) absorbs nominative case and only the lower head is thus available for assigning Case to the underlying object, which hence receives accusative case. If the passive morpheme is generated in AgrO a canonical passive obtains, by absorption of the accusative case, nominative remaining available for the argument that needs to receive case, the underlying object. For a language like Ukrainian, which has both a canonical agreeing passive and a -no/ to construction roughly matching with that of ACC-dialects, the parameter should then be set in such a way that both sites are available for the generation of the passive morpheme.

move to the subject position and get nominative case; the latter, on the other hand, is not available anymore because it has been absorbed by the participial inflection.

The fact that NONAGR-dialects have invariable participles is accounted for by attributing them, in a rather generic way, the status of 'frozen' predicative forms, never agreeing with a subject, nominative or otherwise[14].

4.3.3 *Quirky case and the EPP requirement in Lavine (1999; 2000)*

The intuition lying behind Timberlake's work, the locative PP *u* + DP.GEN as the true subject OF NR constructions, is revived, within a generative framework, by Lavine (1999), already assuming the postulates spelled out in Chomsky's (1995) Minimalist Program. In his paper Lavine investigates the constructions with invariable neuter participle and internal argument in nominative[15] along with another NR construction, the ge-

[14] As recalled in 3.3.1 (note 12), Franks discusses NR passives within a more general analysis aimed at decomposing the Null Subject Parameter into a more complex parameterization, following the line of thought initiated by Jaeggli e Safir (1989). Franks shows that the availability in a language of passive-cum-accusative constructions cannot depend solely on the availability, in that language, of null pronominal subjects. This is, in fact, the prediction made by the standard model for the passive of Chomsky (1981) and Rizzi (1982), whereby an alternation like that of Italian in (viii) vs (ix) holds in virtue of the ability of the passivizing morpheme si (obligatorily coindexed with the subject position) to absorb either nominative (viii) or accusative case (ix):

(viii) $[_{NP}\ e_j]$ $[_{VP}\ si_j$ *mangia le mele*] (Italian)
REFL eats.3SG the apples

(ix) $[_{NP}$ *le mele*] $[_{VP}\ si_j$ *mangiano* $e_j]$ (Italian)
the apples REFL eat.3PL
'The apples are being eaten.'

On the Chomsky-Rizzi model of passive, the unavailability of null pronominal subjects is the reason why in a language like English the passivizing morpheme cannot absorb nominative case, since if this were the case, an illicit null subject would arise. Franks, nevertheless, shows that passives-cum-accusative do exist in Ukrainian, which is considered to be a NSL like Russian (see preceding note 13). I will not go into further detail of Franks's rich system of parameters, but I will just restrict myself to observing that Franks himself acknowledges not to be able to account for all the phenomena affecting NR constructions, also due to some lack of clarity in the data, which he draws entirely from Timberlake (1976).

[15] Although Lavine does not explicitly address the n-dialects constructions, his analysis can be easily extended, besides no-dialects, to all NONAGR-/NOM-dialects.

rundial *-vši* construction and with the Lithuanian evidential in *-ma/-ta*, another invariable participial form.

The central issue in this paper is how the EPP requirement is satisfied in the constructions under discussion; the hypothesis that is put forward in this respect is that the internal argument DP, although in nominative case, is not involved in EPP-checking, since the latter can be performed by another DP, a s.c. 'ergative subject' in a similar fashion to Icelandic quirky subjects. In other words, Lavine says, *no/to* constructions in NR are not passive clauses but active ones, where subjects, merely, do not have nominative case and do agree with the inflected form of the verb. A fact is put forward as the most convincing evidence of such a claim, namely that *no/to* clauses are compatible with unaccusatives and derived unaccusatives (i.e. verbs affixed with the *-sja* reflexive marker), which do not have an external θ-role[16]: assuming that fundamental (and only) property of the voice-shifting operation deriving the passive voice is the dethematization of a verb's initial external argument (as is widely agreed in the literature, cf. Jaeggli 1986; Baker, Johnson and Roberts 1989), the conclusion that necessarily follows is that in the cases under investigation the passive voice is not involved at all.

The claim that the locative PP has the status of a subject is argued for, essentially, on the basis of the same subjecthood tests used by Timberlake, while its oblique marking is attributed to a specific lexical property of the *-no/-to* affix:

> The oblique (or PP) ergative, then, is assigned as a selectional property of the *-no/-to* and *-ma/-ta* derivational morphemes [...] Quirky case is assigned in the site of base-generation (i.e., at Merge). It enters the derivation [+interpretable]; there is no requirement that it be licensed in a structural position in the functional domain. (Lavine 1999: 320-321)

Having established the status of the nominative argument as the object of the clause (in opposition to the subject marked by quirky case), Lavine has to make recourse to a mechanism of Case-checking different than the familiar licensing by finiteness (abstract accusative case assignment by T), by adopting Harley's (1995: 152 ff.) idea that structural case realization is actually a morphological property of the clause as a whole, not a property of Tense or the verb[17]. In this sense, the morphological case

[16] The notion of 'derived' unaccusativity is assumed to entail a pre-syntactic morpho-lexical operation on a verb's argument structure, which suppresses the external θ-role.

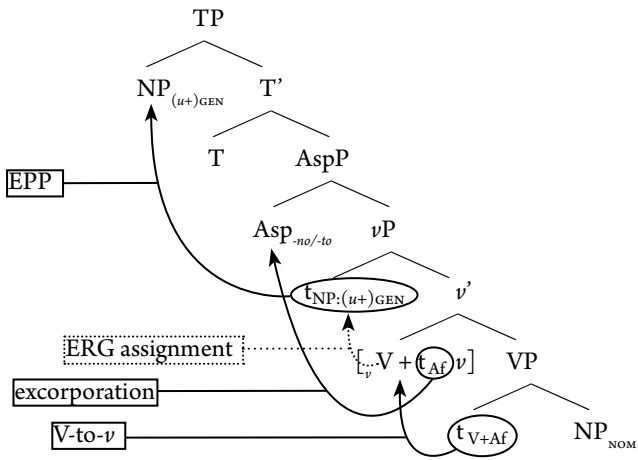
[17] Harley's proposal is in the spirit of Marantz's (1992) dependent case, which is appealed to by Lavine, as well. In the proposal I will put forward in the next chapter recourse to dependent case will be made, too, but it will be involved, crucially, in accusa-

assignment is seen as a purely mechanical process, divorced from particular positions in the clause and requiring that if nominative is not realized on the subject, because it receives quirky case, then it must be realized on the object: structural nominative is assigned to objects in object position – that is, in Spec, AgrO, according to standard hypotheses. The structure proposed by Lavine for transitive participial clauses, in accordance with these assumptions, is the following:

(27) $[_{TP}$ Spec T $[_{AgrOP}$ Spec AgrO $[_{vP}$ Subj v $[_{VP}$ Obj V$]]]]$

A further refinement of the theory is provided in Lavine (2000), where ACC-dialects are also brought into the picture. The account, to a large extent, does not differ from the proposal in his previous paper, but for treating some issues in more detail and generation of the *-no/to* affix in the Lexicon, already merged with V. The latter is postulated in order to account for the fact that the verb must not have a default accusative case feature; in NOM-dialects, in fact, if ergative case is assigned as an intrinsic property of the invariable participial inflection, case-assignment for the other NP remains subject to the theory of dependent case (Marantz (1992) – see note 17) and therefore nominative case is assigned. In the course of derivation the *-no/to* affix excorporates from V and raises to AspP, while V raises further to T, producing the wanted order as in (28).

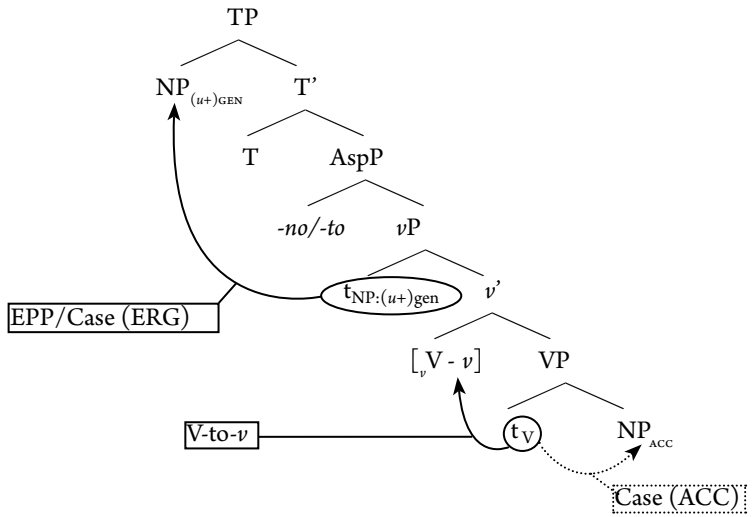
(28)



tive marking for ACC-dialects, not for nominative case assignment in NOM-dialects (see section 5.2.7, p. 16 ff.).

In ACC-dialects, conversely, *-no/-to* is generated in AspP as an independent head; as a consequence the assignment of accusative case by the verb is not inhibited, whereas ergative marking on the subject is still a property of the affixal head *-no/-to*. The resulting derivation is shown in (29):

(29)

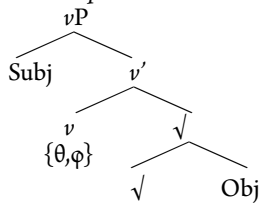


4.3.4 *Morphological ergativity and split* ***v*** *structure. Tsedryk (2006)*

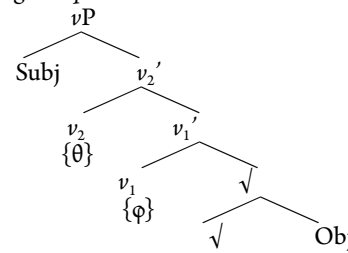
Tsedryk's (2006)approach to NR participles is partially similar to Lavine's in that reference is made to a notion of 'morphological' ergativity, and, likewise, for the proposal that *-n-/-t-* in NR is a syntactic head entering the derivation as such. However, while Lavine posits that the oblique marking on the verb's external argument is triggered by the participial inflectional head, in this case the latter would only be indirectly responsible for assigning it ergative case, since it is suggested that *-n-/-t-* is the Spell-Out of a special *v* head introducing only formal properties (φ-features), θ-properties being introduced by a higher extra *v* head. Basically, the proposal entails a dichotomy between accusative pattern and ergative pattern[18] that obtains, respectively, when formal properties and θ-properties are unified (on a single *v* head) or dissociated (on two different *v* heads), as shown in (30):

[18] The ergative and accusative patterns are not conceived as absolute parametric options, but are admitted to co-occur in a language in different environments. CSR constructions with Experiencer in dative case, as in (x) below (cited from Tsedryk's paper), are paramount examples of ergative patterns in languages that otherwise use the accusative marking, but split ergativity phenomena are well documented and discussed in the literature (see, e.g., Dixon 1994).

(30) a. *accusative pattern*



b. *ergative pattern*

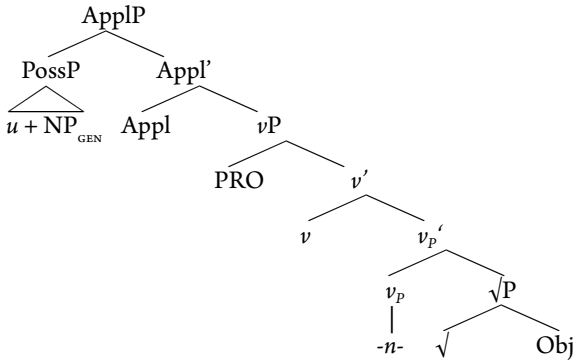


Tsedryk argues that NOM-dialects reflect the ergative pattern with the split-*v* structure in (30b) whereby the higher v_2 head introduces an external argument as a PRO element, while the lower v_1 (spelled out as *-n-/-t-*) contains a φ-set of a special kind where person features are interpretable but the remaining φ-features are not (v_P)[19]. On the assumption that accusative case is licensed when an uninterpretable κ feature on D is checked either against a tense feature on T or an eventive feature on v (basically an Agree operation (Pesetsky and Torrego 2004)), in (31)v_P, after adjoining by head-movement to the higher v, does not c-command anymore the object and for this reason it cannot act as a probe seeking an unvalued κ on the object: the latter thus receives default case, nominative/absolutive. Clear evidence of this higher v head in NR is provided, according to Tsedryk, by the compatibility of participial forms with the reflexive *-sja* that is inserted in this position, as denoting a θ-property of *v*. Correspondingly, the mutual exclusion between *-n-/-t-* and *-sja* in CSR would be the piece of evidence that in the tree there is only a v_P head, which does not introduce an external argument.

(x) *Otc-u* *nadoe-l* *rebënok* (CSR)
father-M.DAT bore.PFV-M.PST child.M.NOM
'The child bored father'.

[19] An interesting observation made by Tsedryk is that in Russian *-n* and *-t* mark the third person, in the pronominal (*o-n* 'he', *o-n-a* 'she', *o-n-o* 'it') and verbal (*čita-e-t* 's/he reads', *čita-ju-t* 'they read') domains, respectively. Hence, these inflections are argued to be the spell-out of a third-person feature. However, an explanation of why these inflections occur as allomorphs is not provided and this hypothesis, though intriguing, is not supported by a convincing account of the mismatch that occurs when it comes to the selectional properties of n and t in different environments. Actually, the factors regulating the distribution of two morphemes (allegedly lexicalizing a single feature) are, in one case, clearly syntactic (*-n* in pronouns and *-t* in verbal inflections), whereas in the other case they depend on the inflectional class and on the phonological properties of the verb base (for details on the *-n-/-t-* allomorphy see note 3, p. 16). Cross-categorial lexicalization of a single feature must therefore be excluded.

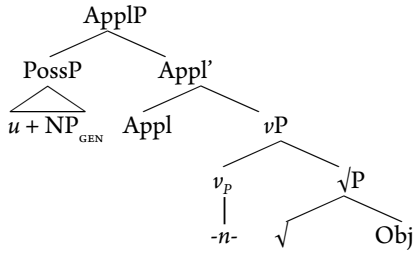
(31)



The locative PP *u* + NP.GEN (in (31) notated as PossP), which is optional and may be freely dropped, is not considered an argument of the verb marked by 'ergative' case, but rather an 'argument introduced by an Appl head'(Pylkkänen 2002). Consequently, Tsedryk postulates a PRO in subject position in order to derive the arbitrary interpretation if the ApplP is missing, and the agentive interpretation if an ApplP is inserted and binds PRO. In CSR (see the corresponding structure in (33)) there is a single *v* layer, with a v_P head not introducing the external argument and therefore the locative-possessive PP cannot bind an argumental PRO, but must necessarily scope over the entire predicate. Therefrom the contrastarises between NR and CSR in availability of different readings for an example like (32): while in NR the locative phrase can be interpreted either as the Agent or the Beneficiary, in CSR the agentive reading for the locative PP is unavailable since it can only point at the entity concerned with the effects of the action described by the predicate, i.e. at its Possessor or Beneficiary.

(32) *U otc-a nakoše-n-a trav-a*
at father-GEN mown-PTCP-F.SG grass-F.SG
'Father has mown the grass' [father=Agent] ✓NR / #CSR
'Father has/had the grass mown' [father=Beneficiary-Possessor] ✓NR / ✓CSR

(33)



A fundamental point for Tsedryk's system is the featural composition of the *vP* head, that would be responsible for the difference between NOM- and ACC-dialects, on the one hand, and between *no*- and *n*-dialects, on the other. The latter difference is in fact accounted for by hypothesizing, besides the third person interpretable feature, extra uninterpretable φ-features on *vP* for the *no*-dialects: these uninterpretable features get neutralized and at PF receive the default inflection *-o*[20]; in *n*-dialects *vP* is defective (vP_{def}) with an interpretable person feature only, so just the latter is spelled out as *n* or *-t* and *-o* is not inserted at PF.

As to the ACC-dialects, the account that is provided relies on the presence of a [+EPP] subfeature on the uninterpretable φ-features of *vP* (Pesetsky and Torrego 2001), attracting the underlying object to Spec,*vP*pP: accusative morphology, then, reflects the checking of [φ, +EPP] in *vP*[21].

[20] That *-o* in Russian is the exponent of neutralized φ-features has been previously argued for by Tsedryk himself (2004).

[21] According to Tsedryk, this is also the reason why in ACC-dialects the participial inflection is always neuter with *-no/-to* (see point f) ii.b.2, p. 87), because a defective $v\text{P}_{\text{def}}$ (spelled out as masculine *-n/-t* inflection) has no uninterpretable features and thus cannot have a [+EPP] subfeature. However, it is not really clear to me why accusative morphology should be the reflex of a checked [+EPP] feature: in note 10 (p. 362), it is explained that if vP is [+EPP] the object is pied-piped to Spec, PP and the valued uninterpretable features of *v*P delete (A-movement deletes features, while Agree does nothing but just relate them) and cannot be probed by the subject; at this point, one might suppose that – nominative case assignment being unavailable – the object is assigned accusative case by Agree with a higher head (T?) that can check its κ feature, but nothing is explicitly said about this by Tsedryk. The lack of uninterpretable φ-features on a $v\text{P}_{\text{def}}$ is also the argument employed by Tsedryk to justify the presence of participle-copula agreement in *n*-dialects: a $v\text{P}_{\text{def}}$ cannot enter agreement with any head, thus the copula must necessarily agree with the underlying object DP. What he seems to suggest is that in *n*-dialects the invariable participle and the auxiliary never agree in masculine gender. This statement, though, is contradicted by an example I have repeatedly cited (as (25) at page 16, below again as (xi)) to epitomize a class of NR varieties, those displaying copula-participle agreement without agreeing with the underlying object DP (see point f) v., p. 16).

(xi)	*Prjalka*	*ne*	*by-l-Ø*	*ešče*	*postavle-n-Ø*	*na mesto*
	spinning.wheel	NEG	AUX-PST-M.SG	yet	put.PFV-PTCP-M.SG	in place
	'The spinning wheel was not yet put back in its place'.					(K&N: 79)

4.3.5 *The **be/have** parameter: little -**v/n** structures (Jung 2007; 2009)*

The most comprehensive treatment of NR participial constructions is also the most recent, namely Jung (2008)[22] and some previous papers of hers (Jung 2007; 2009). In Jung's work, cross-dialectal variation is connected with the alternation between be and have in natural languages to express possession, centring on the view that *have* is the spell-out of a locative preposition that incorporates into *be* (*P-to-BE incorporation*: Freeze 1992; Kayne 1993). Jung's theory takes as its starting point an underlying structure for the possessive construction in Russian (34) where the possessor (in this case, the 1st person pronoun) is an external argument[23] of the *possessum* (here *kniga* 'book'), which is generated as a predicative nominal in a DP structure embedded under the BE-phrase.

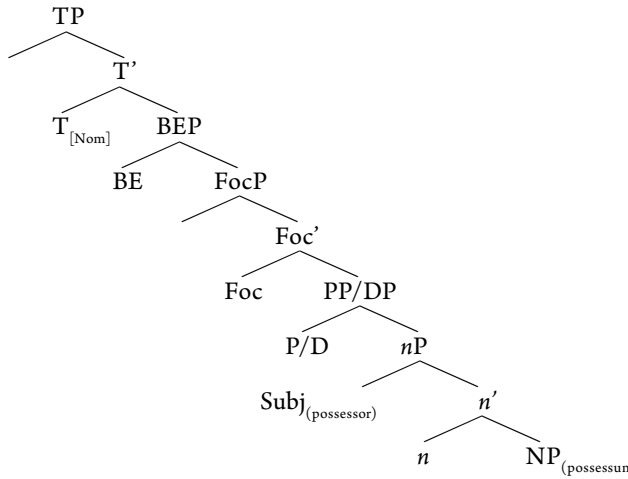
(34) *U* *menja* *est'* *kniga*
at 1SG.GEN is.AUX book.F.SG.NOM
'I have a book'.

In this system (Jung's clausal skeleton for the possessive reproduced in (35)) both arguments are generated within a nominal projection, *n*P, from which the *possessum* raises to a position between BEP and *n*P corresponding to the Low Focus Phrase of Belletti (2004), whereas the possessor (which is the remnant of the movement operation raising the *possessum* to FocP) subsequently raises to TP to check the EPP feature in T, yielding the surface structure in (36).

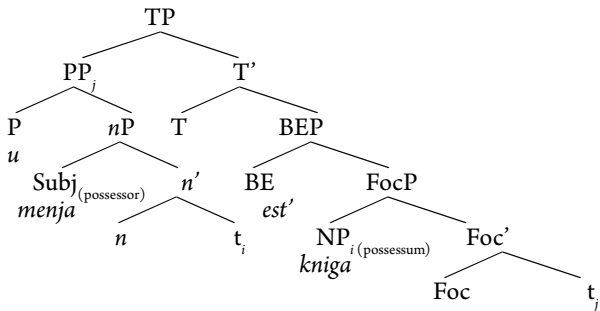
[22] Jung's PhD. thesis has been subsequently published as a monograph with some revisions (Jung 2011). Here I will make reference to the 2009 thesis only.

[23] The question whether the Possessor argument can be base-generated as a PP (rather than a DP undergoing subsequent operations embedding it under a PP) is tackled by Jung while discussing previous approaches to the structure of existential and possessive clauses, but is left intentionally open. The fundamental point that is stressed is that the *possessum* DP is a predicate and the PP (the possessor) is its external argument.

(35)



(36)



Building on Kayne's (1993) proposal extending the possessive structure to the *have*-perfect, where just *v*P is replaced by an *n*P projection, the resulting structure for the perfect in a *have*-less language is argued to have an embedded CP with a prepositional complementizer and a FocP between the BE-phrase and the CP, as in (37) below:

(37) $[_{TP}\ [_{T'}\ T\ [_{BEP}\ BE\ [_{FocP}\ [_{Foc'}\ Foc\ [_{PP/CP}\ P\ [_{vP}\ Subj\ [_{v'}\ v\ [_{PartP}\ Part\ [_{VP}\ \ldots$

To account for the difference, within the NONAGR-dialects, between NOM- and ACC-dialects, Jung proposes that the variation amounts actually to a minimal parametric alternation between *n* and *v*. InNOM-dialects the participial construction contains a nominalized structure with a VP embedded under an *n*P, turning a verbal structure into a nominal one. The external argument, again equated to an ergative subject, is generated in Spec,*n*P and receives genitive case from P (the preposition *u*):

(38) $[_{pP}$ P $[_{nP}$ Subj n $[_{VP(PartP)}$ V Obj]]]

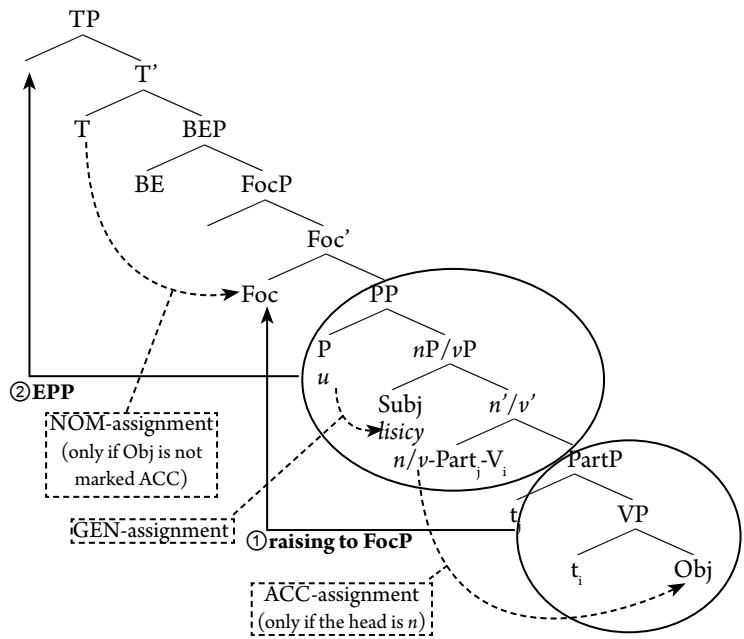
In the same way as happens in the possessive construction, the entire participial VP (notated PartP in (38) above) is attracted to the functional node FocP and subsequently the PP undergoes remnant movement to Spec,TP to check the EPP. Since there is no higher c-commanding node containing an accusative case assigner, the object enters agreement with the T head, assigning it nominative case.

In ACC-dialects VP (PartP) is dominated by a *v*P, i.e. a genuinely verbal projection that thus assigns accusative case to the object. In (39) it is clearly visible how the ACC-dialects structure minimally differs from (38) for NOM-dialects:

(39) $[_{pP}$ P $[_{vP}$ Subj v $[_{VP(PartP)}$ V Obj]]]

Collapsing (38) and (39) into a single abstract structure, the derivation we get for ACC- and NOM-dialects is:

(40)



Jung assumes (*contra* Tsedrik) that the invariable morphology, neuter or masculine, of participles in NOM-dialects is not a kind of default, but in reality has lexicalized φ-features of gender and number, since they have

the ability to trigger, in some instances, the agreement with the copula. The lexicalization of φ-features is conceived as a sort of nominalization producing a mixed category as intermediate between verbal and nominal projections. On the basis of the usually assumed featural composition of participles as [+V, +N], Jung posits that [+N] is assigned in the Lexicon if the participial morpheme is underspecified as 'distinct from [-N]': when the VP (PartP) raises by head-movement to *n*, the latter re-introduces a verbal projection as a nominal one, which as such must have lexicalized φ-features[24].

4.4 *Remarks on previous proposals on NR participial constructions*

A major trend emerging from the (partial and non-exhaustive) overview of previous proposal on NR participial constructions I have provided is the recourse to the idea of 'oblique' or 'quirky' subject for the locative PP expressing the external argument. Actually, the inclination towards explaining many phenomena in terms of this notion is quite pervasive in the generative literature on Slavic languages, oblique subjects having been employed by Rivero and Savchenko (2005), in the analysis of anticausative constructions in CSR, by Moore and Perlmutter (1999; 2000) on infinitival modal constructions with dative[25], by Lavine for Polish and Ukrainian *no/to* constructions (Lavine 2005)[26].

[24] In ACC-dialects, as far as I can understand from Jung's discussion, the *-o* ending is instead a default inflection, because the head of the projection dominating VP (PartP) is *v*, hence a verbal one (Jung 2008: 251-252, 255 ff.).

[25] In modal infinitival constructions (which basically have a deontic/necessitative semantics) dative-marking is not lexically determined by the verb base, since it may possibly occur with any verb, as shown in the following examples:

(xii) *Mne* *uxodi-t'*? (CSR)
1SG.DAT go_away.IPFV-INF
'Should I go?'

(xiii) *Vam* *ne* *naj-ti* *storožej* *lučše* *nas* (CSR)
2PL.DAT NEG find.PFV-INF watchmen.M.PL.GEN better 1PL.GEN
'You won't find better watchmen than us'. (Russian National Corpus)

See also Franks (1995: 249 ff.) and references cited therein. For criticism of Moore and Perlmutter's arguments see Sigurðsson (2002).

[26] In his paper Lavine proposes that *-no/to* in Polish is only apparently a morphological affix, being actually a syntactic head entering the derivation and inserting in a position that is otherwise available for insertion of non-clitic auxiliaries (*był-* 'was',

Obvious landmarks for the works discussed in the preceding sections (as well as for the ones cited above) are, on the one hand, the literature on Icelandic quirky subjects (Zaenen and Maling 1984; Sigurðsson 1992, among many others) and, on the other hand, split ergativity environments, which are cross-linguistically often matching with the perfect (see, e.g., Mahajan 1997 on ergativity in Hindi-Urdu).

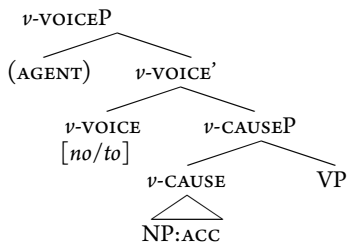
The proposals discussed so far, however, while assigning the *u*-phrase the status of sentential subject, are rather vague on its optionality, that results in a multiplicity of possible readings, as impersonal, generic, or anti-causative (or in an ambiguity between two or more of them – see the glosses to examples (10)-(11)). Lavine's analysis is directed against a characterization of NR constructions as passive clauses, since they lack the fundamental property of passive voice, the demotion of the verb's external argument obtained by assigning the *external* role and the *internal* case to a single element, the passive, which is realized as INFL or N, according to classical treatments (cf. Baker, Johnson and Roberts 1989). Lavine's main argument against an 'impersonal passive' analysis of NR constructions is the ability of *n*(*o*)/*t*(*o*) to combine with unaccusatives, that do not have an external role, but the analysis entailing an ergative subject cannot actually account for examples like the following ones, where there is not any subject, be it ergative[27] or not[28]:

będzie'will be', etc.); this would account for many observable differences with the Ukrainian passive-cum-accusative that has as well the *no/to* inflection. On the basis of the semantic restrictions affecting this construction in Polish (first of all the prohibition for whatsoever *by*-phrase to surface), Lavine postulates a PRO_{arb} head (with animate reference) as an argument of V, subsequently raising to Spec,TP to check the EPP. Strictly speaking, hence, in Polish, contrary to Ukrainian *-no/to* passive, we do not have a quirky subject but an empty category PRO.

[27] See also examples (6), p. 16 and (24), p. 16, and the just recalled examples (9)-(11), p. 16.

[28] For sake of completeness, I have to cite a recent paper of Lavine's (2012) where he actually tackles the question of the optionality of the u-phrase in NR In particular, it is argued in this paper that wherever the theme DP is in accusative cause, there is a divorce between the argument-introducing property of Voice and its accusative case-assigning property (i.e. VOICE and CAUSE are unbundled), resulting in split-*v* structure as below:

(xiv)



(41) *Vrači* *xoroši* *v otpusk* *otpuščeno*
doctors.M.PL.NOM good.M.PL.NOM to leave let_out.PFV.PTCP.N.SG
'They let good doctors to go on vacation'. (K&N: 35)

(42) *Grebenku* *slomato*
comb.F.SG.ACC broken.PFV.PTCP.N.SG
'The comb broke / has been broken'. (K&N: 38)

Even in the proposal advanced by Tsedryk, who correctly observes that the *u*-phrase, as purely optional, is likely in Ā-position, the postulation of a PRO in Spec,*v*P has the flavour of an *ad hoc* solution to reconcile the ergative subjects predicted by the spilt-*v* theory with the fact that they can actually be lacking at all. As Jung (2008: 231) observes, the insertion of a PRO into the structure is also theoretically problematic as far as the predicate, first of all, is a matrix clause and, secondly, the clause is a finite one. For the standard theory of control (Chomsky and Lasnik 1995), in fact, PRO is the only category having null Case, and the latter is licensed only in the Spec of a non-finite TP; in the case under consideration the finite T may assign nominative case in the usual way and therefore it is not clear how a PRO could fill the Spec,*v*P position that is probed by a higher T in a long-distance Agree relation (at least according to Chomsky's (2000) feature-checking model assumed by Tsedryk).

Moreover, these approaches to NR constructions appears to be unsatisfactory in not taking into account the full range of variation as described in Table 1 (p. 89): while Tsedryk's theory rules out an agreement pattern with the auxiliary which, on the contrary, is attested, Lavine does not include in his analysis AGR-dialects or, more precisely, he takes it that all the properties of NR constructions (even those that are subject to variation, as the accusative *vs* nominative marking of the internal argument DP) can be derived from properties of the derivational morpheme *-n(o)/t(o)*, thus ignoring AGR-dialects. Jung's system, too, excludes *de facto* AGR-dialects, since they are equated to CSR canonical passive and thus completely divorced from the constructions with invariable participles, on the basis of the properties and the nature of the *u*-phrase, which is thought of as an applicative phrase in the case of the canonical passive and as ergative subject in reference to *-n(o)/t(o)* constructions.

As a matter of fact, the structure proposed by Jung for NOM-dialects with an *n*P projection (in (38) above) may also be compatible with the pattern of AGR-dialects, since it is explicitly stated that φ-features are

Accusative case, thus, is licensed by the lower cause *v* head while the presence of an external argument, if any, by the higher voice-introducing *v*.

lexicalized in the participle (see above, p.76). If we further stipulate, for example, that in AGR-dialects φ-features on *n* are uninterpretable and therefore act as a probe seeking the corresponding interpretable features on the object (thus checking its φ-features, i.e. agreeing), the general structure proposed by Jung may turn out to be compatible with the agreeing pattern too. However, it is quite striking that the configuration with the nominative DP agreeing with both the copula and the participle is not even mentioned by Jung, who comments only on the agreeing pattern in CSR.

I have to stress here that telling apart AGR-dialects in the analysis (as Lavine and Jung do) is not consistent with actual data, if we take into account the properties of the participles and of the *u*-phrase considered by all authors as the distinctive features of NR perfect (cf. section 4.2.2), since they are all the same reflected in much data from K&N where there is agreement between the participle and the DP:

- Non-ambiguous agentive reading of the *u*-phrase:

(43) Sapogi byli spleteny u menja iz lyk
shoes.M.PL.NOM were.M.PL plaited.PFV.PTCP.PL at 1SG.GEN from bast.GEN
'I plaited shoes from bast'.

(44) *Šapka-to u parnja v okno brošena*
hat.F.SG.NOM-DET at guy.GEN in window thrown.PFV.PTCP.F.SG.
'The guy threw the hat into the window'. (K&N: 24)

- Compatibility with perfective verbs:

(45) *Operacija u menja delana – tak na zrenie povlijalo*
Operation.F.SG.NOM at 1SG.GEN done.IPFV.PTCP.F.SG ...
'I did surgery, it affected sight'. (K&N: 93)

- Compatibility with the reflexive affix *-sja*[29]:

(46) *Ja-to zamazana-s'*
1SG.NOM-DET smeared.PFV.PTCP.F.SG-REFL
'I smeared (with something)'. (K&N: 26)

- Binding of anaphors:

(47) *U nego svoja izba postavlena*
at 3SG.M.GEN his.REFL.F.SG.NOM hut.F.SG.NOM put.PFV.PTCP.F.SG
'He has built his hut'. (K&N: 23)

- Deletion of co-referential DP under coordination (example (15) repetead below as (48)):

(48) *Vot udočk-a*$_j$ *u tebja*$_k$ *by-l-a by vzja-t-a,*
here fishing_pole-F.SG.NOM at 2SG.GEN was.PST-F.SG SBJV taken.PFV-PTCP-F.SG
vot by pro$_{*j/k}$ *nalovil togda*
here SBJV caught:PFV.PST.M.SG then
'Had you taken a fishing pole, you would have caught a lot'. (K&N: 25)

That said, it must be acknowledged that among the merits of Jung's proposal are the unification of the perfect and the possessive constructions within a single abstract structure, and an elegant account of the difference between NOM- and ACC-dialects by way of a minimal parametric variation *n/v* in the functional domain of the clause. Likewise, this unification of the possessive and perfect entails the generation of the oblique subject consistently with the general structure of the clause and not as an idiosyncrasy of certain lexical heads. Nonetheless, even this system does not provide an answer to the question of the optionality of the locative PP, while being rather costly in terms of movement operations needed to arrive at the surface configurations that it accounts for.

Finally, I would like to add a further argument against characterizing the *u*-phrase as a subject, more precisely against producing the (allegedly) obligatory preverbal position of the locative PP as evidence of its subject status. In fact, such an argument (offered in particular by Lavine 2000: chap. 4) has many counterexamples in K&N's data, among which are the examples below, where the *u*-phrase is placed after the verb:

(49) *Gruši bylo privezeno u jej*
pears.PL.NOM was.AUX.PST.N.SG brought.PFV.PTCP.N.SG at 3SG.F.GEN
'The pears were brought by her'. (K&N: 43)

(50) *Ešče éta izba stavlena u otca moego*
again this.F.SG.NOM hut.F.SG.NOM put.IPFV.PTCP.F.SG at father.GEN my.GEN
'This hut, too, was built by my father'. (K&N: 93)

(51) *Naplakano-s' u Njury*
cried_hard.PFV.PTCP.N.SG-REFL at N.GEN
'Njura cried a lot' / 'They cried a lot at Njura's'. (K&N: 114)

Of course, it would be possible to argue for dislocations (e.g. topic fronting of *gruši* in (49)) to account for the post-verbal position of the subject, but likewise there are no obstacles to characterizing, e.g., (49) and (50)

as passive clauses, the former with non-agreeing participle, the latter as a canonical one with agreement. In (51) there are clearly two possible readings, the interpretation of the PP not being univocally agentive: the PP *u Njury* can either express the Experiencer of the predicate or simply be a circumstantial locative phrase to denote the place where the event takes place ('at Njura's'), as is evident from the glosses. Such a consideration could, in principle, also be applied to many of the examples we have provided so far[29]; casting further doubts on the claim that the EPP requirement in these construction is satisfied by the locative PP.

Hence, in the proposal I am going to present in the next chapter, I will be following a two-fold track: on the one hand, I will not characterize the constructions under analysis strictly as either passive or active and, on the other hand, I will try to show that abstracting away from constituent ordering and considering the pieces of morphology as true constituents that enter the derivation as such, it is possible to provide an alternative explanation of how the EPP requirement is satisfied in NR. On these premises, I will work out a theory in which the agentive reading of the *u*-phrase (wherever it obtains) is derived straightforwardly from properties of the locative PP *u* + DP.GEN both in NR and in CSR, without assuming that it is inserted under different functional projections in NR and CSR.

[29] Among the examples (16), repeated below as (xxxix), is notably interesting for displaying a post-verbal locative PP with the preposition *ot* 'from' instead of the usual *u* 'at'.

(xv)	Ej	adres	by-l	da-n-o	ot	Vani Griškina
	3S.F.GEN	address.M.SG	was.PST:M	given.PFV-PTCP-N.SG	from	V. G.GEN

'Her address was provided by Vanja Griskin'.

(K&N: 18)

5

THE MORPHO-SYNTAX OF PARTICIPIAL CONSTRUCTIONS IN NR

5.1 *The framework*

The theoretical background of my proposal is the framework of unification of Morphology and Syntax developed by Manzini and Savoia in several works (Manzini and Savoia 2007; 2008a; 2011a from now on collectively referred to as M&S). Reference will be repeatedly made, too, to previous papers which this framework rests upon (e.g., Manzini and Savoia 1997; Manzini and Roussou 2000) and to subsequent developments of the theory (Roussou 2009; Manzini, Roussou and Savoia forthcoming; 2015; Manzini and Roussou 2011; 2012).

In the following subsections 5.1.1, 5.1.2, 5.1.3, I will briefly present the basic theoretical assumptions of this framework that will underlie my proposal, emphasizing its major departures from mainstream Minimalism.

5.1.1 *Morphology as syntax*

The basic working hypothesis underlying M&S's model, mainly for reasons of theoretical simplicity, is that morphological structures are identical to syntactic structures or, better, that they are built on the same set of categories or categorical features. This entails that the traditional split between morphology and syntax, that is also ultimately implemented in the most recent generative models and in particular in the standard reference theory for sub-syntactic partitioning – Halle and Marantz's (1993) Distributed Morphology, cannot be maintained within a minimalist system, at least if a suitable way is found of associating any lexical element not only with a PF-representation but also with a LF interpretable property (that is, to some semantics). In other words, if it is proved feasible to build a system where the denotation of elements situated at the word level corresponds to the denotation that syntactic categories like D, N or Q have at LF level, it will be possible, then, to adhere strictly to the minimalist idea that structures are projected from the Lexicon and to pursue the elimination of empty categories (*pro*, PRO) and, in general, of all heads not endowed with phonological content.

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We can better understand how this kind of requirement (all overtly realized elements must be interpretable, which after all is but adhering to the principle of Full Interpretation) is connected with the lack of a separate morphological component, if we consider the basic sentential skeleton proposed by M&S, developed within their work on Romance varieties with particular reference to issues of clitic string ordering.

5.1.2 *The EPP and the basic clause structure*

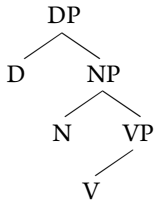
M&S assume the definition of subject and the EPP stated in Chomsky (1995: 232-235), whereby the EPP is conceived as a D(efiniteness) property of the clause, although they implement this property not as an obligatory feature on the clausal head I (or T) but as a denotational category. In Chomsky's original proposal, in fact, the EPP is reduced to a strong D-feature in T requiring raising of a DP to Spec,TP or insertion of an expletive (see the discussion in sections 3.2 and 3.4), while M&S's idea is that D is both the denotational property (Definiteness, so in accordance with Chomsky 1995) and the element(s) expressing it, that is to say, its lexicalization. Hence, in M&S's system, the distinction between features and their values is dispensed with, in such a way that the former are no longer thought of as abstract binary features (+/-), and it is rather the latter that receive an overt lexicalization, in most cases in word-internal position, i.e. in the form of pieces of morphology[1].

With this background, and having assumed that the fundamental positions of the verb in clausal spine are those generally accepted in the literature, i.e., C, T and V, M&S posit that the latter, besides representing the predicative content of the event, projects a set of arguments that includes at least the subject and the object. Hence, the subject position is defined as D, whereas for the object the adopted categorization is N, insofar as it is the point of saturation of the predicate, that is, its internal argument that is indispensable for the event structure. The operation of Merge of the V predicate with an object N and with its subject D creates the structure reproduced in (1)[2]:

[1] Recall the case of plurality, briefly discussed on p. 25 in section 2.3.5, which best serves as an example of this overlapping between a feature and its value. In lieu of the result of a [±sg., ±aug.] feature bundle, the plural is derived at the interpretive level from the lexicalization of the property of plurality only.

[2] Note that X-bar notation is conventionally applied in (1) and subsequent structures (3) and (4).

(1)



At this stage, adopting the commonly shared assumption that the fundamental position of the inflected verb within the sentence is not V, but rather a higher one, conventionally I, M&S extend the argument-projecting property of V to this position as well. Thus they propose that in a language that obligatory lexicalizes a subject at least in the form of a subject clitic (e.g. Northern Italian varieties) the latter is inserted in the position dominating I, whereas a post-verbal subject (e.g. in Italian) is inserted in the D position dominating V and is thus embedded under the inflected verb projection in I. On the basis of independent evidence from Romance and Albanian varieties they finally arrive at the conclusion that each one of the fundamental positions of the verb (V, I and C as well) projects its own set of nominal positions and propose a basic clausal spine structure as in (2):

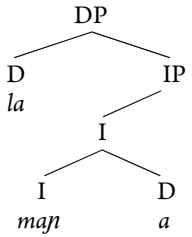
(2) [D [N [**C** [D [N [**I** [D [N [**V**

On the hypothesis that morphological structures are hierarchically articulated as syntactic ones, and that the verb inflection is in a D position within the verb's internal structure, since it indeed lexicalizes the D(efiniteness) property, the structures that must be posited for a subject clitic language like Modenese and for a post-verbal subjects in language like Italian are those shown in (3) and (4) respectively.

(3) *Modenese*

a. *la* *maɲ-a*
CL.3SG.F.SBJ eats-PRS.3SG
'She eats'

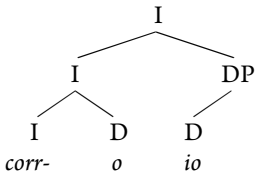
a.



(4) *Italian*

b. *corr-o* *io*
run-PRS.1SG 1SG.SBJ
'I run'

b.



Besides D and N, M&S identify further morpho-syntactic categories corresponding to denotational properties under which the clitic and pronominal series of Romance could be, in their view, better accommodated than in generative treatments that make use of traditional inflectional features like Case, Number, Gender and Person. Hence, recalling that the internal structure of the inflected verb can be built over the same hierarchically ordered set of elements of the clause, any morphological property/category can be represented as an *independent position* in a constituent structure tree. This results in a more articulated clause skeleton that is obtained by expanding (2) with the addition of a series of nominal positions over each one of the verb's fundamental positions. The expanded clausal tree is shown in (5), where the dotted space is to be understood as filled by the same string (D-R-Q-P-Loc) dominating the higher C position; each of these categories is associated with one of the properties listed in (6).

(5) [D [R [Q [P [Loc [N [**C ...** [**I ...** [**V**

(6)
a. D Definiteness (subject/EPP – determinative article)
b. R Referentiality: reference / specific quantification
c. Q Quantifiers (indefinite quantification)
d. P Person (1st/2nd – reference to hearer or speaker, including possessives)
e. Loc Locative (reference to spatial coordinates, including demonstratives)
f. N Nominal Class (predicative properties of Noun - object - nouniness → 3rd person)

In the proposal that I will lay out shortly, the relevant properties/categories I will make reference to are D, N and Q. In this respect, the latter category Q requires some further specifications: in M&S's proposal Q is a position hosting clitics having the property of indefinite quantification, i.e. that can be quantified over; as such, the Q category has the nature of a variable or, more precisely, is the element that introduces it and, in order to be interpretable at LF, must necessarily be bound.

Turning back to the characterization of the D category offered by M&S (EPP=D-property) and to the full isomorphism (or rather, identity) that has been established between pieces of morphology and syntactic heads, the natural consequence of this state of affairs is that a D element can possibly be inserted directly in word-internal contexts and, more importantly, can be doubled by another D element in the tree (as we have seen in (3), (4)).

5.1.3 *Movement and agreement*

Another guideline of M&S's framework that will be implicitly assumed in my proposal is the representational nature of grammatical relations, as opposed to mainstream derivational models of current generative research. The representationalist view has great impact in entailing at least two fundamental consequences:

a) arguments are merged directly in the position where they surface; hence movement operations are excluded;

b) chains are not a product of derivation but are LF-primitives; in this sense, agreement is conceived as identity – or, better, compatibility – of referential properties that enter a chain relation.

Following Brody (2003), M&S claim that a representational view of grammar leads to a theoretical advancement as to the architecture of grammar, since it eliminates redundancies between narrow syntax and LF, in the following respect:

> In general, representational grammars are simpler than derivational ones in that the latter postulate purely computational processes whose results are LF-relevant and hence redundant with LF constructs. Movement and the LF-relevant notion of chain are the obvious cases, but this also holds of the computational operation of agreement and its LF reflexes relevant for coreference etc. By contrast, the representational model views LF-relevant relations as determined directly by the interpretive calculus at the LF interface (chains by the θ-calculus, and so on). (Manzini and Savoia 2011a: 11-12)

Advancing the argument of simplicity phrased in these terms means thus eliminating derivations from the theory and rejecting, as a consequence, notions like phases and feature-checking. The operation of Agree, envisaged in standard minimalist models as depending crucially on the valuation of uninterpretable features, is thought of in M&S's framework as in point b) above, whereby only if the prerequisite of identity (or compatibility) of referential properties holds are certain interpretations possible. In this respect the notion of chain turns out to be the opposite of what it happens to be in derivational models, where it is devised as the outcome of a movement operation driven by computation: chains are an interpretive construct at LF and function in such a way that, for example, the reading of a *wh*-trace is not due to a deleted copy but is produced in virtue of the presence of a *wh*-operator (the antecedent of the *wh*-trace itself), which entails that there necessarily exists a variable that the operator must bind.

In the same manner, the idea of movement as the interpretive construct for structures that are independently generated entails that argu-

ments are actually generated in the position where they surface (as stated in a) above). This principle will be tacitly assumed throughout the analysis that I am about to develop in the next section.

5.2 *Proposal*

In order to account for the variation that is found in NR participial constructions w.r.t. case and agreement, as described in section 4.2.2 (point f), pp. 64-66 and Table 1, p. 89), the general hypothesis I advance here is:

(7) The variation in case and agreement that is found in *-n-/-t-* participial structures across the different NR dialects depends on the way in which pieces of morphology, as the inflectional head *-n-/-t-* of the participle and its agreement (gender) inflections as -o (neuter), a (feminine) and zero (masculine), contribute to the saturation of argumental roles and to the satisfaction of the EPP requirement.

If this working hypothesis is correct, it means that it is not necessary to postulate empty categories in order to account for EPP satisfaction in these constructions. Likewise, the notion of quirky or oblique subject can be abandoned in favour of an alternative device for EPP valuation which, as I will try to show, is preferable on grounds of economy.

On the other hand, the ergative nature of the participial perfect will be construed in a simpler way than as implemented in the previous proposals I reviewed in the preceding chapter, be it the selectional property of a morpheme merged to the verb base in the Lexicon and assigning oblique/ergative case (Lavine 1999; 2000), the effect of a split-*v* configuration (Tsedryk 2006), or the reflex of a *n* head (Jung 2008; 2009). Ergativity, instead, will merely follow from the interaction between a variable which is left open (the external θ-role) and independent properties of the *u*-phrase.

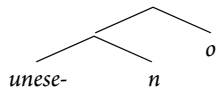
In section 5.2.1 I thus propose a morphological analysis for the participles of these constructions and then turn to discussing the nature of the middle-passive inflection *-n-/-t-* as that of an operator (section 5.2.2). The EPP valuation device is subsequently introduced in section 5.2.3 with reference to *no*-dialects, while the non-agreeing construction with masculine participles (*n*-dialects) is dealt with in section 5.2.4; the agreeing construction (AGR-dialects) and the issues related to the external argument are the topics of sections 5.2.5 and 5.2.6, respectively. Finally, in section 5.2.7 ample discussion is devoted to ACC-dialects. Issues like auxiliary agreement, constructions with unaccusative verbs and properties of the *u*-phrase are introduced in the course of the discussion within the sections listed above. Although it may seem that such questions are somewhat disregarded in introducing them in this manner, this argumen-

tation path naturally follows from the approach I will adopt, where the properties of the morphological elements that are analysed – the participial morpheme *-n-/-t-*, the *-o* inflection and the remaining (non)agreeing inflections (zero and *-a*) – will become clearer and better defined as we proceed.

5.2.1 *Morphological analysis*

Let me start from the structure of the participial form found in *no*-dialects, like that epitomized in example (20). So, for the internal structure of *uneseno* we can assume a simple structure of the type in (8)[3]:

(8)



The *-n-* affix, attaching to the predicative base (the verb stem), modifies the argumental structure of the verb, assigning θ-roles to positions that are different from those of the active construction. Leaving aside for the moment the question whether there is absorption of the external θ-role (and of accusative case, as predicted by standard generative approaches to the passive (Jaeggli 1986; Baker, Johnson and Roberts 1989)), we can start observing that the participial inflection - exactly as happens in Romance past passive participles - 'picks up' the internal argument of the verb, giving rise to an ergative syntax, in the sense of Burzio (1986). If we further observe that this also holds for the so-called 'long' form of the participle, that is, when it has an adjectival function (e.g. *unesë-nn-yj* 'taken away (by someone/something)'), we can then take *-n-* (and its allomorph *-t-*) as an affix encoding a *bona fide* middle-passive meaning, in a very general sense. The middle-passive inflection can thus be thought of as an element expressing the internal argument of the verb or, more properly, establishing a relation between an argumental slot (the internal argument) and the EPP position, which in turn may be independently realized.

Roussou (2009), in her analysis of voice morphology in Modern Greek, observes that in the middle-passive voice, while tense for imperfective verbs has specialized agreement inflections, perfective verbs use

[3] For the time being, the structure in (8) is simply assumed to reflect the morphological segmentation of the inflected participle *uneseno*, without labels for elements and projections; the categorial status of each segment will be defined in the discussion that follows. Provisionally, I will notate √ (root) the element I consider to be the predicative base of the verb, namely *unese-*, abstracting away from the status of the vowel /e/, not being relevant for the discussion whether it is part of the root or inserted for phonological reasons.

the same agreement inflections used in the active voice, albeit putting an infix, *-th-* before them. For exemplification, a partial paradigm of *pleno* 'to wash' is given below in (9).

(9)

	Active perfective		Passive perfective		
	present	past	present	past[4]	
1SG	*plín-o*	*éplin-a*	*pli-th-ó*	*plí-th-ik-a*	
2SG	*plín-is*	*éplin-es*	*pli-th-í-s*	*plí-th-ik-es*	...

Working in the same framework adopted herein, and on the basis of considerations like those just made for *-n-/-t-* in NR, Roussou observes that in the perfective passive the realization of the subject (EPP) and the realization of the internal argument are dissociated, since the former is lexicalized by the inflection agreements of the active voice, while the latter is lexicalized by *-th-*, which can thus be seen as the morphological counterpart to an object clitic, behaving in a fully analogous way. In this manner, *-th-* can naturally be taken to fill an N position in M&S's sentential skeleton in (2) and (5), a conclusion I provisionally extend here to the NR participial medio-passive affix *-n-/-t-*[5], which alike:

a) takes on the internal θ-role of the verbal base;

b) is patently unrelated to EPP-valuation, since it does not contribute to the satisfaction of this requirement (I will return on this matter shortly).

5.2.2 *How it works*

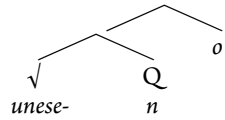
On the basis of the discussion that precedes, the middle-passive inflection *-n-/-t-*, encoding a relation between the internal argument and the EPP position, can be conceived as an *operator* that maps an argumental slot to a distinct position, the EPP position. The *-n* affix thus introduces the internal argument as a *variable* which, as such, must be necessarily bound in order to receive an interpretation at LF. Within the adopted framework, we can state this as the requirement that a chain relation be produced at LF between the internal argument and the EPP slot, in order for them to be identified with each other.

[4] The *-ik-* morphology is analysed as a separate segment and attributed the function of exponent of specialized past tense, selecting a perfective medio-passive base (Roussou 2009: 408).

[5] The morho-syntactic functioning of *n* outlined in the following section is modelled, in its general lines, after Roussou's cited work and Manzini, Roussou and Savoia (forthcoming; 2015). As I will detail in the following, however, the device of EPP-valuation departs slightly from the one proposed by these authors, as it relies on an element which is different from a finite active inflection like that of Modern Greek.

If, by hypothesis, only surface elements are actually part of syntax (empty or silent heads being excluded as well as traces/cancelled copies), the only possible binders for the variable introduced by *-n-* are the remaining inflectional material (the agreement inflection *-o*) or the DP corresponding to the internal argument. With this background in mind, if we turn back to the status of *-n-* within the clausal spine (5), that we had provisionally notated as N, we are now in a position to reconsider it according to its function as an operator and a new categorization becomes available: recalling that it assigns the internal argument slot to an independently realized EPP position, it is natural to assume that it occupies one of the Q positions. Hence, the morphological structure of *uneseno* in (8) can be refined as follows:

(10)



At this point, a clarification is needed on the operator-variable device that has been proposed for the participial inflection, namely that the introduction of an argumental role by way of this mechanism is not a peculiar feature of the middle-passive inflection: we may assume, in fact, that some λ abstraction over variables is the general way to introduce arguments in grammar, where saturation of θ-roles obtains through valuation of λ abstracts, as proposed by Adger and Ramchand (2005)[6] and, with

[6] Adger and Ramchand posit an interpretable [Λ] feature for some kinds of complementizers introducing relative clauses. They propose that this feature is interpreted at the interface as a predicative (λ) abstraction over another feature, [ID:] (shorthand for 'identification'), which is uninterpretable and stands for the variable. Roughly, an [ID:] feature tells semantics "this is a position that is λ-abstaracted over" and hence the position is identified as that of a pronoun, which is always referentially dependent on an antecedent – in discourse, in syntax (Binding Theory) or by way of an assignment function required by connection to an operator. Thus, [ID:] can be assigned two values:

- [ID: dep]: identification of the pronoun takes place via the assignment function determined by a syntactic operator (such as that bearing a [Λ] feature).
- [ID: φ]: identification takes place directly by an assignment function determined by context or binding theory and consistent with the φ-features (that is, the item with this value is an ordinary pronoun).

An object like that shown in (i) below at the interface is therefore interpreted as predicate abstraction:

(i) [Λ … ID] → λx … x

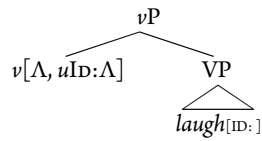
Adger and Ramchand's analysis is applied to Scottish Gaelic and Modern Irish in order to account for the particular morphological alternations these languages display in ques-

reference to the EPP, by Butler (2004). So, it is not unlikely that *-n-/-t-* carries something like the [Λ] feature proposed by these authors, even if we don't make recourse to devices of feature checking and valuation and simply assume that the *n* inflection abstracts over the internal argument *y* of *unese-* and gets valued by merger of further material immediately above it (in the case at hand, as I am about to argue, the inflection *-o*, but possibly also a DP or an inflection agreeing with a DP)[7].

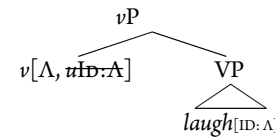
tion formation and relativization, which can be hardly explained by assuming successive-cyclic movement (in particular, the presence of relative C in embedded clauses depending on a matrix wh-clause). To this end, a *pro* [ID:] is postulated inside the embedded clause instead of a trace/cancelled copy of the wh-item. For the purpose of the present work, the relevance of this analysis I would like to stress is that it shows that morpho-syntactic elements can, in principle, act as λ-abstractors, on the one hand, and as positions assigning a value to a variable, on the other.

[7] Butler extends Adger and Ramchand's analysis (cf. previous note) by linking the [Λ] and [ID:] features to the introduction of argumental roles into the sentential structure and to the realization of the 'broadened' EPP (the (sub-)feature of a head that triggers movement, see sections 3.2.1-3.2.2). Butler's idea is that the EPP has semantic properties and is connected, in general, to predication: EPP-features, wherever they appear, have the semantics of a λ-operator, realized by the [Λ] feature, operating on variables identified by items with [ID:]. The latter are initially interpretable but not valued (Pesetsky and Torrego 2001; 2004) and encode argumental roles for categories like V. λ-abstracts require saturation by arguments, and this is obtained by merger of an element (usually a DP) in the Spec of the category having the [ID:] features valued. At First Merge in *v*P the derivation goes as follows:

(ii) a.



b.



c. λ. laugh (δ) (Butler 2004: 7)

In (ii) V has initially a [ID:] feature in need of valuation, whereas *v* has a corresponding uninterpretable [*u*ID:Λ] feature, i.e. the argumental role. The latter acts as a probe and values the feature on V as [ID:Λ], resulting in the configuration in *b*. (note that the [*u*ID:Λ] feature on *v* is checked and appears striked-through) and mapping to the semantics in *c*. At this stage the λ-abstract must be saturated and this is achieved by (External) Merge of a DP like *Arthur* in Spec,*v*P, as in (iii), which is mapped to semantics as (iv). The latter is, actually, a λ-conversion (the λ-bound variable δ is replaced by *Arthur*):

(iii) $[_{vP}$ *Arthur* $[_{v'}$ $v_{[\Lambda;\sout{uID:\Lambda}]}$ $[_{VP}$ *laugh*[ID: Λ]]]]

(iv) λ. [*laugh* (δ)] (Arthur) = Arthur laugh

The entire process is repeated with the introduction of T (that has as well a [*u*ID:Λ] feature), the only difference being that the Spec must filled by Internal Merge: the [*u*ID:Λ] on T probes and finds the (checked) features [*u*ID:Λ] on *v* and they agree, so creating a semantic

In turn, the operator-variable binding applies in the same way for the relation between the expletive and the associate, which is introduced in the next section.

5.2.3 *The neuter ending -**o**: **no**-dialects*

If we consider again *uneseno* in (20) and other participles having invariable *o* ending and taking an internal argument DP in nominative case (*no*-/NOM-dialects), as *kupleno* in (22) and *pereexano* in (24), we can observe the neuter ending *o* can be considered semantically vacuous, since it does not identify a referent, not even by agreement with a DP. The proposal I put forward, then, is that the function of *-o* is basically to check the D/EPP requirement, acting as a sort of expletive clitic[8], that is, an argumental placeholder whose referential filling fundamentally depends on its relation with an associate, in the terms of Chomsky (1995).

In this respect D, which has previously been assigned the internal (Theme) θ-role by *-n*, is introduced, in turn, as a variable argument that gets identified with the associate at a later stage, by way of a mechanism that generates a relation of co-reference at LF. In order to outline the functioning of this device, I will resort to the account offered by M&S (2008b) for a comparable case, the non-agreement of post-verbal subjects with the verb in Central and Northern Italian varieties. They discuss dialects, both with and without subject clitics, where the verb is inflected for 3rd person singular in the presence of a post-verbal 3rd person plural subject and arrive at the conclusion that the corresponding structures (given below in (11) and (12)) do not differ from those of the agreeing construction.

(11) [$_{DP}$ *e* [$_{IP}$ [*dɔɐrm* [$_{D}$ *æ*]]] [$_{DP}$ *i* *tabɛk* (Alfonsine)
CL.SUBJ.3S sleeps 3SG the children (M&S 2008b: 29)

(12) [$_{IP}$ [*dorm* [$_{D}$ *e*]]] [$_{DP}$ *ki* *burdɛi* (Urbino)
sleeps 3SG those children (M&S 2008b: 31)

dependency between the two occurrences of [Λ], which abstract over the same [ID] variable. External Merge would be illegitimate as it would introduce another value for the same variable, so the only option is Internal Merge of the argument of the lower λ-abstract (i.e., *Arthur in* (iii) is raised to Spec,TP). It is crucial to underscore that, in the framework adopted here, we need not formalize λ-abstracts with features and also EPP-raising to Spec,TP is unnecessary (or, seen the other way round, we need not *v* to do the first λ-abstraction).

[8] The fact that an expletive element is inserted in word-internal position faces no conceptual difficulty in the adopted framework, where it has been already assumed that one of the D positions in the sentential spine overlaps with the verb's agreement inflection, which is thus seen as pronominal in nature (ultimately as in Rizzi's (1982) intuition – see section 3.3.1).

On the basis of their previous claim that the post-verbal subject (in VP-internal position according to the basic sentential skeleton given in (2)/(5)) corresponds to a Focus property, M&S take it that the interpretation of the DPs *i tabɛk* and *ki burdɛi* in (11) and (12) as internal arguments of the verb of their respective clause arises as the effect of a predicative relation that is established as an operator-variable structure between D (the 3rd person singular inflection, which in (11) is doubled by the clitic subject), introduced indeed as a variable, and the focused element, that fixes its value.

With the background established for the morphological structure of the participle in NR, we can now straightforwardly and easily transpose this 'predicative (non)agreement' device to the situation of *no*-dialects and speculate that D (*-o*), as an element with a non-referential denotation, is inserted as a variable argument and as such is subject to a generic or existential closure. At LF, then, an unselective existential quantifier is introduced, scoping over both the internal argument variable *y* (associated with the D position) and the event *e*, in the ordinary way (Heim 1982). What we have to postulate further at LF, in order to get the wanted meaning for the nominative DP as the entity affected by the event expressed by the participial predicate, is the introduction of an operator identifying the variable *y* with the referent of the DP, in the guise of an interpretive enrichment that is produced at the interface (Manzini and Roussou 2011; 2012)[9], exactly as happens with the post-verbal DPs in (11)-(12).

Assuming the above scenario to be correct, example (24) has thus the following LF representation (leaving aside the past tense semantics contributed to by *bylo*):

(13) *pereexano (bylo) doroga*

$[\![pereexa\text{-}]\!]$ = cross (x,y,e)

$[\![\text{-}n\text{-}]\!]$ = [λy. V(e,x,y)] (the internal argument of V is introduced as a variable)

$[\![pereexa\text{-}n\text{-}]\!]$ = λy. cross (x,y,e)

$[\![\text{-}o]\!]$ = λV. ∃e∃y [V(e,y)] (existential closure)

$[\![pereexa\text{-}n\text{-}o]\!]$ = λV [λy. cross (x,y,e)] (∃e∃y) =

= ∃e∃y [λy. cross (x,y,e)]

$[\![pereexa\text{-}n\text{-}o\ doroga]\!]$ = (∃e∃y [λy. cross (x,y,e)] ∧ y=street)

('there exists an event *e* of crossing in which there exists a *y*, such that y is crossed by *x*, and *y* is the street')

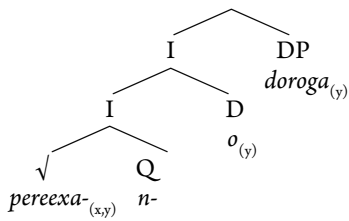
[9] Manzini and Roussou restrict interpretive enrichments at LF to the introduction of operators, which in many instances do correspond to interpretive counterparts to those abstract heads like Appl (Pylkkänen 2002; Cuervo 2003) that are largely accepted in current minimalist theories and that they exclude.

At this stage the variable, in reality, is still an abstract one, but the second conjunct of the formula (*y*=street) does actually assign a value to *y*, so saturating the λ-abstract and returning the interpretation in (14):

(14) ∃e∃y [λy. cross (x,y,e)] (street) = ∃e [cross (x,street,e)]
('there exists an event *e* in which *x* crosses the street')

In this manner, a predicative relation is created between the D element and the DP in structure (15), corresponding to example (24) and to its interpretation given above in (14):

(15)



To recapitulate, the saturation of the verb's internal argument *y* obtains through its assignment by the Q operator (= *-n-*) to D; the latter, as an argument that is variable on its turn, gets existentially closed and is (must be) finally identified with the referent of the DP, that thus receives the role *y*. I leave aside, for the time being, the outcome of the verb's external argument, that I will address in section 5.2.6.

5.2.3.1 *Further evidence: auxiliaries as existentials*

A potential challenge to the account offered in the previous subsection comes from the position of the DP in the participial clause, that can be post-verbal as in the analysed examples (*uneseno kurica*, *pereexano doroga*) but is not necessarily so, given that scrambling phenomena are quite pervasive in East Slavic. Examples like (14), (15), (16), (19) and (22), with the DP before the participle, provide *prima facie* evidence against the parallel we have drawn here with the post-verbal subjects in the analysis by M&S, all the more if we recall their observation that non-agreement in Romance always entails a focused interpretation of the subject, while the opposite implication does not hold and, by and large, «only agreement is compatible with a non-focused, i.e. topicalized, reading of the subject» (Manzini and Savoia 2008b: 30).

However, if being in focus position is not a pre-requisite for the non-agreeing DP in order to be interpreted as the undergoer of the predicate,

what else causes the identification? In this respect, an observation made by Trubinskij (1984: 114-118), albeit being in the diachronic and areal perspective, may provide a clue for a structural configuration in suggesting that the existential meaning is crucial in the non-agreeing pattern. Trubinskij draws attention to dialects halfway between *no*-dialects and varieties not having the construction *uneseno kuročka*, noting that they often recur to a 'one-component impersonal-passive construction' (*odnokomponentnyj stradatel'no-bezličnyj oborot*) adjoined to a nominal predicate, as witnessed by the example below:

(16)	*A*	*vot*	*zdelano,*	*taka*	*myšelofka*
	but	here	done.PFV.PTCP.N.SG	such.F.SG.NOM	mousetrap.F.SG.NOM
	'All done, what a mousetrap'.				(Trubinskij 1984: 115)

According to Trubinskij an utterance like (16) corresponds to the diachronic stage predating the grammaticalization of the non-agreeing construction, which arises from contact between a participle that is neuter-inflected by agreement with a neuter pronominal (*čto-to* 'something', *vsë* 'everything') and an independent nominal predicate. So, the intuition I would like to pursue (though eschewing any sort of areal or diachronic argument) is that the *no*-dialects constructions we are dealing with may be thought of as quasi-clefts, made up of an existential predicate (including the DP in nominative case) and a participial clause in *no* (with an internal argument referentially fixed as a generic/indefinite one): within such an arrangement, I assume that the Topic/Focus relation holding between the two clauses (no matter which one is the focus) is strong enough to force a reading whereby their respective arguments are identified with each other.

Two facts observed in context where the auxiliary surfaces lend additional support to this explanation:

a) *Variation in copula agreement in NONAGR-dialects*:
In NR and CSR the morphological form of the BE-auxiliary in the past tense (*byl/-a/-o* – m./f./n.) and in the future tense (*bud-u/-eš'/-et/...* – 1/2/3sg) is overlapping with the morphology of existential and copular BE (which is, after all, a cross-linguistically very common distribution). Under this circumstance, there is no obstacle to assuming that in the dialects where the auxiliary agrees with the DP but not with the participle (sub-type iv, cf. p. 66), the auxiliary is in fact the head of an existential clause, while in the dialects where the auxiliary and the participle agree with each other, but not with the DP (sub-type v., cf. p. 66), the auxiliary is a true one, contributing just temporal reference to the participial clause. On this hypothesis,

the introduction of an operator assigning the *x* variable the reference of the DP may be better encapsulated into a LF-operation (interpretive enrichment) coindexing the argument that has been existentially closed (D) with the argument of the independent existential predicate. The interpretations that are produced for the two types of auxiliary agreement we are considering are as follows, for previous chapter examples (24) and (22) respectively[10]:

(17) ∃e∃y [cross (x,y,e) ∧ before (e, now)] ∧ ∃z [z=street] $\xrightarrow{\text{coindex y with z}}$
$\longrightarrow$ ∃e∃y [cross (x,y,e) ∧ before (e, now)] ∧ y=street

(18) ∃w∃z [z=bed ∧ before (w, now)] ∧ ∃y [buy (x,y,e)] $\xrightarrow{\text{coindex y with z}}$
$\longrightarrow$ ∃w∃y [buy (x,y,w) ∧ before (w, now)] ∧ y=bed[11]

b) *The existential present* est'*:*
In CSR the existential BE in the present tense has the inviable form *est'*, (historically a 3rd person singular). Contrary to past and future tenses, *est'* only surfaces in existential contexts (typically, within the possessive construction), whereas equative copular clauses have a zero copula. However, in NR participial constructions (in all dialects, both AGR- and NONAGR-), *est'* often surfaces overtly, apparently as an auxiliar, as shown in (19) below (see also example (25), p. 89, with non-agreeing participle in *-n*):

(19)	*krinka*	*vystavleno*	*est'*
	jug.F.SG.NOM	put_out.PFV.PTCP.N.SG	COP.EXIST

'The jug has been put out'.

As far as in CSR *est'* closes off the nuclear scope (the domain of existential closure) (Harves 2002: 228 ff. and references cited therein), or, in other words, the existential reading is only possible when overtly marked by *est'*, I assume this condition to hold also in NR. We may thus think that in NR participial constructions where *est'* is overtly realized, we actually have two predicates, where the argument of the existential is identified

[10] For the sake of exemplification only, I use here the relation BEFORE(e, t) commonly adopted in semantic textbooks (e.g., Delfitto and Zamparelli 2009), with the purpose of making clear which one of the two conjuncts contributes to the temporal denotation of the resulting predicate.

[11] I assume here that in the second conjunct the existential closure on the event variable (*e*) does not apply since the latter can be (and actually is) bound by the event variable (*w*) of the existential predicate.

with the denotation of the participial clause (which in turn is produced by existential closure) by way of coindexing at LF, as defined above.

The claim made above – that if the DP agrees with auxiliary the latter is the temporal denotation of an existential clause, while it is the tense specification of the invariable participle when they agree – is reinforced by the observation that there seems to be an adjacency requirement between the auxiliary and the element with which it agrees. In fact, as all the examples provided so far confirm, the DP never intervenes between an auxiliary and a participle agreeing with each other; likewise, a participle cannot occur between a DP and an auxiliary, if they agree with each other.

The conclusion I draw from the above observations is that the identification between the reference of the DP and that of the existentially quantified argument of the participle (D = *o*) is produced in virtue of their being in Topic-Focus relation, irrespective of which one is focused.

5.2.4 *Participles with zero inflection: the **n**-dialects*

The participles displayed in examples like (23) or (25), i.e. belonging to the varieties I have termed *n*-dialects, are morphologically in the masculine form, i.e. with a morphologically zero inflection. If we go on along the line of reasoning we have been following so far, whereby only elements surfacing at PF are in syntax, we are forced to admit that here we have no D inflection at all, hence the EPP position is lexicalized by the DP only.

If we turn back to the operational scheme outlined in sections 5.2.2 and 5.2.3 the relevant stages in the case of *n*-dialects are:

1) the variable introduced by Q (= *n*) requires being bound in order to receive an interpretation at the interface (a chain relation between the internal argument and the EPP position must be produced);
2) the only element able to act as a binder for the open variable, in the absence of a D inserted immediately above the Q position, is the DP.

The mechanism operating in this configuration is essentially the same one at work in a clause with *-no/-to* + DP.NOM to the exclusion, however, of one intermediate stage, namely the introduction of an argument variable by D (*-o*). Likewise, the final outcome stage of the operation is still connected to the DP, that in this case directly closes the variable introduced by the middle-passive inflection *-n* (corresponding to the verb's internal argument *y*) and checks the EPP requirement.

If the operational device I have suggested for the morphological elements *-n-/-t-* and *-o* is on the right track, in particular the construal of *-o* as comparable to an 'expletive' subject clitic, the parametric variation between the *no*-dialects and the *n*-dialects can be better captured by re-

sorting again to an analogy to the variation existing in Romance. The presence vs the absence of an 'expletive' element corresponding to an argumental role independently lexicalized also by a DP, in fact, resembles closely the variation occurring between Northern Italian dialects on the one hand, where a clitic subject always surfaces even in the presence of a lexical subject, and French, on the other hand, forcing mutual exclusion between a clitic subject and a lexical one. The source of variation, at least at a micro-parametric level for the structures introduced by *-n-/-t-*, may be connected to the same options permitting or banning the availability of null subjects in natural languages, if these options are understood as alternative ways of lexicalizing the D/EPP property, as M&S (2008b) propose. Their partitioning of languages with reference to the null subject is in fact as follows:

a) D/EPP feature lexicalized by the inflection of the finite verb (Italian)

b) D/EPP feature lexicalized by a specialized D head (a subject clitic) that can double a full subject DP – Northern Italian Dialects;

c) D/EPP feature lexicalized by a DP – English;

d) D/EPP feature lexicalized either by a DP or a specialized D head – French and Ladin dialects.

The b) type is thus the analogue to *no*-dialects (*-o* being the counterpart to a subject clitic), whereas the c) and d) types could both in principle correspond to *n*-dialects (D/EPP satisfied by the full DP). Yet, it must be remarked that a full isomorphism of variation in NR participial constructions with the patterns listed above for the null subject is not possible, as far as in the former case, for the transitive verbs we have been considering so far, the D/EPP position is filled by the verb's underlying object. What should be stressed, though, is that the proposed parameterization lies on the same principles, i.e. the way of lexicalization of the D/EPP position(s).

5.2.4.1 *The participial construction with intransitive verbs*

As observed in section 4.2.2 (point d) ii., p. 82), among the distinctive features of the NR participial construction is also the ability of the *-n-/-t-* morpheme to attach to intransitive verbs: This entails that in this case the *-n-/-t-* morpheme is not obviously doing what I have suggested it does with transitive verbs, i.e. pick up the internal argument as a variable in order to map it to the EPP position. We must, therefore, wonder whether the most salient property of *-n-/-t-* in NR dialects is that of a passive (in the sense of a demotion of the external argument from the verb's θ-structure) or, instead, a requirement for syntax to satisfy the EPP re-

quirement in a certain way, providing the computational component with an instruction on how to lexicalize D property/feature.

If this conjecture is correct, and if in *no*-dialects *o* is a D element as I claimed, then we would expect that also in *n*-dialects, in the absence of a DP that could fill the EPP slot (i.e., with an intransitive verb), an 'expletive' element *-o* must be introduced to lexicalize D.

Indeed, this prediction is borne out by the data reported in K&N (1971: 78, 98-99): among hundreds of examples collected in different dialects just very few display the masculine ending *-n-/-t-* attached to an intransitive verb, most of them being with the *no/to* ending also in varieties that w.r.t. transitive verbs behave as *n*-dialects. Moreover, when a participle past auxiliary is associated with an intransitive participle (or a transitive one with ellipsis of the underlying object), it always surfaces in the neuter form *bylo* (K&N: 99-100), i.e. the *o* ending appears at least on the copula. The scrutiny of data, therefore, reinforces the hypothesis that *-o* is a D element: if we may say that with transitive participles it contributes to the satisfaction of the EPP (since there is anyway a nominal that is in principle able to do that), with intransitives it is required as a 'last resort' to provide the clause with a subject, albeit an expletive one.

The considerations just presented are connected, too, to a possible criticism that could be raised against the account I have offered for *no*-dialects: observing that in the LF representation outlined for *no*-dialects the existential closure occurs upon the introduction of an expletive element *-o*, one might possibly object that in the case of *n*-dialects, all the rest being equal, the event variable would remain unbound, as far as it has been posited the unselective existential quantifier that is introduced upon the insertion of *o* scopes over both the internal argument variable *y* and the event *e*. However, this issue just disappears if we observe that in the transitive configuration suggested for *n*-dialects, as well as in any other configuration without expletives, the event variable need not to be closed by an overt element, but occurs as a default operation. Consider, for instance, a derivational system like Butler's (2004: 12-15): the existential closure on the event variable is achieved by Merge of projection termed ∃P for the valuation of a [*u*ID:] feature on an *Event*P projection (basically, one of the many *v*Ps in Butler's clausal spine), that in turn had been previously merged to match a [*u*ID:] introduced by V and corresponding to an 'eventive' argument of the VP[12]. In the representational framework

[12] Butler's treatments of expletives follows Stowell (1991) in considering *there* an existential QP quantifying over events/situations, realized as an overt argument of an Event projection, which in Butler's system is a *v*P since he assumes that Merge of a *v* head is required for each argument of V. So, for the derivation of a sentence like *there arrived two men*, Butler proposes that Event head has a [Λ] feature and therefore the

adopted here Merge of an abstract head is not needed, nor are features required, in order to achieve existential closure – it occurs at the level of the interpretation rather than by insertion of abstract syntactic material. In the absence of D (*o*), existential closure is produced at LF upon insertion of the DP and the internal argument variable *y* (introduced by the *n* inflection) is bound by a DP that is already existentially ied, which contributes to simultaneously closing the event variable *e*.

The connection of the all above with the obligatory insertion of *o* on intransitive participles thus relates not only to the EPP, but also to the need of having an argumental placeholder for the variable that gets existentially closed, in this case the event variable.

Let me turn now to a further issue that could as well be taken as a serious challenge to the present account: if the operator-variable mechanism triggered by *n* always targets the internal argument of the verb, how could it work with unergative verbs, which by definition do not require the saturation of an internal argument? Even in this case, this question may be shown to simply disappear if one adopts the view, widely shared in the literature, that verbs belonging to this class have only apparently a monadic structure, being in fact 'concealed transitives' (Hale and Keyser 1993; Bobaljik 1993). On this understanding, the argumental structure of an unergative verb can in fact be shown to be inherently dyadic, with two arguments, one (approximately) agentive and the other thematic, the latter being a bare noun that gets somewhat incorporated into a light verb. Consequently, in a NR structure $[[[\sqrt{}_{unergat.(x,y)}]\ [_{Q}\text{-}n]]\ [_{D}\text{-}o_{(y)}]]$ the D element-*o*, besides filling the EPP position, has the function of representing the *y* role, inherently present in the semantics of the verb base, in order for existential closure to occur on it.

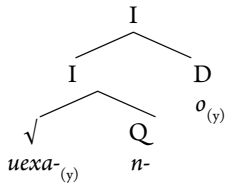
If we consider unaccusatives, the task of the expletive *o* is in some sense more straightforward, as it essentially lexicalizes the only θ-role of the verb base, the Theme. As an operator that is associated with existential closure, *o* is in principle able to existentially close not only the event variable but also the argument variable, the Theme itself. The reading that is entailed in the structure of an inflected participle like (21) (corresponding to example (8), repeated as (20)) is therefore the impersonal one, unless a reference is assigned to the existentially closed Theme argument by a higher element in the structure, for instance the *u*-phrase adjunct *u ego*, as is actually the case in (20)[13].

abstraction over events/situations must be satisfied by a QP *there*; the latter has also a [*u*∃] feature that must be deleted by an interpretable [∃] feature on the head of the ∃P projection, introduced by default for existential closure.

[13] The properties and functioning of the *u*-phrase are discussed later in subsection 5.2.6 with particular reference to the external argument of transitives and unergatives.

(20) *U* *ego* *davno* *uexa-n-o*
at 3SG.M.GEN long_time_ago gone_away.PFV-PTCP-N.SG
'He's gone away since a long time ago'. (OB: 157)

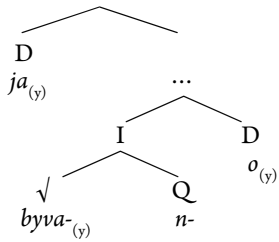
(21)



As a side note, it is interesting to observe that, very marginally, some dialects (perhaps some speakers only, to judge from K&N's materials) allow the insertion of a referent for the internal argument of unaccusatives exactly in the same way as the internal argument of transitive verbs is merged in the participial construction. Consider an example like (22) and the corresponding structure (23): the 1st person nominative pronoun is identified with the EPP/D position lexicalized by *o* as the outcome of the same predicative relation that holds in transitive structure like (15).

(22) Ja v bol'nice ne byva-n-o
1SG.NOM in hospital.LOC NEG been.IPFV-PTCP-N.SG
'I've never been to the hospital'. (K&N: 18)

(23)



Conversely, direct identification of the nominative DP with the internal argument of the verb base, not mediated by *-o* (as in the *n*-dialects pattern for transitives) seems to be completely disallowed, as far as in K&N's data there are no instances of invariable participles in *-n-* formed from unaccusative verbs. If, instead, the inflection attached to *n* has ref-

However, the same considerations can also be extended to the internal argument of unaccusatives, given that inside the participial phrase it remains as a free variable, although existentially closed, and consequently it is available for being assigned a reference by an adjunct.

erential properties, i.e. the pattern is those of AGR-dialects (which will be discussed in the next section) surfacing of a nominal in nominative case seems to be more favoured than with neuter invariable participles: constructions of the Romance type, (like Italian *la ragazza è arrivata*, the girl is arrived.PTCP.F.SG) are not so widespread, yet are less marginal than those with participles in *-no*. A relevant example, displaying also agreement with the auxiliary, is shown in (24) below.

(24) devušk-***a*** uexa-n-***a*** byl-***a*** v Leningrad, teper' vernulas'
girl-F.SG.NOM left.PFV-PTCP-F.SG was-F.SG to Leningrad.ACC now returned
'The girl had gone to Leningrad and now she's back'. (K&N: 26)

In sum, the different options that are available for the realization of the internal argument of unaccusatives seem to reflect a finer parametrization that it appears more difficult to capture, also for the scarce evidence concerning the non-agreeing construction in *no*[14].

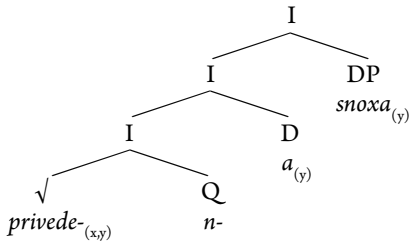
5.2.5 *The agreeing pattern*

In this section I will deal with the varieties that I have termed AGR-dialects, which display gender/number agreement between the inflected participle and the DP, fully matching with CSR canonical passive.

The morpho-syntactic structure I assume for this pattern, taking (18) (section 4.2.2, p.65) as the case for illustration, is the same one that has been posited for the invariable participle in *-no*:

[14] In subsection 5.2.5.1 the properties of *-o* will be dealt with in more detail and I will argue that they are essentially uniform across different contexts of insertion (the non-agreeing configuration, with *-o* functioning as an 'expletive', and the agreeing pattern), the only difference being selectional restrictions that either allow or disallow this element to fill a position that might otherwise be filled by elements with referential (nominal class) properties. However, under the hypothesis that *o* lexicalizes the internal argument of an unaccusative verb, its properties in (22) must be slightly divergent from those that it has in (20), if one wants to account for the fact that in the former case the verb's internal argument is identified with a nominative DP by 'predicative (non)agreement', whereas in the latter case the variable is existentially closed and its reference is subsequently restricted by the *u*-phrase. Besides, the existence of the agreeing pattern in (24) further complicates the picture. Although I do not have a proposal for the parameterization of these cases, I wanted to call attention to the existence of these patterns that, as far as I know, have gone unnoticed in the literature on NR participial constructions.

(25)



In this configuration, the internal structure of the inflected participle includes again a D element that in this case is lexicalized by the feminine singular ending *a*, which I assume to indirectly contribute to the saturation of the verb's argumental role *y* in the same manner the inflection *o* does in *no*-dialects, i.e. by an operation assigning the variable to a referential element. Then, how can the verb-internal D element *a* be identified with the DP *snoxa*, as far as in this case we cannot qualify it as an 'expletive' element?

The answer I would like to suggest to this question is that the identification of the word-internal D (*a*) with the DP occurs not by LF interpretive enrichment coindexing two variables introduced in the respective predicates (as represented in (13)-(14) and in (17)-(18)) but in virtue of some referential property shared by the two elements. If Q (*-n-*) introduces the internal argument as a variable that has to be bound, we can think of the *-a* ending as being able to fulfill this binding requirement by occupying a D position and thus checking the EPP, exactly as *-o*. However, *a* is clearly associated with a nominal class, the one commonly qualifying its members as part of a natural class, the feminine gender. The DP also being associated with this class[15], the identification of the D position with the DP is produced precisely because of the compatibility of referential properties of D with referential properties of the DP, i.e. the property of membership in the feminine nominal/natural class.

If we turn back to the non-agreeing configurations (*no*-dialects and *n*-dialects), we are now in a position to qualify their opposition to the pattern just reviewed as a shown below in (26):

(26)	**predicative (non)agreement**	*vs*	**referential agreement**
	NONAGR-dialects		AGR-dialects
	*pereexano doroga**a***		*priveden**a** snox**a***

[15] In the case at hand, the association of the DP with the feminine nominal class is triggered by the same element that also attaches to the participle (the *-a* ending) but in principle this phonological identity is not a necessary prerequisite. Agreement does in fact hold as well with feminine nouns, like *noč'* 'night', belonging to the morphological class with stems ending in a palatalized consonant, and also with 1st and 2nd person pronouns if the referent is feminine (cf. example (46), p. 106).

Once again, if we bear in mind the characterization that has been given to the morphemes *o* and *a* as word-internal D elements, this contrast is reminiscent of the much more familiar one that is found in expletive constructions with unaccusative verbs, concerning the agreement of the verb and setting apart, say, French from English. Consider the classical examples: in (27) the verb agrees with the expletive *il*, while in (28) agreement is with the associate *some boys*.

(27)	*Il*	*vient*	*des*	*enfants*	(French)
	it	comes.3SG	some.PL	children	
(28)	'There come some boys'.				(English)

NONAGR-dialects thus pattern with French in lacking an agreement relation between D (represented by the verb inflection in French) and the argument DP, whereas AGR-dialects repeat the conditions found in English, where an agreement relation holds between the DP and the verb inflection.

This parallelism, however, does not directly account for the parametric difference between NONAGR- and AGR-dialects, given that the classical explanations of the English-French contrast in (27)-(28) rely mainly on Case-features and φ-features of the expletive, which in the case of French would check all the features on I (triggering agreement); English *there*, conversely, would lack Case- and φ-features and consequently the associate *some boys* would covertly raise to Agr_S to check the unchecked features of I (Chomsky 1995: 272-276; Cardinaletti 1997 and references cited therein). In the case of NONAGR- vs AGR-dialects the expletive (the element we have characterized as such, i.e., *-o*) is actually the D inflection of the verb, hence we cannot strictly speak of agreement between the expletive and verb inflection. Moreover, it could be objected that in the case of *n*-dialects there is no expletive at all, as the variable introduced by the medio-passive inflection *-n-/-t-* is bound directly by DP. Nonetheless, if we look at the contrast between (27)-(28) in terms of, respectively, lack or presence of an agreement relation with a DP that is connected to the EPP slot, the comparison with the contrast in (26) is tenable.

So, if we abandon the somewhat misleading term of expletive for *-o* of *no*-dialects and we just flesh out the properties of D in the different patterns, we can arrive at a system where variation only depends on properties of the lexical elements that set apart one configuration from the other: in *no*-dialects the lexical element *-o* is available for insertion in D/EPP position as a variable argument, while in *n*-dialects it cannot since it does not have this property; consequently the variable introduced by Q (*-n-/-t-*) in these dialects must be bound directly by the DP. In AGR-dialects in there is a requirement, most likely as a selectional property of the *-n-/-t-* morpheme, that the D position be lexicalized only by elements with referential properties of nominal/natural class. To the presence or absence of such a requirement essentially amounts the parametric difference in (26).

5.2.5.1 *Lexicalization of nominal class properties in the participle*

Having argued that in AGR-dialects D is obligatorily lexicalized by elements with referential properties of nominal class, I have necessarily to (try to) define in a more detailed way what such properties consist of.

So far, in fact, I have considered for AGR-dialects only examples with an internal argument DP belonging to the feminine nominal class, basically for ease of exposition in order to show unambiguously the presence of an agreement relation with the participle. Yet, the other two cases, with a masculine DP and with a neuter DP, must be explicitly addressed too, since they may potentially undermine my proposal: in the first case the agreeing participle displays a zero ending and thus, under the hypothesis that syntactic elements are only overt, there is no D element; in the second case the agreement is lexicalized by the neuter ending *o*, i.e. the same morpheme that has been qualified as 'variable argument' (or 'expletive') for *no*-dialects.

Let me start from the question of masculine zero ending by recalling one of the principles of the framework I have adopted, namely non-distinctness between features and their values, whereby there are no abstract binary (+/-) features but just overt lexicalizations of positive properties, mostly in the form of pieces of morphology (M&S 2011: 12, see also the discussion in par. 2.3.5, p. 24 ff. and par. 5.1.2, p. 110 ff.). If we stick to this tenet, in CSR and NR the only properties/features that are being specified in the domain of the predicative past participle as nominal class endings are [feminine], [neuter] and [plural][16], whereas the property of 'masculine' (singular) can only be regarded a possible option at the interpretive level, by elimination of the other logical possibilities. In other words, as far as in the lexicon an element denoting the property of nominal class [masculine] does not exist, nothing is inserted and the bare √-*n* complex can (but must not necessarily) be interpreted as belonging to the natural class of masculine entities since it is devoid of any specification that would qualify it as feminine or neuter or plural. It has to be noted that the same is true of masculine nouns which in the vast majority of cases belong to the so-called second declension and have zero ending in the nominative singular.

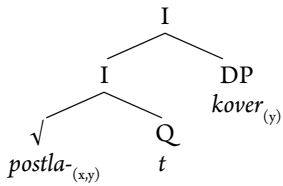
Coming back to the case of masculine agreement in AGR-dialects, if the distinctive feature of these varieties is the requirement that the (morphological) D position be lexicalized only by elements with referential properties of nominal/natural class, and if there is no such element cor-

[16] The [plural] specification corresponds to the *-y* nominative ending, which is actually syncretic for masculine, feminine and neuter. The neutralization of gender specification in the plural holds true also of the other categories, nouns and adjectives.

responding to the masculine class, what we have to conjecture is that, actually, *nothing is inserted under the D position*. For (29) below I thus posit the structure in (30)[17].

(29) postla-t byl kover
laid_out.PFV-PTCP.M.SG was.M.SG carpet.M.SG
'The/a carpet was laid out'. (K&N: 20)

(30)



In this manner, (30) ends up at LF in a form that is identical to that we have posited for *n*-dialects, with the variable introduced by Q bound directly by the DP. In this scheme, the participle is not directly interpreted as masculine, or better, it may be interpreted as such only after the predicative relation between the participle and the masculine DP has been established, although this is largely irrelevant for the semantics of the predicate. As an alternative, it is possible to envisage a mechanism in which the bare √-*n* complex is first interpreted as masculine 'by elimination' (it does not belong to any other nominal class) and consequently the compatibility of referential properties, i.e. agreement with the DP; holds; in this case the interpretive route that is followed matches with that I have proposed for (25) with feminine agreement for *snoxa*[18].

If we turn now to the second issue (the fact that in AGR-dialects neuter agreement is lexicalized by the *o* inflection, which in *no*-dialcts acts, conversely, as a variable argument), we have to consider a fact that is true both of CSR and NR dialects, namely that the *o* ending appears in

[17] In the structure the auxiliary *byl* is omitted for simplicity.

[18] The first option appears to be preferable on grounds of consistency with the principle that only overtly lexicalized elements are interpreted, but has a clear drawback in that it entails different interpretive mechanisms, within a single dialect, depending on the nominal class of the DP. The strengths and weaknesses of the second alternative mirror those of the first one: there is one single interpretive route leading to the identification of the undergoer of the predicate with the referent of the DP, regardless of the nominal class of the latter, but saying that the DP and the participle share referential properties looks like a somewhat ad hoc solution, given that the agreement relation has been explicitly defined as a chain relation between the DP and the word-internal D position, and in this case D has no overt lexicalization. Hence, I have to leave this question open for further investigation.

a variety of so-called impersonal adverbial constructions. The adverb[19], formed by affixation of *o* to an adjectival stem like *temn-* 'dark' in (31) or *xolodn-* 'cold' in (32), is used predicatively and can be associated to an Experiencer in dative case wherever the semantics of the predicate has such a θ-slot, as in (32a).

(31) *V komnate* *temn-o*
In room.LOC dark-ADV/ADJ.N.SG
'It's dark in the room'.

(32) a. *mne* *xolodn-o*
1SG.DAT cold-ADV/ADJ.N.SG
'I'm cold'.

b. *xolodn-o*
cold_ADV/ADJ.N.SG
'It's cold.'

Likewise, in impersonal expressions which include a zeroargumental verb like *temnet'* 'to get dark', when the clause is in the past tense the gender inflection following the past marker *-l* (basically, a participial inflection) is always the neuter *o*, as shown by the contrast in (33):

(33) a. *temne-et*
get_dark-3SG
'It's getting dark'.

b. *s-temne-l-o*
PFV-get_dark-PST-N.SG
'It got dark'.

In the terms of the framework adopted here, in all the examples above the inflection *o* fills the sentential D/EPP slot as there are no other elements that could satisfy this requirement[20] and behaves exactly as *o* of NR participial constructions in existentially closing the event variable[21].

[19] It must be observed that *o* is also the 'short' form of neuter adjectives for their predicative usage and that the participle inflectional scheme, likewise, follows the adjectival declension. The construction is labelled 'adverbial impersonal' according to a widely accepted convention in traditional descriptive grammars of Russian.

[20] A possible exception is (32a) where the 1st person dative pronoun could be taken as the subject. However, while there is rather broad consensus on the subjecthood of dative arguments in modal infinitival constructions (see note 25 in section 4.4, p. 103) the question is much more controversial for Experiencers of adverbial predicative constructions like *mne* in (32a): subjecthood is argued for by Schoorlemmer (1994) but rejected by Franks (1995: 272-276), Zimmerling (2009), Moore and Perlmutter (2000).

[21] As far as this is not the place to argue for a unification of the predicative-adverbial and participial *-o* endings, I will discuss in details the cited examples. However, on the basis of the discussion that follows in the remainder of this section, it is quite likely that such a unification may be easily achieved.

At the same time, again both in CSR and NR, in a past-tense clause with a neuter subject DP as that in (34) below, *o* on the verbs simply marks agreement, that is, on our assumptions, its referential properties of nominal class are a prerequisite for chain formation with the nominal *pis'mo* at the level of interpretation.

(34)	Vaše	pis'mo	beskonečno	obradova-l-o	menja	(CSR)
	2PL.POSS.N.SG	letter.N.SG	endlessly	pleased.PFV-PST-N.SG	1SG.ACC/GEN	

'Your letter pleased me greatly'.

From this it necessarily follows that the referential properties of *o* must be as compatible with a nominal class designating non-animate entities as with the (looser) denotation of states like (31)-(32) or events like (33): in this sense, then, *o* lexicalizes no different properties in AGR-dialects (and in CSR) than those it lexicalizes in *no*-dialects. In the varieties displaying participle-DP agreement there must be, however, a selectional restriction preventing *o* from appearing in contexts where it is possible to insert elements permitting chain formation with a DP by identity of nominal class. This restriction, thus, must necessarily be thought of as a lexical idiosyncrasy that produces a parametric difference.

The expletive/variable argument nature of *-o* in *no*-dialects (cf. the discussion at p. 90) is not an additional property of this element, since it arises from the contribution of properties and operation of *-n-/-t-* and *-o*: on the one hand *o* has a generic D property and is compatible with the denotation of events or states, on the other hand there is an argumental role that is abstracted over (introduced as a variable) by *-n-/-t-* and therefore in need of being lexicalized by a D element. The variable is thus assigned to the D element belonging to the set of argumental projections above V (see (5), section 5.1.2): expletive *o* in *no*-dialects, an inflection with referential properties of nominal (feminine) class like *a* in AGR-dialects (but for the masculine see the discussion at pp. 99-100).

On the other hand, I have argued that in *n*-dialects there must be a different restriction at work on *-o*, preventing it from being inserted above Q (*-n-/-t-*) if the variable introduced by the latter can directly bind a DP (although it must be inserted anyway if an internal argument DP is lacking – cf. the discussion on intransitives in section 5.2.4.1).

5.2.6 *The external argument*

Having been concerned with the different configurations in which the internal argument DP does or does not agree with participle, so far I have said nothing, apart from a few remarks on intransitives, about the external argument. In Lavine's and Jung's treatments, the latter is assumed,

with different implementations and at least for NONAGR-dialects, to act as an oblique subject. In Tsedryk's system it is lexicalized as an arbitrary control PRO. In discussing these authors' proposals, I have repeatedly stressed that assuming that the external argument fills the Spec,TP (or Spec,AGR$_S$P) position, whatever the movement operations that are postulated for it and independently on the other material that is raised, amounts to ignoring all the cases when the external argument does not surface at all. At any rate, for any formulation of the EPP one may assume, it must be necessarily acknowledged that the external argument of the verb, in the NR constructions, can check the EPP only at the cost of assuming a different structure for clauses where there is no *u*-phrase.

As far as I have argued here that the syntax of these constructions is that of non-active voice and, consequently, that in the EPP-checking the internal argument is involved, what I have to assume about the external argument of the verb is in some sense rather trivial: if the middle-passive inflection Q (*-n-/-t-*) associates the internal argument *y* to the EPP position, the external argument *x* remains unassigned as a free variable. As such, it admits of two modalities of realization:

a) Lexicalization by way of a *u-phrase* (a PP: *u* + DP.GEN);

b) Lack of lexicalization and interpretation as an implicit or generic argument.

The case in b) produces the impersonal reading of (24) (as shown in (13)-(14)), but, the external argument, being unassigned, may even be suppressed, as is the case in the following example, which admits a double reading (impersonal-passive or anti-causative).

(35) *Saxarnic-a* *kudy-to* *dĕva-n-o*
Sugar_bowl-F.SG.NOM somewhere put.IPFV-PTCP-N.SG
'The sugar bowl has been put somewhere'. /
'The sugar bowl is disappeared somewhere'. (OB: 158)

The only option that seems to be excluded is the identification of *x* with the EPP argument, in other words the reflexive reading, which is possible in some dialects only when the reflexive clitic *-sja* intervenes, as in *zapisanos'* in (13)[22].

[22] In the other cited examples displaying the reflexive marker *-s'/-sja* (*oborvana-s'* in (10), *napečeno-s'* in (11)) one of the available readings is again the anti-causative one, which seems to be actually reinforced by the reflexive particle. In these examples the reflexive reading proper is in fact excluded by the semantics of the internal argument, which is inanimate.

Anyway, there are multiple factors regulating the licensing of the different readings, including at least the animacy features of the external argument, the semantics of the predicate and, most likely, also the pragmatic conditions in which the sentence is uttered[23].

5.2.6.1 *The properties of the* ***u****-phrase*

One of the arguments brought forward by Timberlake, Lavine and Jung in support of the nature of NR constructions as active clauses with an ergative subject (at least when NONAGR dialects are concerned) relates to the ability of the *u*-phrase to behave consistently as subjects with respect to a series of properties: anaphor binding, control in embedded infinitival or gerundive clauses, etc., as detailed in section 4.2.2.

Having argued for a system in which the internal argument of the verb, in the constructions at stake, is mapped to the EPP position, so contending that these are instances of the middle-passive voice, my task now is to give an account of these unusual properties of the *u*-phrase. If these properties are liable to be accounted for in a principled way within the adopted framework, dispensing with the subjecthood of the *u*-phrase (or with any fixed functional node in clause under which it should be generated), the explanation I have given in terms of properties of single pieces of morphology will receive additional support.

Consider an ordinary possessive construction in CSR and NR, with the past tense copula for concreteness:

(36)	*U*	*menja*	*byla*	*mašina*
	at	1SG.GEN	was.SG.F	car.F.SG.NOM
	'I had a car'.			

It is a well known fact that in a clause like (36) the insertion of a reflexive possessive adjective results in a perfectly grammatical sentence even if the anaphoric element is bound by an adjunct, the PP *u* + DP.GEN:

(37)	*U*	*menja*$_i$	*byla*	*svoja*$_i$	*mašina*
	at	1SG.GEN	was.SG.F	REFL.F.SG	car.F.SG.NOM
	'I had my own car'.				

Facts like this are brought in as evidence, in many analyses of the Russian possessive construction, of a common underlying structure shared

[23] On the multiple readings associated with the middle-passive voice I refer once again to the analysis by Manzini, Roussou and Savoia (2015), based on data from Albanian and Greek.

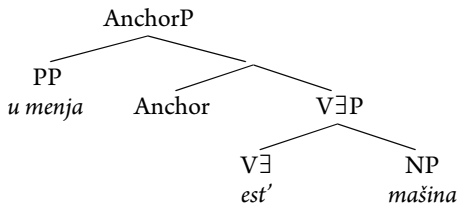
between the existential and possessive constructions. This structure is assumed to include a possessor and a *possessum*, both generated in A-position as a small clause (see references cited in section 4.3.5). However, Arylova (2012; 2013) observes that unifying the existential with the Russian BE-possessive, the latter being basically a two-place predicate, entails a redundancy in that an implicit locative (like 'the world' or 'one of the possible worlds') must always be present even in pure existential clauses. This condition, actually, is the one generally envisaged by the proponents of the biargumental nature of Russian *byt'* 'to be', who argue, in a nutshell, that if some entity exists, it must necessarily exist in some place. Arylova, though, opposes to such an assumption examples like (38) as evidence of the monadic, unaccusative structure of the existential, arguing for the secondary, derived nature of the possessive construction.

(38) Est' voprosy, na kotorye čelovečestvo nikogda ne najdet otvetov
is.PRS questions on which umanity never NEG will_find answers.GEN
'There are questions humanity will never be able to answer'. (Arylova 2012: 31)

Arylova thus proposes that the *u*-phrase in the possessive construction corresponds to the external argument of a projection that is termed AnchorP for its ability to anchor the assertion of existence in which the *possessum* is included: if the *u*-phrase is chosen as the 'perspectival centre' (in the sense of Partee and Borschev 2007), i.e. the participant chosen as the point of departure of the situation[24], it introduces a two-argument predicate, an anchor XP and the phrase YP that has to be anchored. The interpretation of possessor of some *possessum* arises in dependence on the property of a Predicate Anchor to introduce an argument X that serves as a point of reference (Anchor) for its sister node and denotes a dependency that is at the same time of a locative kind (proximity) and cognitive type, as an 'abstract region of control'. Thus (36) is subsumed by the structure in (39),where V∃P is one-argument existential predicate and the PP in Spec,AnchorP subsequently raises to TP, according to standard derivational models.

[24] The difference between existential and locative sentences is stated by Partee and Borschev (2002; 2007) in terms of the differences in the type of predication and in particular in what they call their Perspective Structure. The conceptual structure of *be* in these sentences (not necessarily the verb's argument structure in the strict sense) is defined as BE(THING, LOC): an 'existence/location situation' may be structured either from the perspective of the THING or from the perspective of the LOCation; the Perspectival Center is the the participant chosen as the point of departure for structuring the situation. The choice of THING as the Perspectival Center produces the unmarked structure, a standard locative sentence, whereas choosing LOC as the Perspectival Center reverses the predication and what is predicated of is the fact that LOC includes THING.

(39)



In Arylova's system, raising to TP accounts for the property that the referent of the PP has to bind the reflexive *svoja* in (37), even if technically the configuration in which the binding relation holds is established at Merge of AnchorP: the PP with *u* controls in the phrase containing the *possessum* at every point in the derivation. The crux of the system is that considering the *u*-phrase as the lexicalization of an independent projection, AnchorP, which takes another predicate as its argument, makes it possible to derive different interpretations and different syntactic properties relying on its context of insertion. Arylova provides extensive evidence that in other types of BE-possessives it is the position of the AnchorP *u*-phrase that regulates differently the syntactic properties of the clause and triggers a mostly locative (rather than possessive) interpretation of the referent of the PP w.r.t. the whole of the clause.

In sum, in the possessive construction (37) the alleged subjecthood of the *u*-phrase (i.e. its position is Spec,TP) is not relevant in order for it to bind anaphors or for other properties that are typically ascribed to subjects[25]. These are connected, according to Arylova, to its intrinsic predicative and denotational properties and are determined in a dynamic manner, depending on the argument that the AnchorP takes as its complement. Hence, this conclusion can be fully extended to the *u*-phrase of NR constructions, all the more if I am on the right track in claiming that NR participial constructions are presumably made up of two predicates, where the only Theme argument of the existential predicate is identified with the internal argument of the predicate expressed by the participle (see the discussion in 5.2.3.1, p. 121 ff.).

The idea that the Anchor Phrase is the lexicalization of a conceptual primitive that may potentially scope over an entire clause, along with the

[25] On control of PRO by the *u*-phrase in the modal possessive construction (i.e the construction formed by a *u*-phrase, existential *byt'*, a relative pronoun and an infinitive, as in example below), see the discussion in Arylova (2013: 162-170).

(v) *u* *Maš-i* *est'* *čto* *počitat'* (CSR)
at M.GEN is what read.INF
'Maša has something to read'.

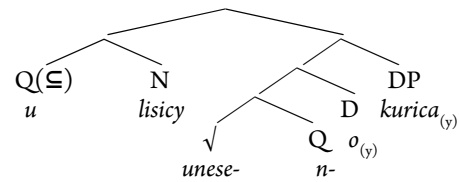
proposal that different interpretations (location, temporary possession, inalienable possession) crucially stem from its insertion point, is fully in the spirit of the principle adopted herein, according to which structures are interpretable as they stand, that is to say, as they surface. AnchorP, a projection instantiating a relation between two elements as arguments of an elementary predicate, may thus be naturally translated in the present framework into a Q category. The latter, in fact, encodes quantification over an argument (which may well be a predicate in turn) as the relation between a set and one of its parts. A relation of this kind is conceptually loose enough to entail, at the interpretive level, either a locative relation (proximity) or a possession relation that may vary in its scope upon insertion in different contexts, as shown by Arylova. Actually, M&S (2011a: chaps. 6-7; 2011b), building on the notion of 'zonal inclusion' of Belvin and den Dikken (1997) for the meaning of *have*, whereby it corresponds to a relation of an entity with another superordinate entity[26], suggest that this 'superset-of' relation is encoded not only in *have* but also in many other lexical and morphological elements, extending this categorization to the case morphemes (including their pronominal counterparts in Romance). To this end, they discuss the properties of the *-t(ə)* morpheme in Albanian and Arbëresh varieties qualifying it as a Q(⊆) category, arguing that the quantificational properties associated with it, depending on what they take in their scope, can account for its different readings that include plurality, second argument (dative) of ditransitives and possession (genitive).

Franco and Manzini (2013) ascribe the same 'superset-of' denotation (⊆) to DOM Datives in Indo-Aryan and Romance, arguing that they do not differ from ordinary (goal) Datives in this respect and suggesting a possible connection with the oblique marking of the external argument in split ergativity contexts in Iranic, where actually the Ergative case (=Dative/Oblique), if understood as a Q(⊆) category, has sentential scope and therefore locates the 'possessor' of the state denoted by the clause.

[26] For clarity's sake, let me quote in full the explanation provided by the authors: "[…] the 'meaning' of *have* […] denotes a special kind of inclusion relation […] dubbed 'zonal inclusion'. […] Entities have various zones associated with them, such that an object or eventuality may be included in a zone associated with an entity without being physically contained in that entity. […] The type of zones which may be associated with an entity will vary with the entity. Sentential entities have two zones associated with them above and beyond non-sentient entities, specifically, a zone of control and a zone of experience. These two zones are distinguished by the nature of the relation between objects or events which occur in them and the entity with whom the zone is associated. […] These two zones give rise to the causative and experiencer interpretation of *have* sentences, respectively. […] Of course, on the view that *have* is not a lexical primitive, this semantics of inclusion is not a lexical-semantic property of *have*: rather, it is the lexical primitives from which *have* is composed and the syntactic configuration that give rise to this semantic interpretation" (Belvin and den Dikken 1997: 170-171).

If we come back to example (20) and its *u*-phrase (*u lisicy*), we can then assume that the preposition *u* is a Q(⊆) category taking as its complement the DP.GEN in its sister node and having as its external argument the participial phrase in the sister node of its projection. What we get is the structure below in (40).

(40)



The Q(⊆) operator hence does nothing but 'zonally include', in the sense of Belvin and den Dikken (1997), the predicate *uneseno kurica* in the scope of *lisica*. This does not differ from what it does when it is inserted as modifier of a DP, as illustrated in (41): in this case, however, we get a purely locative interpretation at LF, since the reference of the Q(⊆) complement *bereg* that is involved is unanimated and thus prevents its interpretation as a possessor, leaving room only for the proximity interpretation:

(41) *Dom* *u* *berega*
house at shore.GEN.
[[$_{DP}$ Dom] [[$_{Q}$ u] [$_{N}$ berega]]]
'The house by the shore'.

If the 'zonal inclusion' may distribute either over an object or predication, taking it in its scope, in the latter case the interpretation of the element acting as the encloser is determined at LF in relation to the thematic roles of the predication itself and to the event. If we take an example in CSR like (42), the interpretation of the PP *u menja* is clearly that of a Beneficiary w.r.t. the event expressed by the predicate, but the PP does also contribute to the referential interpretation of the argument nominal in the predicate ('*my* son is born')[27]:

[27] This kind of constructions, usually referred to in the literature as External Possession constructions, are discussed and unified under the AnchorP conception by Arylova (2013: chap. 7). Other constructions where the u-phrase is interpreted as an 'involuntary causer' (dealt with by Rivero and Savchenko (2005) in terms of High Applcative phrases) are also brought back to configurations with AnchorP.

(42) *u* *menja* *rodil-sja* *syn*
at 1SG.GEN bear.PST.M-REFL son.NOM
'A son is born to me'.

Coming back to NR, in (40) the elementary predicate expressed by Q(⊆) must saturate first the encloser (possessor/zone) argument and then can also assign a value to the variable corresponding to the *possessum* by picking up the participial phrase. In this manner, the event expressed by the participial phrase is interpreted as the object that is predicated of the inclusion. Recalling what have been said about the external argument of the verb base, namely that, being unassigned, it remains as a free variable, one of the possible interpretations arises from the identification of the free variable *x* of the verb base with the possessor, on the condition that the referential properties of the latter are compatible with *x*: the possessor must be an animated entity, in order to be qualified as an Agent. In (40) and in (42) alike, the possessor contributes to the referential interpretation of an argument of the predicate; however, while in (42) the sole argumental role of the clause is already saturated by *syn* 'son' in such a way that the *u*-phrase dominating it can only modify it, in (40) the *x* variable (the external role) is free altogether and can thus be bound by the possessor, getting identified with it.

Again, what is produced at LF is an interpretive enrichment operation (Manzini and Roussou 2011; 2012)[28]: if an animated entity is the encloser/possessor of a predication and the latter has a free argumental role, an operator mapping the encloser/possessor onto the argumental role is introduced.

Of course the interpretation of *x* as a generic or implicit argument may remain available and in this eventuality the referent of the *u*-phrase is interpreted as an 'external possessor' (see note 27) in a similar fashion to (42), or as a purely locative adjunct. Consider the CSR example in (42)[29] where the denotation of the *u*-phrase can give rise to either of these interpretations, as shown by the glosses: the PP *u nas* can be of course interpreted as the location where the event takes place, but since its referent is animated and particularly salient in the context of utterance, the agentive interpretation is favoured.

[28] See note 9, p. 120.

[29] Note, incidentally, that this example provides evidence that not only in NR, but also in CSR, the *u*-phrase is able, in principle, to bind reflexives within the context of a participial construction.

(43) *U nas prinjata svoja sistema rasščetov*
at 1PL.GEN taken.PFV-PTCP.F.SG REFL.F.SG.NOM system.F.SG.NOM calculations.GEN
'We use our own accountancy system'. /
'In our company our own accountancy system is adopted'.[30]

The conclusion to be drawn from all the above leads us straightforwardly to an explanation of the parametric difference between CSR and NR in the surface realization of the external argument in participial constructions. Recall that in CSR the standard realization of agent role in the passive voice, not only in participial constructions, is a nominal in instrumental case: what is shown by the comparison of the NR participial construction examples with a CSR example like is that the *u*-phrase in CSR does not differ from the *u*-phrase or NR dialects, but simply in the latter the agentive interpretation is favoured, due to the lack of a specialized lexicalization for the Agent of the non-active voice- Conversely, CSR has this specialized form (DP.INSTR) and therefore for the *u*-phrase the locative interpretation, along with that of an 'external possessor' or 'involuntary causer', is preferred to the purely agentive one.

This is consistent with the statement that I made that there is no reason to consider the NR participial construction as an active one (as opposed to the passive participial construction found in CSR). The only divergent options between CSR and NR concern the selectional properties of the *-n-/-t-* morpheme, which in CSR is restricted to transitive verbs and is specialized for operations on the internal argument, all the remaining properties being the same. The syntax of participial constructions is a non-active syntax both in CSR and NR[31].

5.2.7 *The accusative configuration*

Among the patterns I singled out in section 4.2.2, the last one to be analysed is that in which the internal argument DP surfaces in accusa-

[30] Example from the Russian National Corpus.

[31] Within the range of variation of NR dialects, there is an interesting comparison that can be made concerning the different options that verb arguments have for surfacing. Consider in fact the structures that have been proposed for unaccusatives, (20)=(21) vs (24): if we build artificial examples that can be translated roughly as *I have gone* (hypothetically uttered by a female speaker), the structures corresponding to (20)=(21) and (24) are shown in (vi) and (vii), respectively. In (vi) the relevant relation (*u menja, -o*) is between the *u*-phrase and the D position (realized as an expletive representing the argument *y* of the verb base) and is created by the operator Q(⊆). In (vii) there holds a chain relation, produced by referential agreement (*ja, -a*), between two D positions that make reference to one EPP slot. Despite their being different in nature, these two relations end up in one interpretive outcome.

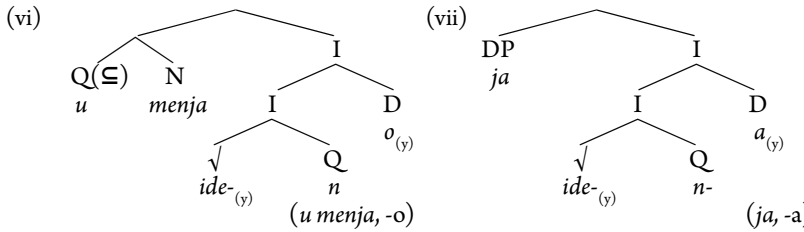
tive case (point ii.b.2, p. 87), characterizing the varieties I have dubbed ACC-dialects. Undoubtedly, this is the configurations that may pose the most difficult challenge to the general explanation I have proposed for the functioning of the participial morpheme, as far as the presence of accusative case seems to point to a genuinely active syntax. This is indeed at odds with one of the main claims in my proposal, namely that in all NR dialects and in CSR the fundamental property of the *-n-/-t-* morpheme is basically that of the non-active voice. Hence, in defence of this claim, what I will argue in the remainder of this chapter is that in ACC-dialects the *-o* element lexicalizes the external argument of the verb, and that this is the reason why the underlying object is accusative-marked[32].

5.2.7.1 *Cross-linguistic facts*

The occurrence of accusative case in a context where the noun carrying it is the only overt argument of the clause (i.e., there is no Agent in nominative case) is reminiscent of facts like the Spanish existential *haber* construction in (44) where the accusative case is clearly visible if the lone argument is cliticized (cf. (44b)).

(44)	a.	*Hay*	*un hombre*	*en*	*la*	*habitación*	b.	*Lo*	*hay*	(Spanish)
		has.3s	a man	in	the	room		3s.ACC	has.3s	
		'There's a man in the room'.						'He's there'.		

A more striking analogy with the NR facts is found in the passive-impersonal constructions in Sakha, a Turkic language of Northeastern Siberia, discussed by Baker and Vinokurova (2010), insofar as the realizational



[32] I have to acknowledge here that this statement may raise some questions w.r.t. the claim I have made (see subsection 5.2.5.1) that the referential properties of *-o* are loose enough to be compatible both with the nominal class reserved for non-animate entities and the denotation of states or events. I have no clue for the reasons why *-o* in ACC-dialects lexicalizes the external argument of a participial clause, so I will simply stipulate that it is an additional property of this morpheme in these dialects.

options available for Case in these constructions (the Theme argument can be either nominative or accusative) mirror exactly the opposition between NR NOM- and ACC-dialects, as shown by the following example:

(45) *Caakky/caakky-ny* *aldjat-ylyn-na* (Sakha)
cup/cup-ACC break-PASS-PAST.3SG
'The cup was broken'. (Baker and Vinokurova 2010: 608)

Finally, a similar competition between accusative and nominative case in the passive construction is found in the emergence of the so-called New Passive in Icelandic, where the subject slot is filled by an expletive, with which the participle and the BE-auxiliary agree, and the underlying object remains (w.r.t. the active construction) in situ and case-marked with accusative:

(46) *Það* *var* *lamið* *stúlkuna* *í* *klessu* (Icelandic)
It was hit.PTCP.N.SG the.girl.F.SG.ACC in a.mess
'The girl was badly beaten up'. (Maling and Sigurjónsdóttir 2002: 98)

All these patterns share with each other the property of going against Burzio's Generalization, in that the verb in cited examples does assign accusative case notwithstanding the fact that it does not clearly assign a θ-role to the subject position[33]. The cross-linguistic spread of these patterns seems to suggest that the Nominative-Accusative alternation may not be a particular idiosyncrasy of elements selecting for Accusative in place of Nominative. As Baker and Vinokurova argue for the Sakha facts, Accusative might possibly be assigned not by agreement with a functional head like *v* (or, in pre-Phase Theory terms, in Agr_OP) but in a configurational fashion, depending on other elements in the clause, basically in accordance with Marantz's (1992) theory of 'Dependent Case'.

[33] Recall the original formulation of the Generalization:

(viii) *All and only the verbs that can assign a θ-role to the subject can assign accusative Case to an object.* (Burzio 1986: 178)

Note that 'subject' here stands for an external subject (agent), so to exclude the surface subjects of unaccusatives. Actually, the link between the ability of a verb to assign accusative Case and its ability to assign an external θ was stated by Burzio by observing that unaccusative verbs lack an external (agent) θ-role.

5.2.7.2 *Preliminary discussion*

As I have observed (see point ii.b.2, p. 87, and point v., p. 88) within the range of variation of NR dialects the accusative pattern is crucially possible only in the presence of the neuter ending *-o* on the participle: although in some dialects the invariable ending *no/to* may co-occur with *-n-/-t-* or with an agreeing ending (an example being (19), p. 86), there are no attested examples of invariable *-n-/-t-* participles accompanying an accusative DP. To phrase it differently, an ACC-dialect is necessarily also a *no*-dialect: an example like (21), p. 66, repeated below as (47), is ungrammatical in any dialect if the participle ending is *-n*.

(47)	*U*	*dedka-to*	*merëž-u*	*ostavle-n-*(o)*
	at	grandpa.GEN-DET	fishnet-F.SG.ACC	left.PFV-PTCP-***(N.SG)**

If I am right in claiming that *-n-/-t-* and *-o* are true syntactic categories, an intuition, worth pursuing, that naturally arises from this observation, is that Accusative case must be somehow licensed by the presence of *-o*. This insight can be productively enriched with another hint I have just touched upon, namely the possibility of resorting to a configurational modality of Case assignment: the resemblance of the accusative NR constructions with the Sakha ones invites consideration of the hypothesis, put forward by Baker and Vinokurova (2010) in discussing the Sakha facts, that Case may be assigned not only by a functional head to the closest NPvia an agreement relationship (the standard Minimalist view)[34] but

[34] The standard minimalist view (Chomsky 2000; 2001) maintains that structural case is assigned by agreement with a functional head (T, *v*) that has an uninterpretable Case feature and thus acts as a Probe seeking a corresponding uninterpretable feature on the Goal. A widely accepted approach is also Pesetsky and Torrego's (2001; 2004) proposal that structural case is unvalued T(ense) feature, subsequently integrated into their more sophisticated theory (Pesetsky and Torrego 2007) that separates the interpretability of features from their valuation. Pointing out the theoretical difficulties in considering Case the only radically uninterpretable feature, M&S, in several works (starting from Manzini and Savoia 2004) reject the conception of Case as a feature and propose instead that 'case' inflections are best treated as categories closely matching denotational properties. To cite from Manzini and Savoia (2011a: 276):

"'Case' inflections, like 'agreement' inflections, lexicalize denotational properties of nominal class (gender), quantification, definiteness, etc. In virtue of these denotational properties, they satisfy the argument specifications of the predicate base (the 'noun') to which they attach. 'Case' inflections differ from 'agreement' inflections in that they are restricted to certain syntactic-semantic configurations of embedding. In other words, they are specialized for attachment of the noun (phrase) as the complement of a superordinate verb ('accusative'), as an EPP argument ('nominative'), as a complement of a superordinate noun ('genitive') etc."

also configurationally, depending on whether there are other nominal in the same local domain. This latter alternative, as reminded above, stems directly from Marantz's (1992) theory of Dependent Case, maintaining that in order for the inflected verb complex (V+I) to assign (morphological) accusative case to a nominal, there must also be, in the same V+I local domain, another position that is not part of a chain governed by a lexical case determiner and that is distinct from the chain that is being assigned accusative case. Simplifying somewhat, the hypothesis is that accusative is possible only when a second position is available.

5.2.7.3 *'Dependent' case*

According to Marantz (1992) there are four types of morphological case, or better, there are four modalities of case assignment, ordered in the scale listed below in (48):

(48) *Case Realization Disjunctive Hierarchy.* (Marantz 1992: 247)

a. lexically governed case [=case assigned in virtue of the lexical properties of a particular element, e.g. quirky case in Icelandic];

b. 'dependent' case (accusative and ergative);

c. unmarked case (environment sensitive) [which may be context-sensitive, e.g. genitive may be the unmarked case for an NP inside another NP, nominative may be the unmarked case inside an IP];

d. default case [=the case that in a language is assigned when no other case realization principle is applicable].

This hierarchy is basically a precedence order, whereby more specific rules prevail over more general ones: going down the list, if a case affix finds some case feature that it is eligible for, it takes that case and leaves the list.

The 'dependent' cases (either ergative or accusative, i.e. structural non-nominative or non-absolutive case) are assigned if the conditions stated in (49) hold:

(49) *Dependent case is assigned by V+I to a position governed by V+I when a distinct position governed by V+I is:*

a. not 'marked' (not part of a chain governed by a lexical case determiner);

b. distinct from the chain being assigned dependent case.

In the remainder of this section, however, I will not build specifically on such a conception, leaving the question of the nature of case rather unspecified, since it is only marginally relevant in the explanation that I will propose for accusative marking in the ACC-dialects.

In addition to these conditions, Marantz further stipulates that if dependent case is assigned up to subject we get a morphological ergative, whereas if it is assigned down to the object we get accusative case.

Accusative and ergative are thus assigned by the inflected verb to an argumental position as opposed to another argumental position: in a nominal, the accusative or ergative marking not only crucially depends on the properties of another nominal in the same V+I complex.

5.2.7.4 *The -**o** element as an argumental position*

Carrying on assuming that inflectional elements like *-n* and *o* perform syntactic actions, and with the now introduced concept of dependent case at hand, an explanation of case configuration found in ACC-dialects is now within reach .

Hence, what I propose is that in ACC-dialects the *o* ending can be treated again as an 'expletive' clitic as in the other *no*-dialects, but with the additional property of being associated with the external argument slot, rather than the internal role as in all the other NR varieties. Its nature of an argumental placeholder enables it to still fill a D/EPP structural position (as happens in NOM-dialects), whereas its interpretation of the verb's external role remains dependent on a *by*-phrase or generic/implicit. In this sense, in ACC-dialects it is the external argument that is introduced as a variable argument: at LF it may get identified with the referent of the *u*-phrase (producing the passive reading by way of the mechanisms discussed in section 5.2.6) or it may remain as a free variable, in which case the impersonal or anticausative readings arise[35].

The association of *-o* with the verb's external role slot is required in order to define a configuration where the conditions stated in (49) for dependent case assignment are met. In fact, we have, on the one hand, a position (D = *-o*) not assigned a lexically governed case and, on the other hand, a distinct nominal position, like the DP *merëža* in (47), that is governed by the same V+I complex. The DP *merëža*, likewise, is not assigned a lexically governed case (as far as there are no elements governing

[35] My statement that *-o* in the accusative configuration lexicalizes the external argument *x* has the unwanted consequence of entailing that in ACC-dialects the properties of Q (*-n-/-t-*) are altered, recalling that I have explicitly defined Q as an operator assigning the role *y* to the D/EPP position. A conjecture that may be entertained to preserve the homogeneous nature of the *-n-/-t-* inflection across the different dialects is that D (*-o*) of ACC-dialects could possibly be inserted in the EPP position as directly associated with the external argument. Consequently, the operator Q should skip over a position and assign interpretatively the variable *y* to the other available position, the DP. I have to acknowledge, however, that this speculation is in need of independent evidence and remains an open issue in the theory that needs to be investigated.

it and assigning lexical, 'quirky', case), and therefore it falls under point b) of the hierarchy (dependent case). This is enough for the verbal complex (*ostavle-n-)* to be able to assign the object accusative case or, in other words, for *-o* to license accusative on *merëža*[36].

In such a way, the only stipulation that is required to define the source of the parametric variation differentiating ACC-dialects from the other NR varieties concerns again single properties of lexical (morphological) elements, in that it amounts to the obligatory association of *-o* with the external argument of the element with which it merges (of course, if such an element has an external argument). The latter can be the $\sqrt{n}$ (or $\sqrt{t}$) complex but also a simpler predicative base like that of impersonal adverbial constructions[37].

In closing this section (and this chapter as a whole), I conclude by identifying the relevant parameter of variation between an ACC dialect (epitomized in (47)) and a NOM-dialect (with non-agreeing ending in

[36] A question that may well be raised is why in structures like those I have proposed, where it looks as though the DP is higher than the participial complex and therefore c-commands *-o*, the case being licensed is actually accusative. Marantz's rule in fact requires that the case that is assigned 'up' be ergative, and not accusative. However, I think there are two facts supporting the account I have provided. First, rather trivially, Russian and NR dialects do not have a distinct morphological ergative case, nor any analogue to it that in certain tenses/aspects/moods systematically marks the subject of a transitive verb. The second and more crucial point is that according to the rule in (49), ergative is assigned to the subject when the latter c-commands an object that did not get lexical case. But it is precisely the subject position that has been assumed to be filled by *-o* , not the DP, as far as it has been have explicitly stated that -o fills the D/EPP slot. Thus, it is plausible that the 'position governed by V+I' should be understood not as strictly as stated in Chomsky's (1980) standard definition of government (see note 6, p. 16) but in a broader sense, considering all the argumental positions that make reference to the same V+I complex. Alternatively, it is possible to assume that in ACC-dialects the DP is merged in a position lower than the one it has in a NOM-dialect (shown, e.g., in (15)). However, it seems to me that it is highly preferable to maintain uniformity and simply assume that the rule operates just because there is another argument position under the same V+I complex , irrespectively of whether this position is lower or higher.

[37] In section 5.2.5.1 I argued that the referential properties of *o* in AGR-dialects are as compatible with a nominal class (the neuter) as with the denotation of states or events and also that *-o* basically lexicalizes the same set of properties in AGR and NONAGR-dialects. For if it were not the case, it would be hard to explain the dual behaviour of *-o* in AGR-dialects where it acts as an inflection of neuter agreement but also attaches to the participial base of intransitives (or to adjectival bases in the impersonal adverbial construction, cf. pp. 134-136) for EPP reasons. For ACC-dialects there is no reason to maintain this uniformity, since *-o*, rather trivially, never has the function of marking neuter agreement in the participial construction and thus there is no obstacle to stipulating its association with the external argument of the base it inserts on. In the adverbial impersonal construction an external argument of the predicative base is not specified and therefore this association is not obligatory.

-no, as in (13)) with the argumental role that *-o* lexicalizes: the external argument for the type *merëžu ostavleno* (ACC-dialects), the internal argument for the varieties displaying constructions like *pereexano doroga* (NOM-dialects).

CONCLUSION

6.1 *Further parametric effects: the Generalization of the Input in NR*

Before turning to the final conclusions of the present work, I would like to present some data, drawn again from Kuz'mina and Nemchenko's monograph, offering evidence that the treatment of the inflection *-o* as an expletive/variable argument D element (or the lack thereof, entailing direct saturation of an argumental role and EPP-checking by a DP) can be generalized to contexts different from the participial ones. I will thus briefly discuss some examples in order to show that a broadened formulation of Holmberg and Roberts's (2010) like that I have proposed in (29) (subsection 2.4.3.3, p. 35), consistently predicts that some phenomena related to (non)agreement and to insertion of *-o* as a D expletive may also occur in other contexts and not only in the participial construction. The principle modifying the Generalization of the Input (and in some sense also Boeckx's (2011; 2012) Superset Bias) is repeated below:

(1) If acquirers (do not) lexicalize a certain specific property in a context, they will (not) lexicalize the same property in all comparable contexts.

Let me now turn to the first set of relevant data, coming from those NR varieties that I have dubbed *n*-dialects. K&N note that in these dialects it is possible to draw a parallel between, on the one hand, the participial construction and, on the other, constructions with verbs in past tense and the predicative adjectives: in the areas where the participial construction appears mostly with invariable *-n/-t* ending, the same lack of agreement with the DP is found in adjectival predication and in the past tense of verbs[1] including copular constructions. Interestingly, the adjective or

[1] Recall that past tense morphology *l* in Russian is essentially participial, with subject agreement in number and gender, but not in person. The same set of gender/number endings used for the past participles in *-n-/-t-* and in the adjectival 'short' declension is employed in the past tense: *a* / *o* / *y* respectively for feminine, neuter, plural and zero for the masculine.

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the verb displays exactly the same masculine (null) non-agreeing form, as illustrated by the following examples:

- Past tense verbs (including existential construction with copula *byt'*):

(2) *gadjuka* *vyšel* *iz* *kusta*
viper.F.SG.NOM came_out.PFV.PST.**M**.SG from bush.GEN
'A viper came out of the bush'. (K&N: 51)

(3) *voda* *byl*
water.F.SG.NOM was.PST.**M**.SG
'Water was there'. (K&N: 51)

- Copular existential construction with quantified genitive DP[2]

(4) *ran'še* *tut* *35* *dvorov* *byl,* *a* *teper'* *15*
previously here 35 homesteads.M.PL.GEN was.PST.**M**.SG but now 15
'Once there were 35 homesteads here, now only 15'. (K&N: 51)

- Adjectival predicative construction:

(5) *muki* *dolžen* *mne* *sosedka*
flour.GEN owing.ADJ.**M**.SG 1SG.DAT neighbour.F.SG.NOM
'My neighbour owes me flour'. (K&N: 51)

Building on what I proposed in section 5.2.4 for the participle in *n*-dialects, I would like to suggest that in these dialects, the unavailability of *-o*, either as an 'expletive' element or as referential agreement inflection (along with the markers of feminine, *-a*, and plural, *-y*), extends from participial contexts to predicative adjective constructions and the past. The learner, then, generalizes the lack of the D/EPP property for -o from the context when it is merged with the Q element *-n/-t* to other Q elements (*l* of past tense) or to some specific adjectival bases as in (5). The satisfaction of the EPP requirement in the cited examples, thus, is achieved in the same way it obtains in the participial constructions with invariable *-n/-t* ending, as a chain relation between an argument and the EPP position, that in this case is filled by a DP and is not mediated by a D element like *-o*. As far as I can tell from the material reported in K&N, the bare predicative adjective (i.e. invariably masculine) and the invariable *-l* past inflection are attested only in conjunction with a DP (even in genitive case, as

[2] In CSR in such contexts the neuter form *bylo* is compulsory.

is the case of *dvorov* in (4)). This is consistent with the prediction, made by the functioning scheme proposed for *n*-dialects, that an 'expletive' *-o* element has to be introduced in the absence of a DP that could lexicalize the D/EPP position[3].

The other generalization that can be observed concerns, indeed, *no*-dialects. In these varieties, the same set of categories that I have briefly discussed above (predicative adjectives, *l*-past) display alike non-agreement with the DP, but in this case with an invariable *-o* ending. The relevant examples follow:

- Past tense verbs:

(6) *oni* *uexal-o* *na* *poezde*
3PL.NOM left.PFV.PST-**N**.SG on train.LOC
'They left by train'. (K&N: 50)

- Adjectival predicative construction:

(7) *dolžn-o* *otvet* *byt'*
owing.ADJ.**N**.SG answer.M.SG.NOM be.INF
'There must be an answer'. (K&N: 50)

- Existential predicate in the past tense:

(8) *V* *Leningrade* *on* *byl-o*
in Leningrad.LOC 3sg.NOM was.N.SG
'He's been to Leningrad'.

So, if we take the principle defined in (1) and apply it to the phenomenon of non-agreement in *no*-dialects, that is, we replace a *certain specific property* with *the D/EPP property*, we get a generalization that can be phrased as follows:

[3] Even in case we would regard the insertion of *-o* in *no*-dialects as a selectional property of the middle-passive inflection *-n-/-t-* (and not vice-versa), we could equally characterize the generalization as the extension of a selectional property from a head to comparable heads. The generalization would thus look something like (ix):

(i) *Generalization of the Input for middle-passive inflection -n-/-t-*
Extend the selection of *-o* (with its properties, D/EPP, etc.) from structures with *n* to comparable structures (adjectives, etc.) → require Merge of *-o* to structures comparable to $\sqrt{n}$.

(9) If acquirers lexicalize the D/EPP property by -o (functioning as an argumental placeholder) in the insertion context above Q = n, they will lexicalize the same property in comparable contexts like predicative adjectives and the l-past.

One final consideration is in order here: on the one hand, a principle like the Generalization of the Input (the essentially analogous principle of the Superset Bias by Boeckx), albeit not providing restrictions to variation in terms of exact one-way implications, shapes the limits of variation towards the construal of macro-parameters as aggregates of micro-parameters (or, most properly, as parametric effects due to properties of lexical elements, as I tried to show in this work). This has actually been the focus of most generative research of the last decades, as Kayne insightfully puts it:

> […] apparently macroparametric differences might all turn out to dissolve into arrays of microparametric ones (i.e., into differences produced by the additive effects of some number of microparameters). The idea could be elevated to the general conjecture [that] *every parametr is a microparameter*. (Kayne 2005: 10; emphasis added)

On the other hand, the fact that properties of elements traditionally regarded as morphological (like the agreement inflections) are subject to the Generalization of the Input is another piece of evidence that they may be treated as genuinely syntactic elements, as I attempted to do in the previous chapters.

6.2 *Summary: parametric differences within NR varieties and with CSR*

In this section I summarize briefly and define better the parametrization emerging from the analysis that I proposed in the previous chapter.

The first parametric difference that has been singled out is between CSR, on the one hand, and the whole of NR dialects, on the other: the unusual feature of freely combining with imperfective verbs and unaccusative and unergative verbs, displayed by NR past passive participles, has been implicitly assumed as a selectional property of the *-n-/-t-* morpheme. The latter in NR can in fact be inserted under a Q position immediately above the predicative base √ of any kind of verb. The conclusion is that the relevant parametric difference reduces to the degree of specialization of the 'middle-passive' (non-active voice) inflection, w.r.t. the verb base it selects:

- in CSR *-n-/-t-* is more specialized and operates only on the internal argument, which must be overt (i.e. it is not included in the predicative base of the verb, as in unergative verbs) and must not be the only argument (so to exclude unaccusatives);

- in NR *-n-*/*-t-* is less specialized and is able, in principle, to operate on the internal argument, irrespectively of the argumental structure of the verb to which it attaches.

The second parametric difference I have argued for is internal to NR varieties and discriminates between NONAGR- and AGR-dialects: it has been imputed to the requirement for AGR-dialects that the subject DP and the participle have compatible referential properties of nominal class. Actually, the characterization as a lexical parameter that I have given is rather from the opposite point of view, by stipulating that the prohibition for *-o* in AGR-dialects to select a participial base if in that position an inflection with more specific referential properties (that is, in agreement) can be merged.

Within NONAGR-dialects, the difference between masculine (*n*-dialects) and neuter (*no*-dialects) default agreement has been derived from a restriction on the *o* element, holding in *n*-dialects, that prevents the latter of doubling another D/EPP position that might possibly be present in the sentential spine. In other words, the prohibition for *o* is to act as a variable argument. The *-o* element has been equated to a clitic subject and an explicit comparison with the parametric variation related to the presence/lack of subject clitics in Romance has been employed.

As to ACC-dialects, I have argued that the properties of *-o*, that are basically uniform in all the other dialects (left aside the just reminded restriction in *n*-dialects), are substantially different in these varieties, in that this element is again a variable argument, but is associated with verb's external argument and not with the internal one. If this conjecture is correct, the accusative marking of the DP can be explained by resorting to the theory of 'dependent case'.

With reference to auxiliary agreement (that in NONAGR dialects may be either with the DP or with the participle), I have put forward the hypothesis that the auxiliary corresponds to an independent existential predicate and postulated an interpretive enrichment operation at LF that co-index the argument of the existential and the D-variable argument of the participial phrase. Some evidence for this conjecture comes from adjacency of the auxiliary and the element with which it agrees, and from the presence of present tense *est'*, which in CSR is reserved for the existential.

Finally, I have singled out some finer distinctions within the constructions with unaccusative verbs: in these constructions the Theme argument is usually lexicalized (optionally) by the *u*-phrase, but some varieties seem to allow its assignement to the EPP/D position. I have not proposed a parameterization for the realizational options of the Theme of unaccusatives, also in view of the fact that the latter types of construction are rather rarely attested. The only speculation I can offer here is that

there might be some restriction on the category Q (*-n-/-t-*) that blocks the generic closure of the internal argument, which therefore must be obligatorily realized in EPP position.

6.3 *Final remarks*

The brief summary presented in the preceding section may serve to evaluate this work against the aim and objectives set out in the introductory chapter – exploring some aspects of variation in natural languages with reference to current generative theory. While *I leave to* the reader to judge whether this task has been accomplished, I hope to have provided a contribution to the idea the all variation can be ascribed to properties of lexical elements.

As discussed in the first chapters, the idea of lexical parameterization has been implemented in different and sometimes conflicting ways by different authors. The point of view I have adopted here in spelling out my proposal is a maximally lexicalist one in that it takes it that elements usually regarded as morphological can be best dealt with on the assumption that they are syntactic heads that enter the computation, on a par with other functional heads. In this respect I have taken a very different approach with respect to the standard current model for morphology, represented by Distributed Morphology (Halle and Marantz 1993; 1994). After all, in following Manzini and Savoia (1997; 2004; 2007 and subsequent works), I have adopted another viewpoint not so popular in mainstream generative linguistics, the principle according to which only what surfaces is represented in syntax: there are no empty categories or unpronounced lexical elements (as e.g., in Kayne 2011), nor are elements moved/copied. Conversely, LF admits of covert operations like variable closure or the introduction of operators providing interpretive enrichments, in accordance with Full Interpretation (Manzini and Roussou 2011; 2012). Finally, the identity of features with their values (features become categories: Manzini and Savoia 2004) dispenses with uninterpretable features and feature-checking as a primitive of syntax.

My attempt was to show that a theory based on the principles recalled above has advantages, in terms of economy, in accounting for the rather extreme variation found in NR participial constructions, for example in positing one structure for different patterns. In pursuing this attempt, I hope to have presented enough evidence to support my claim that a piece of morphology, the participial middle-passive inflection, acts as an operator scoping over the verb's arguments. I am also confident that I have convincingly argued how agreement inflections (that in standard minimalist treatments are the reflex of an operation performed by the morphological component on abstract features) contribute to the saturation of argumen-

tal roles and to the EPP, so as to dispense with the notion of oblique or quirky subject, at least for the NR constructions I have analysed.

This approach correctly predicts a gap in the variation scheme, namely the lack of the logically possible pattern where the participle has invariable-*n*/-*t* ending and the DP is in accusative case. It also takes advantage of the analogies with patterns of parametric variation that have been extensively analysed in the literature, in particular the null subject and the related phenomena.

For the copula agreement patterns I have suggested a solution that, however, is in need of further evidence from the data and should be implemented more systematically. The same is true with regard to the binding properties of the *u*-phrase, that must be accounted for in full if one assumes, as I have done here, that it is not an oblique subject. Finally, there are issues that are potentially problematic for my proposal, e.g. the association of *-o* with the external role in ACC-dialects in the presence of a Q head that should assign it the internal role. I leave all these questions for future work.

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