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Infinitive Subjects or Subjectless Infinitives?

This paper argues against the view that infinitive, or to be more precise, definitized clauses have subjects. The so–called infinitive subjects occur in three main types of construction: (i) subject of the infinitive introduced by the preposition *for*; (ii) either nominative or oblique (accusative) subjects of infinitives, and (iii) covert subjects of the infinitives. It is shown that these putative subjects have none of the relevant coding or behavioural properties of typical subjects. The so–called subjects of the infinitive are clearly semantic arguments of the non–finite predicate and their semantic interpretation depends on the meaning of the non–finite predicate, but they have not been grammaticalized as subjects.

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0. Introduction

There are at least five possible types of subjectless clauses in English: (i) *to–* infinitive clauses (*To see her is to love her*); (ii) bare infinitive clauses (*Did you hear anyone close the door?*); (iii) *–ing* participle clauses (*Buying all those books will cost you a fortune*); (iv) *–ed* participle clauses (*Called early, he was sleepy all day*); and (v) small clauses (*They think him clever*). Some of these clauses can function as the subject itself:

    (1)   To be a good teacher is more difficult than people think.
    (2)   Swimming in the lake will make you ill.
    (3)   The kitchen free of cockroaches is a welcome prospect.

What is at issue here is the claim that infinitive clauses and participle clauses can have a subject of their own. The putative subject of the infinitive is introduced by the preposition *for* or placed in an oblique case:

    (4)   For us to understand the issue requires a major mental effort.
    (5)   For James to go to college would be a good idea.
    (6)   We expected him to see a doctor.

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The so–called subject of the participle is a noun in the nominative case or in the accusative case:

(7) George fooling around embarrasses his friends.
(8) George breaking the rules is unacceptable.
(9) Did you hear him singing in the bathroom?
(10) We saw him entering the house.

Small clauses have nominatively or accusatively marked subjects:

(11) Scotland independent makes sense.
(12) Bill judges the Head of Department a genius.

The idea that infinitive and participle clauses have subjects is quite wide-spread. In their discussion of verb complementation in English, Quirk *et al.* (1985) distinguish four types of monotransitive complementation by non–finite clauses: *to*–infinitive clause without subject (*Jack hates to miss the train*), *to*–infinitive clause with subject (*Jack hates her to miss the train*), *–ing* participle clause without a subject (*Jack hates missing the train*) and *–ing* participle clause with subject (*Jack hates her missing the train*). In his discussion of control phenomena, Comrie (1984a, 1985) speaks of the implied subject of the infinitive, whereas Aarts (1997: 69) argues that "... where the Subject clause has no subject of its own, one is usually implied and can be easily inferred."[1] As can be seen from the above discussion, it is generally argued that the subject of a nonfinite clause can be either overtly expressed by means of the nomina-tive case, or an oblique case, or it can be implied. On the other hand, Kiparsky and Kiparsky (1971: 356) argue that "infinitives arise regularly when the sub-ject of an embedded sentence is removed by a transformation", which suggests that infinitive clauses might be subjectless. It should be noted at this point that Functional Grammar, as developed by Dik (1978, 1989) avoids transfor-mations in the sense of structure–changing operations. Consequently, the in-formation that a sentence lacks a constituent with the coding and behavioural properties of a typical subject must be present in the underlying predication.

To asses whether infinitive clauses have subjects or not we must first look at the properties of the typical subject and at the nature of subjecthood. If subject is a linguistic category, then it must have certain formal properties that distinguish it from other grammatical relations. If, on the other hand, it is a notional category, then we can speak of implied or unexpressed subjects. The following section looks at some coding and behavioural properties of typi-cal subjects in English and Croatian.

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1 In such cases traditional grammars speak of the unexpressed or invisible subject.

1. Some Properties of Subjects in English and Croatian

Basically, languages employ two distinct, but mutually related means of encoding grammatical relations: word order and case marking.[2] Word order and case marking are two complementary means of marking grammatical relations and the more a language uses the one the less it needs the other means.[3] English and Croatian are fairly typical examples of languages which employ one of the means to the almost complete exclusion of the other.

According to Mallinson and Blake (1981: 151), word order can be explained by the following three principles: "(a) more topical material tends to come nearer to the beginning of the clause (to the left) than non–topical material; (b) heavy material tends to come nearer to the end of the clause (to the right) than light material; (c) constituents tend to assume a fixed position in the clause according to their grammatical or semantic relation or category status (noun, verb, prepositional phrase, etc.)." Points (a) and (c) are more relevant to the present discussion than point (b). Subjects tend to be topical and their topicality has led some authors to define subjects as the intersection of topic and agent (e. g., Comrie 1981), while others have defined subject in purely pragmatic terms (e. g., Givón 1984). As for point (c), in a language with rigid word order, subjects have not only a fixed position with regard to the verb but they are defined in terms of their position. English subjects occupy the preverbal position, and although the word order OSV may occasionally be found in topicalised sentences *(That man she can't stand)* there is no confusion as to which NP is the subject. On the other hand, Croatian is a free word order language in the sense that word order is not used to encode grammatical relations. Word order is also free in the sense that all six logically possible orders of the three major constituents (subject, verb, object) are equally grammatical:[4]

(13) Ivan   voli   Mariju.
      Ivan–NOM   loves   Mary–ACC
 'Ivan loves Mary.'
(14)   Ivan Mariju voli.
(15)   Mariju Ivan voli.
(16)   Mariju voli Ivan.
(17)   Voli Ivan Mariju.
(18)   Voli Mariju Ivan.

The word order SVO plays an important role only when, in exceptional cases, case marking does not unambiguously indicate grammatical relations, as in case syncretism. All neuter and inanimate masculine nouns have syncreti-

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2   The third formal means of encoding grammatical relations (agreement) plays a marginal role in both languages, although there are languages in which agreement is the only means of encoding grammatical relations (cf. Comrie 1984b).

3   Blake (1994) considers case and word order competing mechanisms. Cf. also Keenan 1978.

4   Strictly speaking, Croatian is an SVO language (cf. Silić 1977; Nakić 1977).

sed in Croatian and sentences like (19) and (20) tend to be interpreted as SVO unless contextual clues suggest the opposite:

(19) Ledenjak   je razbio   ledolomac
     iceberg–m. is break–m ice breaker–m.
 'The iceberg broke the ice breaker.'
(20) Mjesec   je   zastro oblak.
     moon–m   be   hid–m cloud–m
'The moon was hidden by the cloud.'

(19) can also mean 'The ice breaker broke the iceberg' because both nouns can be either the nominative or the accusative case. In (20) both *mjesec* and *oblak* are either nominative or accusative, but the only plausible semantic and pragmatic interpretation is the one given in the translation of (20). The syntactically possible sentence *The moon hid the cloud* does not make sense pragmatically and speakers tend to reject it as impossible.

According to Keenan's (1978) Principle of Covariation of Functional Equivalents, "syntactic (and morphological) processes which have the same 'function' covary in their distribution across languages. By covary we mean that the more a language has one of the processes the less it need have the other." (Keenan 1978: 120). It follows from this principle that cases should play only a marginal role in encoding grammatical relations in a rigid word order language like English.

When discussing the role of cases in the grammar of a language, a distinction has to be made between cases and case endings. "Case in its most central manifestation is a system of marking dependent nouns for the type of relationship they bear to their head." (Blake 1994: 13). Case endings or case markers are affixes added to stems to mark case relations. Given this distinction, one can speak about the nominative–accusative syncretism of case markers but not of cases which still retain their primary function of marking the subject and direct object, respectively. One could also take the view that all nominals in English take case, but that it is realised morphologically only on personal pronouns. In addition to the expected nominative case in coordinated subject phrases, as in *John and I went fishing,* there are four other possibilities of case marking the subject:

a. Pronoun in the accusative plus noun unmarked for case:

(21) Me and my dad used to go fishing.

b. Two coordinated accusative pronouns:

(22) Him and me left.

(23) But now him and me has never been such friends.

c. Nominative pronoun plus accusative pronoun:

(24) Either he or me has to get out.

d. Single accusative pronoun in the *Mad Magazine Sentences* (cf. Akmajian 1984):

(25) What! Her call me up?! Never.

(26) Him wear a tuxedo!? (Sure).

The effect of word order on the interpretation of grammatical relations is so strong that speakers tend to interpret as SVO even sentences like *Him and me hit Bill* (cf. Schreiber 1981). We may therefore agree with Stahlke (1984: 361), who has concluded that "One can account for these unusual case distributions more simply and consistently by eliminating the notion case altogether from consideration in the constructions under study. Rather, the distribution of pronoun forms in Modern Standard English reflects the nearly total loss of the grammatical case marking in English. The pronouns, and, to a degree, the functions of the pronouns are synchronic reflexes of a case system that can be traced back to Proto Indo–European, but the forms no longer function as case."

Subject–verb agreement plays a less important role than either case marking or word order.[5] Consider first the following sentences:

(27) A pen and two pencils are on the desk.

(28) Two pencils and a pen are on the desk.

(29) *A pen and two pencils is on the desk.

On the basis of these examples we may conclude that a coordinated subject determines plural agreement irrespective of the order of conjuncts since coordinated NPs are semantically plural. However, the agreement in existential sentences gives a somewhat different picture.

(30) There is a pen and two pencils on the desk.

(31) *There are a pen and two pencils on the desk.

The sentences above suggest that the verb agrees with **there**, which is singular, rather than with the postcopular NP, which is plural. Consider now (32) and (33), which suggest that the verb agrees with the plural postcopular NP.

(32) There are two pencils and a pen on the desk.

(33) *There is two pencils and a pen on the desk.

The sentences (30) — (33) are also compatible with the analysis that agreement is determined by the first conjunct on the right–hand side of the copula. This explanation, however, cannot account for agreement in (34) and (35):

(34) There is some things I can't resist.

(35) There's some people I'd like you to meet.

Agreement, then, is not a sufficient criterion to identify subjects in existential sentences in English (cf. Kučanda 1990). Agreement presents a different problem in Croatian. For example, masculine nouns in –*a (pismonoša, kolovođa, pristalica, starješina, knjigovođa)* agree in the plural with a predicate marked for masculine gender or feminine gender.

(36)	Pristalice	su	se	našli	na sastanku.
	supporters–m. pl.	are	refl	meet–pl. m.	on meeting

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5   Težak and Babić (1992: 198) define the subject as "that element which is included in the sentence by virtue of its agreement with the predicate." (my translation). This definition does not have any cross–linguistic validity since there exist languages in which there is no agreement at all (cf. Blake 1994).

(36)a Pristalice   su   se   našle   na sastanku.
      supporters   are   refl meet–pl. fem.   on meeting
'The supporters met at the meeting.'

Neuter nouns in *–lo* (*zanovijetalo, piskaralo*) can agree with a predicate marked for masculine gender:[6]

(37) Piskaralo   je   ostao   u uredu.
     scribller–n.   is   remain–sg. m.   in office
'The scribller remained in the office.'

In such cases of discrepancy between the natural and grammatical gender of the subject and the verb it is difficult to talk about agreement and the term choice might be preferable, i. e., the grammatically neuter subject choses the masculine verb. Nevertheless, there is some sort of agreement between the subject and verb in the sense that both are marked for number, person and gender.

In addition to the three above mentioned coding properties, subjects have quite a number of behavioural and control properties (cf. Keenan 1976). One such property is subject raising out of an embedded predication into the matrix clause[7]. The resulting structures have an infinitive clause as complement to the main verb, as in (38) — (42):

(38) They believe them to be innocent.
(39) Jack expects Bill to see a doctor.
(40) We expect it to be windy in Chicago.
(41) They believe there to be lions in Africa.
(42) They expect tabs to be kept on all habitual criminals.

In each of the sentences above, the NP which would have been the subject if the clause were finite has been raised out of the embedded clause and functions as the syntactic argument of the matrix verb. Raising is a typical subject property and it does not apply only to noun phrases but also to prepositional phrases as subject, as is exemplified by (43) and (44):[8]

(43) Max reports around 4:00 to be the most dismal part of the day for
     elderly shut–ins.
(44) Across the road appeared to be swarming with bees.

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6   More on agreement in Croatian, see in Barić *et al*. (1979).

7   The issue of whether the subject is really raised out of an embedded clause (cf. Postal 1974) or whether 'raising' structures have two different underlying structures, as argued by Dik (1979; 1989), is irrelevant for the present purposes.

8   (43) is from Borkin (1984: 42) and (44) is from Jaworska (1986: 355). Contrary to Borkin (1984), Akmajian (1973: 3) argues that "the rule of *Raising to Object* is stated in terms of the category NP, whereas the rule of *Raising to Subject* seems to be stated in terms of the functional notion *subject*."

2. Discussion

Given the above coding and behavioural properties of typical subjects (cf. Keenan 1976 for more details) we can identify three types of anomalous subjects in definitized clauses: (i) subjects of the infinitive introduced by the preposition *for*; (ii) either nominative or oblique subjects of infinitive and participle clauses and small clauses, and (iii) phonetically unrealized subjects of infinitives. To be able to say whether any of these three overt or covert categories are subjects we shall start from the following methodological assumption: "... in order to say that a given grammatical relation exists in a given language this claim must be justified both language–internally and cross–linguistically. Language–internally, this means that a number of logically independent criteria must be established that serve to identify the grammatical relation in question as being syntactically significant in the language in question." (Comrie 1981: 80).

2.1 Overt Subjects of Infinitives

2.1.1 *The for Device*

The claim that subjects of infinitives may be introduced by the preposition *for* cannot be immediately rejected on language–internal grounds since English does allow prepositional subjects. Quirk *et al*. (1972: 305; 1985: 658) provide the following examples of prepositional phrases as subjects (cf. also (43) and (44))[9]:

(45) Between six and seven will suit me.
(46) On Tuesday will be fine.
(47) In March suits me.
(48) During the vacation is what we decided.
(49) Between six and seven may be convenient.

However, prepositional phrases with the subject function are restricted to temporal and locative expressions, whereas the alleged subject of the infinitive may have any semantic function compatible with the meaning of the infinitival predicate (cf. (4) and (5)). Secondly, prepositional subjects occupy the preverbal position, which is normally reserved for noun phrase subjects. The *for* phrase may also occur in the postverbal position, which is typically reserved for objects. One could also argue that the *for* phrase occupies the preverbal slot since

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9   Jaworska (1986) claims that prepositional phrase subjects can also be found in Polish, as in
     (i) and (ii):
     (i) Po   obiedzie pasowalo wszystkim.
        after dinner   suited   everybody
     'After dinner suited everybody.'
     (ii) Przy oknie   bylo zajęte   dla dziecka.
         by   window was   reserved for child
     'By the window was reserved for the child.'
     Given that Polish is a pro–drop language, (i) and (ii) seem also to be compatible with the
     view that the subject is a semantically unspecific ellipted head noun meaning 'time' or 'place'.

it preceeds the infinitive, but this argument seems less plausible in view of the fact that in American English the *for* phrase can be displaced from the object slot by the dummy element *it*, as in (50a)[10]:

(50) I would hate (for) Mary to want me to leave.

(50)a I would hate it for Mary to want me to leave.

Admittedly, this phrase does not behave as an object either (e. g., it cannot be promoted to the subject of a passive sentence), but if one adopts the view that an argument of a verb does not necessarily have a clear syntactic function if it has a semantic and/or pragmatic function, and vice versa, then the *for* phrase may be argued to be a semantic argument of the following infinitive which has not been grammaticalized as either subject or object[11].

Thirdly, although agreement as a coding device has a minor role in comparison to word order in English, it is a necessary condition since all subjects must agree with their predicates. Quirk *et al.* (1985: 755) say that nonfinite clauses, prepositional phrases and adverbs functioning as subject count as singular for the purposes of agreement. Prepositional *for* phrases do not agree with their predicates, which is an indication that the semantic argument of the verb has not been grammaticalized as subject. Its semantic function depends on the semantics of the verb, and it can be assigned the pragmatic function of primary or secondary topic, but it is not a typical representative of either the subject or object function. It is also worth noting that although grammarians speak of *for* + subject in sentences like *It is vital (for the children) to be properly clad*, no one speaks of *of* + subject in sentences such as *It was wrong (of him) to tell lies* despite the fact that in both cases the prepositional phrase introduces a semantic argument of the infinitive.

Finally, *for* prepositional phrases do not behave as subjects with respect to raising either. Examples (38) — (44) show that raising is 'blind' to the category or semantics of the raised element as long as it has subject function. Non–subject NPs cannot be raised when embedded under a raising predicate, as in the following Croatian examples[12]:

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10   Akmajian and Heny (1975) argue that (50a) is the deep structure of (50) before *It Deletion*. If this is the case, then the *for* phrase is promoted to the object slot which remains empty. Other verbs in this class include *prefer, hate, like, hope, desire, love.*

11   Comrie (1981: 101) argues in favour of the following cross–linguistic characterization of the subject: "The prototype of subject represents the intersection of agent and topic; i. e. the clearest instances of subjects, cross–linguistically, are agents which are also topics. There are two important characteristics of this definition: first, it is multifactor; second, it is stated in terms of prototypes, rather than in terms of necessary and sufficient criteria for the identification of subjects. The second point is particularly important, given that many subjects in many constructions in many languages are not topic, or are not agent, or are neither." It also follows that neither agents nor topics need be subjectivized.

12   Note that in the embedded clause in (51) there is no agreement between the so–called Dative Subject and the predicative adjective, which is invariably marked for third person, singular neuter.

(51) Ivan   smatra   da   je   Marku   mučno.
      Ivan–Nom considers   that be–3p. sg. Marko–Dat sick–3p. sg. n.
'Ivan thinks that Marko is sick.'
(51)a *Ivan   smatra   Marka   mučnim.
      Ivan–Nom   considers   Marko–Acc sick–Instr

2.1.2 'Raised' Subjects

As regards the status of the italicized NPs in (52) and (53), there are two conflicting analyses in the linguistic literature:

(52) Ed believes *the story* to be false.

(53) Ed believes *him* to be a traitor.

Quirk *et al*. (1985) argue that the italicized NPs are objects and that (52) and (53) instantiate a complex transitive type of complementation: "This noun phrase, which if a personal pronoun is in the objective case, is commonly termed a RAISED OBJECT: semantically, it has the role of subject of the nonfinite verb; but syntactically it is 'raised' from the nonfinite clause to function as object of the superordinate verb. Hence in general, this noun phrase can become subject of the corresponding passive."[13]

Raised elements are also assigned object function in Functional Grammar (cf. Dik 1979; 1989). However, since Functional Grammar does not recognize structure changing transformations, such constructions are due to the direct assignment of syntactic functions to arguments of embedded clauses, that is, there is no intermediate structure in which a term is first a subject and then an object. The assignment of syntactic functions penetrates directly into the embedded predication and assigns to the first argument of a predicate the function which it would have received only derivationally in a framework which recognizes multiple syntactic levels.

On the other hand, Aarts (1997: 227*ff*) argues that (52) should be bracketed as in (54), that is, he argues that the italicized NP is the subject of the infinitive:[14]

(54) [S Ed [VP believes [Clause *the story* to be false]]]

Aarts (1997: 227*ff*) offers three basic criteria in support of his claim that the italicized noun phrases in (52) and (53) are subjects of the embedded infinitive clauses: meaning, dummy elements and idiom chunks, and passivization. We shall consider each of these arguments in the order mentioned above.

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13 The issue of whether raised elements have object or subject function has been discussed in the linguistic literature ever since Postal (1974).

14 Such constructions are known in the Government & Binding framework as ECM (Exceptional Case Marking) constructions (cf. Hoekstra 1984: 95*ff*; Haegeman 1994: 169*ff*). "The peculiarity of this construction is that a lexical NP can appear in subject position of a tenseless clause. This means that it cannot receive Case from within the clause, since there is no TENSE to provide nominative Case for this NP. Therefore, it must be concluded that the lexical NP is licensed by the matrix verb." (Hoekstra 1984: 95).

2.1.2.1 *Meaning*

There is very little doubt as to what constitutes the semantic arguments of a verb such as *believe*. *Believe* is semantically a two–place predicate which takes as its arguments an Experiencer and the Content of Experience, which may be expressed as either an NP, as in (55), or as a whole proposition, as in (56):

(55) Jack believed *the story*.

(56) Jack believed *his neighbour to be a spy*.

The categorial status of the complement of *believe* is irrelevant for the present purposes; what is at issue here is the syntactic function of the postverbal NP in infinitival complement clauses: is it an object of *believe*, as is argued, *inter alios*, by Postal (1974) and Quirk *et al.* (1985), or is it the subject of the infinitival complement, as is argued by the adherents of the Government & Binding theory (e. g., Hoekstra 1984: 95*ff;* Haegeman 1994: 169*ff;* Aarts 1997: 227*ff*). As is obvious from the preceeding discussion, neither Quirk *et al.* (1985) nor Aarts (1997) question the semantic status of the infinitival complement of *believe*. What neither of these two approaches can admit is that there may be a discrepancy between the syntax and semantics of the second argument of *believe,* that is, both approaches are rather categorical in their claims that the postverbal NP is either the object of *believe* (Quirk *et al.* 1985) or the subject of the infinitival complement (Aarts 1997).

The view adopted in this paper is that a sentence element may be a non–discrete member of more than one category. In the case of clausal complements of *believe,* there is an obvious discrepancy between the semantic and syntactic behaviour of the postverbal NP. Semantically, it is an argument of the following infinitive but syntactically it behaves as if it were an argument of *believe,* as is evident from its case marking and the possibility of being assigned the subject function in a passive clause. Such odd behaviour of the second argument of *believe* can be easily accommodated within a framework which recognizes that not all arguments of a predicate need simultaneously be assigned both a semantic and a syntactic function. Such a framework is provided by Functional Grammar, as developed in Dik (1989). Within the framework of Functional Grammar the assignment of syntactic functions may penetrate into embedded clauses without necessarily changing the semantic status of the arguments of embedded predications, that is, a sentence like (56) can be simultaneously analysed as having the whole embedded predication as its semantic argument while assigning the object function only to the postverbal NP. The underlying semantic and syntactic representation of (56) can be roughly sketched as in (57):

(57) believe$_V$ (x_1: Jack(x_1)$_{Exp}$ [(x_2: his neighbour(x_2)$_{Obj}$ (x_3: to be a

spy(x_3)]$_{Content of experience}$

The representation in (57) assumes that *believe* is syntactically a three–place predicate while simultaneously being a two–place predicate from a semantic point of view. This representation accounts both for the fact that the content of believing is the whole proposition and for the fact that the postverbal NP

behaves in most respects as an object of *believe* (position, case marking, passivization), but that it is syntactically neither a prototypical subject nor object.

2.1.2.2 *Dummy Elements and Idiom Chunks*

The argument that dummy elements in (58) and (59) and idiom chunks in (60) and (61)

(58) Ed believes *it* always to be raining in London.
(59) Ed believes *there* to be a traitor in the company.
(60) Ed believes *the coast* to be clear.
(61) Ed believes *the fat* to be in the fire.

are subjects of infinitives rests on theory–internal grounds, that is, Aarts (1997: 230*f*) adopts the Government & Binding framework, in which subjects are external arguments. According to this view, dummy elements and subject idiom chunks are not assigned a thematic role. "Whenever there is a predicate–argument relationship, there is a thematic relationship between the predicate in question and its argument(s)." Aarts (1997: 231). Since dummy elements are semantically empty, there can be no thematic relationship between them and the predicate and they must therefore appear in subject position. They cannot be analysed as direct objects because they cannot enter into a thematic relationship with the predicate.

As we showed in the preceeding section, an NP need not necessarily be an argument of the predicate to have morphological and syntactic characteristics of an object. It is true that, meaningwise, the whole nonfinite clause including the dummy elements and subject idiom chunks functions semantically as a single argument of *believe*, but this does not preclude the dummy *there* and *it* and subject idiom chunks from functioning syntactically as direct objects. They have the position characteristic of direct objects, they are case marked as direct objects and they can be assigned the subject function in a passive sentence (the relevance of the passive will be discussed in 2.1.2.3).

Secondly, the argument that subject idiom chunks like those in (62) and (63) cannot receive a thematic role is not fully consistent.

(62) The coast is clear.
(63) The fat is in the fire.

Idioms are language–specific expressions whose meaning cannot be predicted from the component meanings of its parts. It is indeed true that the meaning of *coast* in (62) cannot be analysed independently of the rest of the idiom and that for this reason it cannot receive a theta role. For the same reason, object idiom chunks cannot receive a theta role from the predicate, for what is the meaning of *bucket* in *kick the bucket* on its idiomatic reading? Nevertheless, Aarts (1997: 230) analyses *bucket* as a direct object. If the analysis that idiom chunks cannot receive a theta role were consistent, this NP could not receive a theta role from the predicate *kick* and consequently the NP *bucket* should be described as a subject. This is not to say that *bucket* is either

a typical subject or object; the purpose of this discussion was to show that idiom chunks can behave as subjects or objects to some extent.

Thirdly, the meanings of the subject and predicate cannot be analysed independently of each other. Consider the following set of sentences:

(64) John/the horse is still running.

(65) The car engine/my watch is still running.

(66) My nose/the tap is still running.

(67) *The Fiddler on the Roof* is still running.

In each case the verb *run* has different meaning which is not independent of the meaning of the subject. In (64) *run* means roughly something like 'to move the whole body by lifting feet from the ground'. In (65), what moves are only the internal parts of the engine or watch, while the whole engine or watch need not move at all. The subjects of (66) do not move at all, but what moves is a liquid that comes out from a tap or a nose. In each case the meaning of the predicate depends on the meaning of the subject, and conversely, the semantic role or theta role cannot be assigned to the subject without taking the whole subject — predicate relationship into consideration[15].

2.1.2.3 *Passivisation*

Although objects are notoriously difficult to characterize cross–linguistically, one of the most widely used tests to identify direct objects is passivisation: "... an NP which is 'heir apparent–to–S(ubject)' could perhaps be usefully titled DO." (Collinge 1984: 10). In Croatian, for example, only accusatively marked objects can become subjects of passive clauses, while genitive objects, which typically express partitive meaning, cannot undergo passivisation.

On the other hand, Aarts (1997: 232) claims that "if we can passivise the postverbal portion in any verb + NP + *to* infinitive construction without a resulting change in meaning, then the postverbal NP is not a Direct Object, but the Subject of a subordinate clause." The examples that illustrate this claim are given in (68) and (69):

(68) Ed believes the jury to have given the wrong verdict.

(69) Ed believes the wrong verdict to have been given by the jury.

It is indeed indisputable that (68) and (69) have the same truth value, but this does not yet mean that they present what may be the same situation in the real world from the same point of view. The approach adopted in this paper is that passivisation is a strategy which enables the presentation of the same State of Affairs from different perspectives, that is, the subject specifies the vantage point from which the State of Affairs is presented in the predication (cf. Dik 1989: Ch. 10). In both (68) and (69) the State of Affairs expressed

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15 The subject of (67) could perhaps be assigned to the class of Eventive subjects (cf. Quirk *et al.* 1985: 747), but this class would be so heterogenous that it would be difficult to predict the semantic role of the subject given the meaning of the predicate, and it would be also difficult to select the right predicate given the meaning of the subject. For example, films and exhibitions run, football matches take place, disputes last, accidents occur, etc.

by the whole predication is presented from the point of view of *Ed*, whereas *the jury* in (68) and *the wrong verdict* in (69) represent secondary topics at the *believe* level and primary topics at the level of the embedded predication. However, the claim that the postverbal NP is the primary topic of the infinitive clause does not mean that it is necessarily assigned the subject function. The overlap between subjects and topics is a frequent, but by no means necessary condition for subjecthood (cf. Shibatani 1991).

To sum up, meaning, dummy elements and idiom chunks, and passivisation do not conclusively prove that the postverbal NP in the verb + NP + *to*–infinitive structure is a subject. Although the meaning of the NP + *to*–infinitive construction suggests that the whole construction is a semantic argument of the *believe* type of verb, the coding and behavioural properties of the postverbal NP suggest that it is an object of the matrix verb rather than the subject of the infinitive. For this reason, we propose the semantic bracketing of the *believe* type sentences as in (70), and the syntactic bracketing as in (71):

(70) Ed believed [the story to be false].

(71) Ed believed the story [to be false].

2.2 Implicit Subjects of Infinitives

According to the generally accepted view, the missing subject of the infinitive in (72), marked with the symbol ▲, is correferential with the matrix subject, whereas the missing subject of the infinitive in (73) is correferential with the matrix object:

(72) Jack$_i$ promised Jill$_j$ ▲$_i$ to leave.

(73) Jack$_i$ persuaded Jill$_j$ ▲$_j$ to leave.

It has been convincingly argued by Comrie (1984a, 1985) that the subject and object control phenomena cannot be adequately accounted for in purely syntactic or semantic terms. In ambiguous cases, such as (74),

(74) Jack asked Jill ▲ to leave.

it is the pragmatic interpretation of the verb that helps us disambiguate the sentence. What is at issue here is not control as a linguistic phenomenon, but the appropriatness of the use of the terms such as implicit or missing subject of the infinitive. As has been argued in the preceeding sections of this paper, subject is a morphosyntactic category and it should not be equated with any notional category or the pragmatic category topic.

The argument that ▲ is correferential with the matrix subject or object is based on the fact that in the finite versions of the above sentences it is the subject of the embedded clause that is correferential with the matrix subject or object:

(72)a Jack promised Jill that he (Jack) would leave.

(73)a Jack persuaded Jill that she (Jill) should leave.

If both the overt subject of the finite clause and the implicit subject of the infinitive are assigned to the same category 'subject', then subject is obviously a very heterogenous category. On the one hand, we would have subjects that

are case–marked, agree with the predicate and have certain behavioural and control properties (e. g., raising, ellipsis in coordinate sentences, addressee of imperatives), and on the other hand we would have subjects that lack all of these properties. If implied subjects of the infinitive have none of the coding or behavioural properties of typical subjects, how do speakers then recognize them as subjects. What seems to be the case is that speakers do not recognize 'implied subjects' of infinitives as correferential with the subject or object of the matrix verbs by virtue of their being subjects, but because they are first arguments of the infinitives, that is, arguments which claim priority to subject-hood in the assignment of syntactic functions to semantic arguments of predi-cates in finite clauses[16].

For this reason, I suggest that the notion 'implied subject of the infinitive' be replaced with the term 'implied argument of the infinitive', leaving the term subject for an overt morphosyntactic category. It is more common to speak of an implied argument in sentences like *I'm reading* or *I'm eating* than to speak of an implied direct object, the reason being that the missing argu-ment need not be realized as a direct object in all languages. Similarly, in sen-tences like *He forked the hay* or *They bottle beer in green bottles* it is not custo-mary to speak of the incorporation of adverbials of instrument or place into the meaning of the verb. The terminology usually used to describe this lexica-lization process is the incorporation of semantic arguments Instrument(al) and Locative. Finally, the implied argument of the nonfinite verb need not always be correferential with the subject or object of the matrix clause, as in the fol-lowing Croatian example:

(75) Ozeble   su mi   ruke   berući   jabuke   na toj zimi.
      frost–bitten are me–Dat hands–Nom picking apples–Acc on this cold
'My hands got frost–bitten picking apples in this cold.'

The Croatian sentence (75) seems to suggest that the 'implied subject' = of the gerund is correferential not with the nominative subject of the main clause (*ruke*), but with the so–called dative of possession *mi,* which is not a semantic argument of the verbal predicate[17]. On the other hand, the only pragmatically felicitous interpretation is that there is a relationship of correferentiality be-tween the referent of the dative ("the Possessor") and the implied argument of the gerund, that is, the referent of the dative is here an Experiencer (Affected participant) rather than the Possessor. This becomes more obvious when the sentence (75) is translated less literally and more felicitously as *I got my hands frost–bitten while picking apples*.

To sum up, the notion 'implied subject of the infinitive' has little, if any-thing, in common with an overt subject. What is missing or implied in the constructions with a phonetically unrealised 'subject' is not a subject but a se-mantic argument of the predicate, which can be described as a first argument since it claims priority to subjecthood in the assignment of syntactic functions

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16   More on the notions first, second and third argument see in Dik (1989: Ch. 11).

17   Cf. Kučanda (1996) for a discussion of the so–called dative possessive constructions.

to arguments of finite verbs. Very little is gained by the expansion of the term subject to include unexpressed and inexpressible first arguments of nonfinite predicates. The notion infinitive, or more generally, nonfinite subject simply confuses the issue: subject is an overt, tangible category.

3. Conclusion

This paper has argued against the view that infinitive, or more generally, definitized clauses have subjects. The so–called subjects of nonfinite clauses may be overtly expressed or remain implicit. In neither case do they have the coding or behavioural properties of typical subjects. If overtly expressed, arguments which would have been subjects in finite clauses have the coding and behavioral properties typical of objects, yet they remain semantically arguments of the nonfinite verb. The so–called implicit subjects of infinitives should be termed implicit arguments of lexical predicates since they never get realized as subjects. This discrepancy between the morphosyntactic and semantic behaviour of arguments of predicates can be easily accounted for if it is admitted that these arguments are neither typical objects nor typical subjects. The implicit 'subject' of infinitives are not syntactic functions at all; they are simply implied arguments whose interpretation depends on the semantic and pragmatic interpretation of the matrix verb. The grammarians' quest for the subject of the infinitive may be characterized in this way: "Sie berücksichtigen, wie die Logiker so oft in sprachlichen Dingen zu ihrem Schaden getan haben, mehr das, was ihrer Ansicht nach in der Sprache vorhanden **sein sollte**, als das, was wirklich vorhanden **ist**, und suchen mehr das, was **nicht** gesagt ist, zu erklären, denn das, was gesagt ist". (Siebs 1911: 256).

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Subjekt infinitiva ili infinitiv bez subjekta?

U radu se iznose argumenti protiv tvrdnje da infinitivne, ili preciznije rečeno, nefinitne konstrukcije imaju subjekt. U engleskom se takozvani subjekt infinitiva javlja u tri tipa konstrukcija: (i) klauze sa subjektom uvedenim pomoću veznika *for*; (ii) infinitivni subjekti u nominativu ili kosom padežu (akuzativu) i (iii) fonološki nerealizirani subjekti infinitiva. Ni jedan od ova tri tipa takozvanih subjekata infinitiva nema ni svojstva kodiranja ni svojstva ponašanja karakteristična za tipični subjekt. Takozvani subjekt infinitiva je semantički argument nefinitnog predikata čija semantička interpretacija zavisi od semantičke interpretacije nefinitnog predikata, ali taj argument nije gramatikaliziran kao subjekt.

Key words: infinitive subject, infinitive, syntax, English
Ključne riječi: subjekt infinitiva, infinitiv, sintaksa, engleski jezik