

ON CASE-MARKING IN POLISH *

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This paper is concerned with an analysis of some principles determining Case-marking in Polish. Data from Polish are analyzed here in terms of the assumptions of the Case theory in the Government-Binding (henceforth, GB) framework. The study investigates if and to what extent the theoretical assumptions claiming universality, yet adopted largely on the basis of English, a language with a degenerate Case-system, find support in a richly inflected language like Polish.

It will be shown here that Polish strongly supports the distinction made in the Case theory between structural and inherent Case-marking. The two instances of Case-marking are clearly distinguished under sentential negation in Polish. However, it will be argued here that the concept of inherent Case may be interpreted somewhat differently than in Chomsky (1986). It will also be suggested here that the properties of the passive construction in Polish may be deduced from the Case theory if verbs appearing with indirect objects and prepositional complements are systematically distinguished from verbs appearing with direct objects as regards the properties of Case-marking. Thus, it will be suggested here that lexical Case-markers assign Case in Polish analogously to prepositions. It will follow from the analysis of the Polish data that if the system of abstract Case-assignment is to be kept restrictive, marked processes of Case-realization must be allowed in particular languages.

1. The Case theory in GB: English

1.1 The concepts of Case and Case-marking.

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In the GB model, the subcomponent of the general system of principles which deals with Case is the Case theory.¹ The Case theory defines the notion of Case and determines the principles of Case-assignment, i.e., specifies the categories which assign Case, determines what Case is assigned and under what conditions it is assigned.

Case is a feature in the GB framework. It is a fundamental assumption of this theory, which distinguishes it from the traditional approaches to case, that the feature of Case is an abstract one: it may be realized morphologically, as is true of languages which have overt case-endings, but it need not be manifested morphologically, as is true of languages lacking overt case-morphology. Since Case is an abstract marker in GB, assigned uniformly whether it is realized overtly or not, all languages are subject to the (core) system of principles determining Case-assignment, although only some languages realize Case morphologically. In traditional theories (cf. Kuryłowicz (1964), Heinz (1955 and 1965)), case is a purely inflectional attribute and languages have case or lack it depending on whether they realize it or not.

The GB and traditional approaches also differ in defining what it means for a category to have, appropriately, Case or case. In the GB theory, Case is assigned by Case-marking categories, i.e., an element acquires a feature of Case as a result of being assigned Case by a category which has Case to assign. Traditionally (cf. Kuryłowicz 1964), case is possessed, i.e., an element has case either by virtue of being syntactically dependent on a category which selects for the case-form of its syntactic dependent, or the element does not depend syntactically on any category and has case which is the exponent of a well-defined semantic (thematic) relation which this element expresses in the structure.

Another difference between the GB and the traditional approaches is that in the former, Case is assigned to NPs while in the latter, it is primarily an attribute of nouns.² The general requirement imposed by the Case theory in the GB model is that (lexical) NPs must have Case. This requirement, known as the Case Filter, cannot be reduced to the requirement that nouns rather than NPs must have Case, as it holds of both NPs which have a nominal head and of NPs which do not have a nominal head, as is the case with gerunds and infinitivals in NP positions. Thus, all the structures in (1) may be treated analogously, i.e., they are all ill-formed by virtue of containing a Caseless NP:

- (1) a.* I wonder [who_i [[_{NP} he] to surprise t_i]]
 b.* I wonder [who_i [[_{NP} his winning] to surprise t_i]]
 c.* I wonder [who_i [for [_{NP} him to win] to surprise t_i]]

¹ Following a generally accepted convention, I shall use the term Case referring to abstract Case and the term case referring to morphologically realized Case.

² Both theories assume that the process of agreement involves, appropriately, Case- or case-sharing.

1.2 The principles of Case-assignment

1.2.1 Conditions on Case-assignment: government and adjacency

The main conditions imposed on Case-assignment in GB are the requirement that Case be assigned under government and the requirement that it obey adjacency. The former requirement explains the ungrammaticality of (2) and the latter requirement explains the ill-formedness of (3):

- (2) * John tried [[Mary to be sick]]
 (3) * John gave to Mary [a book]

(2) is ill-formed with respect to the Case theory because it contains an NP (i.e., *Mary*) which is not governed (by a Case-assigner), hence, which is Caseless. (3) is ill-formed because the object NP is not adjacent to the verb and thus cannot be marked for Case by the verb.³

1.2.2 Case-assigners

There have been two approaches to the problem of the principles determining the assignment of Case in the GB theory. In Chomsky (1981), only the [–N] categories, i.e., verbs and prepositions, as well as the constituent INFL of tensed clauses are considered to have the property of assigning Case. The constituent INFL assigns nominative Case only if it has the element [+AGR], i.e., if the clause is tensed. Verbs assign objective Case to their object NPs and prepositions assign oblique Cases to their complements.⁴ The genitive Case in NPs and APs is not assigned by a governor, since nouns and adjectives are not Case-assigners. Rather, genitive Case is assigned under the genitive Case rule assigning Case in the configuration (4a) and under *of*-insertion in (4b) (cf. Chomsky (1981:170, 50)).

- (4) a. [_{NP} __ X']
 b. [[+N] __ NP]

The genitive Case assigned under (4a) is realized by the inserted 's. The genitive Case assigned under (4b) is realized by the semantically inert preposition *of*.

In Chomsky (1986), the class of potential Case-assigners includes all lexical categories, i.e., verbs, prepositions, nouns, and adjectives, as well as the constituent INFL. As before, nominative Case is assigned by INFL if INFL is [+AGR], objective Case is assigned by verbs to their complements, and oblique Cases are assigned by prepositions to their object NPs (cf. note 4).

³ Heavy object NPs need not be adjacent to the verb in surface structure. The status of the rule shifting such NPs is not clear.

⁴ In English, prepositions may be assigning objective rather than oblique Case.

In contrast with Chomsky (1981), in Chomsky (1986) genitive Case is assigned directly by nouns and adjectives.

1.2.3 Case-assignment and Case-realization

Chomsky (1986) assumes that Case-assignment is directional, where the direction in which Case is assigned corresponds to the head parameter of the X'-theory. Thus, if heads are initial, as in English, Case-assignment should be uniformly to the right. Since in English NPs, a Case-marked NP may appear to the right of the head or to the left of the head, as shown in (5a) and (5b), respectively, Case-assignment is distinguished from Case-realization.

- (5) a. the destruction of [the city]
 b. [the city's] destruction

In (5a), genitive Case is assigned to the complement, i.e., to the right, and it is also realized to the right, but it is assigned to the right and realized to the left in (5b). Hence, there are two instances of genitive Case-realization in English: in the complement and in the subject positions.

Chomsky (1986) assumes isomorphism of assigned and realized Case. For example, if a category is marked for genitive Case, it cannot realize nominative Case.

1.2.4 The Case Filter and the concept of structural and inherent Case in GB and traditional theories

The Case theory of Chomsky (1986) makes a distinction between structural and inherent Cases. Nominative and objective are instances of structural Case. Structural Case is a purely configurational notion; it is Case assigned in terms of the appearance of an NP at S-structure, in dissociation from Th-marking. Structural Case may be assigned to an NP by a governor which marks the NP for Th-role, but it may also be assigned to an NP by a governor which does not mark the NP for Th-role, e.g., nominative Case-marking is assignment of Case in dissociation from Th-marking. If structural Case could be viewed as a marker of the structural relation in which NPs stand to head categories, the notion of structural Case in GB would be directly analogous to the notion of grammatical case of Kuryłowicz (1964), where the grammatical case-endings are considered to be merely the exponents of the syntactic dependence of nouns on head categories in structures, but where the heads determining grammatical cases include only verbs and nouns.

Inherent Cases, genitive and oblique, are assigned in close association with Th-marking, at D-structure. This association falls under the uniformity condition ensuring that a category may assign inherent Case to an element

only if it assigns a Th-role to this element. Actually, since Th-roles are assigned to chains headed by an element which is Case-marked, the Case Filter of Chomsky (1986) is not a morphological condition holding of the PF component, unlike in Chomsky (1981). Rather, it is a condition holding at LF, determined by the visibility condition on Th-marking. Roughly, the visibility condition ensures that a chain is visible for Th-marking if it is headed by Case at LF. Thus, in this theory, Case is an abstract marker making Th-marking and interpretation in the semantic component possible.

In the approach to the Case theory in Chomsky (1986), Case is dissociated from Th-role in nominative and objective Case-assignment. Case and Th-role are associated in the assignment of oblique Cases, nominal and adjectival genitive and verbal Case other than the objective, e.g., genitive or dative, if a language allows such Case-marking. Yet, even if Case is associated with Th-marking, Case does not express relations other than the structural dependence of a constituent of phrase on the head of the phrase. There is no interdependence between the kind of Case assigned and the kind of Th-role assigned in Chomsky's accounts of Case: it is not claimed in the GB theory that specific Th-roles or ranges of Th-roles may be correlated with specific Cases or ranges of Cases so that particular Cases could be viewed as the exponents of the Th-roles which NPs bear to their lexical heads. In this respect, the notion of inherent Case of Chomsky (1981 and 1986) differs from the notion of concrete, or semantic case of Kuryłowicz (1964), for whom semantic cases are determined contextually, i.e., such cases depend on the semantics of particular verbs in the sense that there is a common semantic denominator to verbs selecting for a concrete (i.e., semantic) case and there is a common relational meaning to their object NPs, or else NPs appearing in concrete case-forms have well-defined (adverbial) meanings comparable with the meanings associated with prepositional phrases functioning as adverbial expressions, i.e., case-endings in case-languages may express the same relations that prepositions express in languages with or without degenerate case-morphology. Case-languages may differ depending on whether they have both the grammatical and concrete cases or only the grammatical cases (cf. Kuryłowicz 1964:32). Thus, it is of fundamental importance in traditional theories what case-form a category appears in and what function the case-ending has in the case-system of the given language (cf. Heinz 1955). In GB, in contrast, what is most significant is that an NP has Case. The Case feature makes it possible for an NP to receive a Th-role and semantic interpretation, but the Case feature does not serve to identify the Th-role, whether Case is structural or not. Thus, it is of little, if any, significance in the GB theory that "dative" verbs belong to a well-defined semantic class or that the possessor phrase appears in the genitive in a large number of unrelated languages, e.g., English as well as Japanese.

2. A GB analysis of Case in Polish

2.1 Polish case-morphology

Polish has seven distinct morphological cases: nominative, genitive, dative, accusative, instrumental, locative, and vocative. The vocative, which will not be discussed here, is realized on NPs used in isolation, i.e., in addresses and appeals. All other case-endings are realized on NPs appearing in structures. Nominative is the case of the subject of tensed clauses and locative is an exclusively prepositional case in Polish. Accusative is not realized in NPs and APs in Polish, as predicted by Chomsky's (1986) analysis. Instrumental, genitive, and dative NPs occur in NPs, APs, PPs, and as objects of verbal heads. Under sentential negation, the otherwise accusative NP occurs in the genitive case-form in Polish.

2.2 Bare NP adjuncts and Case-marking

Consider the following examples:

- (6) Jan wysłał im pieniądze [pocztą(instr)]
 (= John sent them money [(by) mail])
- (7) Jan napisał to [ołówkiem(instr)]
 (= John wrote this [(in) pencil])

In (6), the expression in the instrumental case-form functions as the adverbial of means. In (7), it functions as the adverbial of instrument. The expressions are peripheral to the verb, i.e., they are not subcategorized. In the X'-theory, they are immediate constituents of VP rather than V', which includes only subcategorized elements. By virtue of the fact that adjunct NPs are not complements of the verb, they cannot receive Th-roles (if they are marked for Th-roles) from the verb. Neither can they receive Case from the verb, whether objective or inherent, the latter option being precluded by the uniformity condition. As shown in the English translations of (6) and (7), in English such expressions appear as PPs, where the object NP of the head preposition plausibly receives its Th-role and Case from the head preposition. However, an adverbial modifier need not be expressed only as a PP in English. English has a limited class of bare NPs functioning as adjuncts of time, place, direction, and manner, as witnessed by (8) (cf. Larson 1985:595):

- (8) a. I saw John [_{NP} that day]
 b. You pronounced my name [_{NP} every way one could imagine]

Also Polish has bare NP adverbs functioning as temporal and locative modifiers:

- (9) a. Jan spał [cały dzień(acc)]
 (= John slept [the whole day])
 b. Jan przyjechał [następnego dnia(gen)]
 (= John arrived [the next day])
 c. Jan pójdzie [lasem(instr)]
 (= John will go [(through) the forest])

The appearance of bare NP adjuncts in sentences raises questions relating to their status with regard to the Th-theory and the Case theory. Non-subcategorized adverbials need not be analyzed as arguments: they do not appear in A-positions. Hence, their appearance in structures is not enforced by the Th-theory and it follows that they are optional. The situation is different in the case of subcategorized adverbials, as in (10) below:

- (10) a. [_{VP} put the book *([_{PP} on the desk])]
 b. [_{VP} take someone *([_{NP} an hour])]

The verbs *put* and *take* + NP must be analyzed as having adverbial Th-roles to assign and consequently, VPs headed by these verbs must contain expressions receiving these adverbial Th-roles.

What structures like (10) show is that prepositional expressions of place and NPs of time extension may, and sometimes must, be assigned a Th-role. Theoretically, then, adverbial modifiers in (6), (7), and (9) may be assigned a Th-role. What seems to differentiate the assignment of Th-roles in (10) from Th-assignment in (6), (7), and (9) is that in the former case, the Th-roles are assigned obligatorily, by a lexical head, while in the latter, the Th-roles are assigned optionally, perhaps under a general convention allowing such assignment rather than by a lexical head (cf. Larson 1985). If adverbial Th-roles may be assigned freely, subject to semantic interpretation, they must be semantically compatible with the head verbs, e.g., a temporal Th-role may be assigned if the verb may be interpreted relative to time location. Alternatively, it may be possible to suggest that adjunct Th-roles are assigned compositionally by predicates and that such roles are optional. Note that adjunct Th-roles may to some extent be treated analogously to subject Th-roles: a verb is specified as assigning a subject Th-role although it does not assign it directly and it may be specified as assigning adjunct Th-roles although it does not assign such roles directly. Yet, while subject Th-roles are obligatory, adjunct Th-roles are optional.

It seems desirable to subsume adverbial adjuncts under the Th-theory: if adjunct phrases bear Th-roles, their appearance in structures falls under the Th-criterion and it is possible to explain the ill-formedness of sentences containing more than one expression bearing a given adverbial Th-role, e.g., the role of Instrument as in (11):

(11) *John attached the board to the wall with a nail, with a hammer.

In this approach, it would be possible to analyze expressions such as *on the desk* and *an hour* uniformly, i.e., they would be interpreted as expressing, respectively, spatial and temporal Th-relations whether they are subcategorized or not. Only the manner in which their Th-roles are assigned would be different depending on the structures they are part of.

As illustrated in (9), a bare NP adjunct may appear in different case-forms in Polish. The accusative in (9a) is associated with a temporal Th-role, which is a relation of temporal extension. The noun of the accusative NP denotes a stretch of time, a temporal measure. In contrast with the accusative, the temporal genitive in (9b) is associated with a moment within the period of time denoted by the noun. A selectional restriction is imposed on the head noun of the genitive adjunct: the noun must denote a divisible period of time and not a point in time. This explains the availability of genitive NPs like *tego dnia* (= that day) and the unavailability of genitive NPs like * *tej chwili* (= that moment). The restriction is analogous to restrictions holding between prepositions and head nouns. For example, the preposition *at* of a temporal PP selects for nouns denoting points of time rather than time extensions. Hence, *at this moment* is possible but * *at this week* is not.

In Polish, the accusative of temporal extension is compatible with a durative verb like *spać* (= to sleep) and the partitive genitive is compatible with a verb of momentary action like *przyjechać* (= to arrive). Thus, selectional restrictions hold between head verbs and the Case/case of adjunct NPs. Moreover, selectional restrictions seem to hold also between the noun of the adjunct NP and the Case/case of this NP, just as such restrictions hold between the head noun and the preposition.⁵ In GB, selectional restrictions are considered to hold between heads. Restrictions between verbs and nouns are restrictions between heads. Restrictions between the Case of the NP and the nouns of this NP may be regarded as holding between heads if the Case is analyzed as the head of the adverbial NP, e.g., the case-ending is the head of the adjunct phrase. If so, lexical Case-markers in Polish would be analyzed on a par with prepositions. Just as prepositions are Th-assigners, lexical Case-markers may be associated with Th-roles. Just as prepositions are the exponent of various adjunct Th-roles which may be in relation to the verb

⁵ Note that the restriction responsible for the unavailability of (i) below must be holding between the noun and the genitive itself, as *przyjechać* (= to arrive) is semantically compatible with an adverbial modifier whose head noun denotes a point in time, as witnessed by (ii):

- (i) * *przyjechać* [_{NP_{gen}} *tej chwili, gdy ...*]
 (= to arrive [the moment when ...])
 (ii) *przyjechać* [_{PP} *w chwili, gdy ...*]
 (= to arrive [at the moment when ...])

(e.g., *to talk with Mary* [for an hour]: *to talk with Mary* [(on) the next day]), lexical Case-markers are the exponent of Th-roles (e.g., *rozmawiać z Marią* [*godzinę*(acc)] (= to talk with Mary for an hour): *rozmawiać z Marią* [*następnego dnia* (gen)] (= to talk with Mary the next day)). I will adopt this analysis, following the insights inherent in the traditional studies of Kuryłowicz (1964) and Heinz (1965). Thus, I submit here that various Cases may be associated with various Th-roles in Polish and that the assignment of adjunct Th-roles (which may be optional Th-roles assigned by prepositions) is mediated through a lexical Case-marker just as it may be mediated through a preposition.⁶ That is, a predicate may select for an autonomous Th-assigner, a preposition or a lexical Case-marker (if a language permits the latter option) to assign its indirect adjunct Th-role. The preposition and the Case-marker also assign Case.⁷

2.3. Case-marking and sentential negation in Polish

The assignment of Case to adjunct NPs in Polish is associated with Th-marking. Hence, it is inherent Case-marking in terms of Chomsky's (1986) analysis. The interaction between Case-marking and sentential negation provides support for the assumption that Case-marking involved in adjuncts differs from Case-marking in objects.

Sentential negation affects the assignment of Case to an object NP in Polish: an accusative object of a verb appearing in a declarative sentence is obligatorily expressed in the genitive in a negated counterpart. However, negation does not affect oblique accusative, as shown in (12) and (13):

- (12) Jan liczy [_{PP} *na* [*pomoc*(acc)/* *pomocy*(gen)]]
 (= John counts [on help])
 (13) Jan nie liczy [_{PP} *na* [*pomoc*(acc)/* *pomocy*(gen)]]
 (= John does not count [on help])

If negation affects only verbal accusative, expressions like the bracketed NP in (9a) should not be affected by negation. Compare (14b), which involves an adjunct, with (15b), which involves an object NP:

- (14) a. *Deszcz padał* [*trzy godziny*(acc)]
 . (= The rain was falling (for) three hours)
 b. *Deszcz nie padał* [*trzy godziny*(acc)/* *trzech godzin*(gen)]
 (= The rain was not falling (for) three hours)

⁶ Similarly to the temporal accusative and genitive, the instrumental Case assigns a spatial Th-role (cf. (9c)). The spatial relation is that of traversed space and it is also assigned by the preposition *przez* (= through).

⁷ See Anderson (1983) and Larson (1985) for different approaches to the problem of Case- and Th-marking to adjunct NPs in English.

- (15) a. Jan przeszedł [trzy mile(acc)]
 (= John walked three miles)
 b. Jan nie przeszedł [* trzy mile(acc)/ trzech mili (gen)]
 (= John did not walk three miles)

By affecting only the assignment of accusative Case to an object NP of a head verb, negation distinguishes between the assignment of verbal accusative to an object NP from the assignment of accusative Case to an adjunct, as well as to a prepositional object. In terms of Chomsky's (1986) analysis, the former is structural Case whereas the latter is inherent Case.

If negation affects the assignment of structural Case, it may be expected to affect nominative Case-assignment, as nominative Case is structural in Chomsky (1986). Furthermore, negation may be expected not to affect the assignment of verbal non-accusative, which Chomsky (1986) analyzes as inherent. These predictions are supported by relevant data:

- (16) a. Jan pomógł [Irenie(dat)] (= John helped Irene)
 b. Jan nie pomógł [Irenie(dat)/* Ireny(gen)]
 (= John did not help Irene)
 (17) a. Na stole jest [książka(nom)]
 (= There is a book on the table)
 (17) b. Na stole nie ma [* książka(nom)/książki(gen)]
 (= There isn't a book on the table)

As the sentences in (17) show, the subject NP is nominative in a declarative existential-locative sentence in Polish, but this NP is genitive in a negated counterpart. The structural analysis of existential-locative sentences is of no special concern here and I will assume that the NP in question appears in the VP at some level, either as a result of lowering into VP transformationally, or by virtue of having been base-generated in the VP. I submit here that the morpheme of sentential negation, i.e., neg, realized as *nie*, obligatorily cliticizes onto the verb in the syntax, forming a complex verbal unit as in (18):

- (18)
$$\begin{array}{c} \text{V} \\ \swarrow \quad \searrow \\ \text{neg} \quad \text{V} \end{array}$$

The evidence for the assumption that *nie* is a verbal clitic-like element is wo-fold. The morpheme of sentential negation behaves like a proclitic with regard to stress-assignment in Polish (cf. Ozga 1976). There is also syntactic evidence suggesting that *nie* cliticizes onto the verb in Polish: no constituent, not even another clitic may separate *nie* from the verb, as shown in (19):

- (19) a. Jan nie nudzi się (clitic) (= John is not bored)
 b. Jan się nie nudzi
 c. * Jan nie się nudzi

Despite the fact that *nie* and the verb form a complex verb, it would not be well-motivated to suggest that sentential negation is lexical in nature in Polish, i.e., that the verb is pulled from the lexicon with *nie* already cliticized onto it. Such an account would unduly expand the lexicon of Polish and a lexical rule would have to be postulated which does not affect the argument structure of the verb; hence, does not feed the Projection Principle, which is expected of syntactic rather than lexical rules (cf. Borer 1983, Williams 1981). Furthermore, treating sentential negation as lexical would amount to treating predicates like *nie być (całkiem) szczęśliwym* (= not to be (quite) happy) and *być (całkiem) nieszczęśliwym* (= to be (quite) unhappy) on a par syntactically and semantically, which is undesirable. Such a treatment would predict that there are no scope relation differences between structures involving sentential and structures involving lexical negation, but such differences may easily be observed. For example, (20a) is ambiguous between the **not Q** and the **Q not** readings whereas (20b) admits only the **Q not** reading:

- (20) a. Jan nie widział wielu rzeczy
 (= John did not see many things)
 b. Jan był niezadowolony z wielu rzeczy
 (= John was displeased with many things)

Sentential and lexical negation in Polish also differ in the range of negative lexical items which may occur with the morpheme *nie*. Negative polarity items such as *nikt* (= no one), *nigdy* (= never), *nigdzie* (= nowhere), etc., may occur under sentential but not under lexical negation:

- (21) a. Jan nie był nigdy zadowolony
 (= John was never pleased)
 b. * Jan był nigdy niezadowolony
 (= John was never displeased)

In view of the above considerations, I will assume here that sentential negation is syntactic in Polish, i.e., the cliticization of *nie* takes place in the syntax. What remains to be explained is why sentential negation affects structural Case-marking but does not affect inherent Case-marking. I will address this problem later in this section.

2.4 Inherent Case-marking in Polish

In Chomsky (1986), oblique Cases and verbal Case other than the accusative are analyzed as inherent, assigned at D-structure and associated with Th-marking. Although it is quite natural to regard the assignment of Case by prepositions as related to Th-marking, it is not clear why verbs assigning dative, genitive, or instrumental rather than objective should assign

inherent rather than structural Case. What is unexplained in this approach and clearly needs to be explained is how verbs assigning inherent Cases differ from verbs assigning structural Case. Furthermore, if relating Th-marking to Case under inherent Case-marking is well-motivated, it must be explained if every instance of verbal non-accusative may indeed be analyzed as related thematically and if it is distinct from structural Case. Another problem that arises in connection with distinct mechanisms of Case-marking is whether the difference in the way in which object NPs are assigned Case is paralleled by other distinctions manifesting themselves in the syntactic behavior of the complements marked for Case differently, or marked for different Cases.

I submit here that dative is inherent in Polish and that it is associated with the Th-role Goal, instrumental is inherent when it is associated with the Th-role Source, and genitive is inherent in Polish when it is associated with the Th-role Source (or Cause) or the Th-role Goal (or Target). In all instances where the non-accusative complements do not express these relations in construction with the verb, the Case assigned is objective, e.g., I claim here that the abstract Case assigned to the object of the verb *kierować* (= to direct, manage), which appears in the instrumental case-form, is objective, and that the genitive object NP of the verb *nienawidzieć* (= to hate) is also assigned objective Case. I submit here that objective Case is realized by irregular allomorphs of the objective Case morpheme with such verbs. Irregular allomorphs are governed lexically, i.e., objective Case may be realized by an irregular allomorph only with certain verbs. The lexical entries of such verbs may thus have to be specified for the particular case-form realizing their Case feature. If markedness of lexical items may be determined on the basis of the number of features necessary to define the given lexical entry, transitive verbs assigning objective Case realized regularly need not be marked in the lexicon with respect to their Case-assigning property, or may be marked as assigning Case, i.e., [+Case]. In the absence of the Case-assignment specification (or if the item is marked as [+Case]), the Case feature will be realized as accusative under a redundancy rule. Transitive verbs assigning objective Case realized by the irregular allomorph may also have to be specified for the allomorph realizing the Case feature, e.g., [+Case, /+instr/]. The motivation underlying this analysis is that it differentiates between the object NPs of various verbs. While the object NPs marked for inherent Case tend to be optional, express well-defined relational meanings, cannot serve as subjects of passive sentences, and are not affected by the morpheme of sentential negation, the object NPs marked for objective Case by the head verb tend to be obligatory, may serve as subjects of passive sentences, and are affected under sentential negation. Accusative verbs are distinguished from (inherently) non-accusative verbs in this study in that accusative verbs are transitive, i.e., they assign Case to their object NPs, while (inherently) non-accusative verbs are intransitive, i.e., they

do not assign Case to their indirect arguments. Rather, they select for an autonomous Th-role assigner, i.e., a preposition or a Case-marker, which is also a Case-assigner.⁸ In this way, inherent Cases assigned by Case-markers are associated with Th-roles (cf. also Rizzi (1986)).

2.5 Lexical Case-markers and prepositions in Polish

As has been suggested above, lexical Case-markers are associated with Th-roles on a par with prepositions. In fact, prepositions assign all the Th-roles assigned also by the lexical Case-markers in Polish. For example, the Th-role Goal may be assigned both by the dative or the genitive and by the preposition *do* (= to). The Th-role Benefactive (Malefactive) associated with the dative in Polish may be assigned by *dla* (= for). The Th-role Source assigned by the inherent genitive is assigned by the prepositions *od* (= from) and *z* (= from). Not unexpectedly, many changes may be observed in the categorial realization of arguments bearing such Th-roles in the historical development of Polish, e.g., the prepositional complement [_{PP} *dla* NP] of the verb *poświęcić* (= to sacrifice) in contemporary Polish could earlier be expressed by a dative NP (cf. Kałkowska et al 1974:21), or the contemporary instrumental complement of the verb *dziwić się* (= to be surprised) could earlier be expressed by the PP *nad* + NP (= over/at + NP) (Kałkowska et al 1975:29). In contemporary Polish, a lexical head may occur both with a prepositional complement and with an inherently Case-marked object NP, e.g., *nieznany* (= unknown) + dative NP or [_{PP} *dla* + NP] (= for + NP).

2.6 Passive sentences in Polish

As has been shown by Zabrocki (1981), passive is severely restricted in Polish. Unlike English, Polish does not allow indirect object and prepositional passives. In English, the passive construction is analyzed to have two sources: lexical and syntactic. Lexical passive is governed thematically, i.e., the subject phrase of the passive sentence must be marked for the Th-role Theme. Syntactic passive is not governed thematically and is derived by the movement of the object NP into the subject position, as shown in (22) below.

- (22) a. e was arrested John
 b. John_i was arrested t_i

⁸ It may also be that the lexical Case-marker is just a place-holder for the Th-role assigned directly by the verb, but it assigns Case. This seems to be taking place also in some V+PP structures, where the head preposition does not seem to have a Th-role to assign, but where it marks the NP for Case, e.g., *liczyć na coś* (= to count on something).

The passive morpheme is analyzed as a clitic which absorbs the Case of the verb to which it attaches. Thus, the object NP must move to a Case-marked position or the structure will offend the Case Filter. The question that arises in connection with the passive construction in Polish is whether the restrictions on the passive follow from the lexical nature of the construction (cf. Zabrocki 1981), or from the conditions on Case-marking in passive structures in Polish.

The hypothesis that passive is lexical in Polish is a natural one given that passive is so heavily constrained in Polish. Yet, this analysis depends on the Th-theory adopted for the purposes of the study: the Th-role assigned to the object NP by verbs like *uderzyć* (= to hit), *przekonać* (= to persuade), or *pokazać* (= to show) may be interpreted to be the same, i.e., Theme (cf. Williams 1981), or all three verbs may be analyzed as assigning different roles, i.e., Patient, Goal, and Theme, respectively (cf. Chomsky (1986), Rizzi (1986)). More importantly, however, the NP *Jan* carries the object Th-role in both (23a) and (23b):

- (23) a. Jan został aresztowany przez policję
(= John was arrested by the police)
b. Policja aresztowała Jana
(= The police arrested John)

If the passive (23) were lexical, the internal argument of the verb *aresztować* (= to arrest) would be assigned its Th-role by the verb in (23b) but compositionally by the VP in (23a).

Suppose that (some) passive constructions may be analyzed as syntactic in Polish. Then, the passive morpheme may be analyzed as absorbing the Case of the verb. Let us see if the restrictions on the passive construction in Polish may follow from the properties of Case-marking in passive sentences in Polish.

As has been discussed by Zabrocki (1981), dative and prepositional complements do not have related passives (cf. (24)). Direct object NPs, typically accusative NPs, have related passive, as shown in (25). Interestingly, verbs assigning objective Case which is realized irregularly also have related passive, as shown in (26):

- (24) a. * Maria została pokazana książkę
(= Mary was shown a book)
b. * Maria była polegana na (= Mary was relied upon)
- (25) Jan został uderzony/znaleziony/zastrzelony/przekonany
(= John was hit/found/shot dead/persuaded)
- (26) a. Jan jest nienawidzony przez wszystkich
(= John is hated by everyone)
b. Jan jest poniewierany przez szefa
(= John is maltreated by the boss)

Assuming that passive morphology absorbs the Case assigned by the verb, the distributional properties of the passive construction in Polish will follow from the principles of Case-marking if it is assumed, as has been done above, that verbs taking indirect objects and prepositional complements do not assign Case in Polish. Hence the passive morphology does not affect the assignment of Case to such complements and they cannot undergo NP-movement without violating the Case Filter (i.e., NPs marked for inherent Case cannot realize it). In contrast, passive morphology affects the assignment of Case by the head verb, i.e., objective Case. Object NPs marked for Case by the verb must be moved to a Case-marked position in a passive sentence or else such NPs would lack Case.

2.7 Case-assignment and Case-realization: the genitive of negation in Polish

Consider the following sentences:

- (27) a. [_{NP_{nom}} Dwaj mężczyźni (nom)] pobili Jana
(= Two men beat up John)
b. [_{NP_{nom}} Dwóch mężczyzn (gen)] pobiło Jana
(= Two men beat up John)

In (27a), the subject NP consists of the counted noun *mężczyźni* (= men) and the numeral *dwaj* (= two). The NP is in the nominative and triggers regular verbal agreement. In (27b), the counted noun as well as the numeral are in the genitive case-form. The NP triggers irregular verbal agreement, or does not trigger agreement at all and the verb is marked for the features third person, singular, neuter by default. The structures in (27) are syntactically parallel: the bracketed NP is the subject in both cases, assigned the same Th-role by the predicate *pobić Jana* (= to beat up John). Yet, the NPs differ morphologically. Note that it would not be reasonable to analyze the numeral *dwóch* (= two) as the head of the subject NP (the numeral *dwaj* (= two) has adjectival inflection and is clearly a modifier), as the counted noun would have to be analyzed as a complement and the fact that it realizes dative Case when the inclusive NP is marked for dative, as in (28), could not be explained.

- (28) Maria pomogła [_{NP_{dat}} dwóm mężczyznom (dat)]
(= Mary helped two men)

Hence, the counted noun is in the genitive case-form in quantified NPs in Polish only when the inclusive NP is marked for nominative (cf. (27b)) or objective (cf. (29)) Cases.

- (29) Maria spotkała [_{NP_{acc}} dwóch mężczyzn (gen)]
(= Mary met two men)

What this suggests is that the morphemes realizing nominative and accusative Cases (i.e., structural Cases) have allomorphs syncretic to the allomorph of the morpheme realizing the genitive Case and that these allomorphs realize nominative and accusative Cases in certain well-defined configurations, e.g., in the presence of quantificational modifiers like *wiele* (= many), seminumerals like *kilka* (= several), and the numerals *dwóch* (= two), *trzech* (= three), *czterech* (= four) as well as the numerals (ending in) *pięć* (= five) and more, e.g., [ośmiu mężczyzn (gen)] (= eight men).

Since the marked morphological mechanism of Case-realization must be allowed in the grammar of Polish in view of the data in (27) and (29), it seems better-motivated to analyze the genitive of sentential negation as an instance of marked Case-realization than as an instance of a marked mechanism of Case-assignment. Thus, I submit here that assigned Case may have marked realization in Polish also in the context of the morpheme of sentential negation *nie*. On this analysis, *nie* is expected to affect the assignment of structural Cases, but it is not expected to affect the assignment of inherent Cases. What remains to be explained is why *nie* does not affect the lexically governed realization of objective Case, as shown in (30):

- (30) Jan nie dowodzi [plutonem (instr)]/* [plotonu (gen)]
 (= John does not lead/command a platoon)

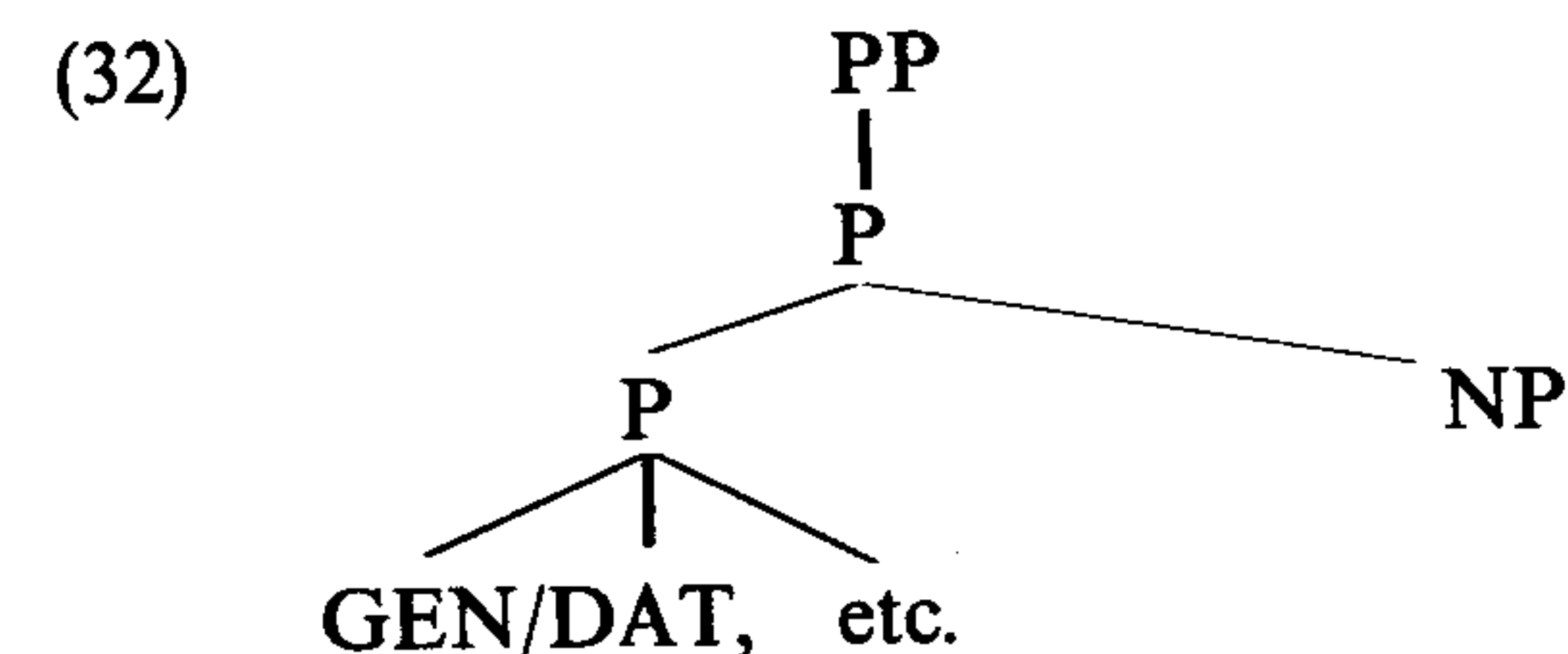
Here, I suggest that if Case-realization is specified in the matrix of inherent features of a category, this requirement takes precedence over a convention realizing Case depending on context. That is, the feature [/+instr/] takes precedence in (31):

- (31) [_v nie [_v +Case, /+instr/]]

3. Conclusions

As the analyses have shown, Polish clearly distinguishes between the structural Cases, nominative and accusative, and the inherent Cases, genitive, dative, instrumental, and oblique. It also supports the assumption that the former are assigned at S-structure, in dissociation from Th-marking, while the latter are marked at D-structure, in close association with Th-assignment. Since direct object NPs differ in Polish from indirect objects and prepositional complements both with regard to the ability to have related passive and with regard to the phenomenon of the genitive of negation, it has been suggested here that direct object NPs (as well as the subject NP) are marked for Case directly by the verb (and INFL-AGR, respectively), while indirect objects and prepositional complements are assigned Case by lexical Case-markers and prepositions, respectively. This analysis entails that Case-markers are heads

of the NPs realizing the assigned inherent Cases. It is thus necessary to claim that Case-markers are lexical categories. I submit here that they are a subclass of prepositions in Polish, as they assign the same Th-roles that prepositions assign and often alternate with prepositional phrases in realizing the arguments of the verbs categorially. The structural analysis of a phrase whose head is a Case-marker may be as in (32):



The Case-markers in (32) are bound morphemes and they cliticize onto their object NPs past the level of D-structure. They are realized through appropriate case-endings, which manifest the Case they assign.

It has also shown here that the restrictive system of principles determining the assignment of particular Cases suggested in Chomsky (1986) may be maintained, but it is necessary to assume that abstract Case is realized under morphological mechanisms (if a language realizes Case morphologically), which may involve highly-marked, language-specific processes.

The analysis of the Case-theory in Polish presented here ascribes to the case-system a function and significance which go beyond the subdomain of inflectional morphology. In terms of the present analysis, languages do not differ merely in having or lacking phonological or morphophonological mechanisms spelling out the feature of Case. As has been shown here, the fact that Polish has case-morphology has ramifications for other components of its grammar; in particular it has ramifications for its syntax.

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