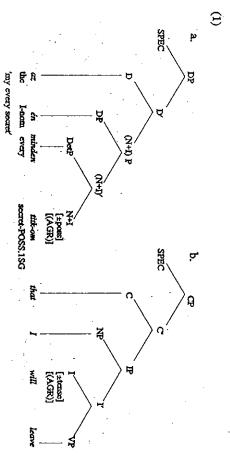
SUBORDINATION: ARTICLES AND COMPLEMENTIZERS

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1. Introduction

In a series of papers I have argued that Hungarian noun phrases have a clause-like structure. Within the framework of Chomsky (1986), it can be represented as (1a). Compare (1b), the structure attributed to English clauses. DP is parallel to CP, and (N+I)P to IP. As a minor point of deviation, I am assuming that the inflected noun, N+I, forms a complex head.



I. Kenesei & Cs. Pléh (eds.), Approaches to Hungarian, Vol. 4: The Structure of Hungarian, IATE, Szeged, 1992.

position as an escape hatch: on the possessed noun, and they extract in two steps, using the phrase initial [Spec,DP] possessor and the behavior of the article. Hungarian possessors behave like subjects of (configurational) clauses. They bear nominative case, they trigger person-number agreement The motivation for this analysis comes from two main sources: the behavior of the

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Kitudódott [DP [D. 'Peter's secret came to light.' came-to-light a [n+np Péter [_{N+0}. Peter(-NOM) secret-POSS.3SG-NOM titk-a]]]]

Ģ. Peter(-NOM) came-to-light tudódott ki [pp [p a [(N+DP t, [(N+D' titk-a]]]] É secret-POSS.3SG-NOM

Kitudódott [pp 'It is Peter whose secret came to light.' Péter-nek, Lp. alm+pp 4 lm+p. titk-a]]]·

Péter-nek; came-to-light 'Peter's secret came to light.' tudodott ki [pp t, [p. a [N+pp t, [N+p. Peter-DAT the titk-a]]]] secret-POSS.3SG-NOM

Peter-DAT It is Peter whose secret came to light.' came-to-light Ę, secret-POSS.3SG-NOM

article, which I placed under category D, is the analog of the complementizer, C. First, I argue that the article (a(z)) definite or 0 indefinite must be distinguished from In this paper I focus on the other aspect of the clausal analogy, namely, the claim that the

of quantifiers - a problem for all current syntactic and semantic theories. as in (1a). This means that the article needs to be attributed a function distinct from that quantifiers, for instance, because they occupy different positions and may even co-occur,

bearing argument. tizer, and its function is subordination: it enables the noun phrase to act as a theta-role Second, to solve this problem I propose that the article is the analog of the complemen-

subordinators and clause-type indicators. distinction that Hungarian, but not English, makes between two types of complementizers: do not. Relying on Bhatt and Yoon's (1992) proposal, I suggest that this parallels the distinction between articles and quantifiers, while many other languages, including English, Third, I will address the question of why Hungarian makes the above functional

2. Two categories of determiners: D and Det

in Hungarian: The items corresponding to the broad category of determiners split into two main groups

- (3) D (precedes the nominative possessor): a(z) 'the', 0'a(n), some', ez a(z) 'this', az a(z) 'that'
- **£** sok 'many', egy(ik) 'one', valamennyi 'each', barmelyik 'either', semelyik 'neither' minden 'every', e, eme, ezen 'this', ama, azon 'that', melyik 'which', kevés 'few', Det (follows the nominative possessor):-

Some comments are in order concerning the membership of the classes D and Det

- into various subcategories is immaterial to my present concerns. empty [\pm definite] and [\pm specific] features to this category. Whether Det is to be split listed certain numerals here. Moreover, in Section 3 I will assign even the phonetically (i) The category Det is heterogeneous: in addition to quantifiers and demonstratives, I
- kinds of motivation. One, the linear position of egy is always like that of Dets: stressed variant is a numeral and its unstressed variant is an article. My decision had two (ii) I listed egy 'one' only among Dets, although the traditional assumption is that its
- Ģ Ę, þ you(-NOM) every /*every/ /*minden/ *one *egy(ik)minden /one/ /egy(ik)/ *a you(-NOM) secret-POSS.2SG *the titkod secret-POSS.2SG titkod

wherefore the two variants need not be assigned to two different categories. Two, whether egy is stressed or not is predictable from whether it is in focus or not,

- presumably have different structures. In the restrictive version, where ez/az is stressed, ez/az may occupy the [Spec,DP] position (cf. Kenesei (1988)). On the other hand, in the (iii) The complex demonstratives $ez \ a(z)$ 'this the = this' and $az \ a(z)$ 'that the = that' are simply listed under D, although the restrictive and the non-restrictive versions version cannot form a constituent with it, while the non-restrictive version can. marked possessor is in [Spec,DP], the above analysis will explain why the restrictive unstressed non-restrictive version ez/az a(z) seems like one complex D. Since the dative-
- 9 *Én csak [pp Péternek "ezt [p· a [n+pp javaslatát]]] támadom, azt nem It is only THIS proposal of Peter's that I am attacking; THAT one I am not.'
- En csak [p] Péternek [p] erre a [n+p] javaslatára]]] akartam felhívni a figyelmet. 'All I wanted was to draw attention to this proposal of Peter's.'

that their positions are distinct and can even be filled simultaneously. With these in mind, let us turn to the positions of D and Det. I first briefly justify the claim

will be accounted for with reference to haplology, see (14). the structure assumed in (1a). In other cases the article appears at the beginning of the possessive construction only if it is indeed part of the prenominal possessor; these cases be analyzed in this way comes from two kinds of data, to be reviewed below. This justifies the nominative possessor may be surprising. Evidence that there are cases which can only The claim that the possessive construction is introduced by an article that is not part of

obligatorily preceded by an article: Personal pronouns do not have an article of their own, but as possessors they are

(7)

a. az én kalap-om b. *én kalap-om the I(-NOM) hat-POSS.1SG I(-NOM) hat-POSS.1SG 'my hat'

*Az én isz-om. b. Én iszom. the I(-NOM) drink-1SG I(-NOM) drink-1SG 'I drink'.

it is not the usual form in this dialect: and Magda Szabó (p.c.). The (*) in (9b) indicates that this form is not ungrammatical but Debrecen dialects, documented in Simonyi (1914), Magda Szabó's novel Freskó (1958), Essentially the same behavior is exhibited by names of persons in the Upper Tisza and

9)
a. a János kalap-ja b. (*)János kalap-ja
the John(-NOM) hat-POSS.3SG John(-NOM) hat-POSS.3SG
'John's hat'
'John's hat'

(10)

a. *A János isz-ik b. János isz-ik the John(-NOM) drink-3SG John(-NOM) drink-3SG 'John drinks' 'John drinks'

possessive construction and not to the nominative possessor. The occurrence of Dets following the nominative possessor is uncontroversial. These data make it necessary to acknowledge an article that belongs to the whole of the

surface simultaneously. One is the possessive construction itself. When the nominative positions but may also co-occur. I am aware of two independent constructions in which they possessor is overt, the article may co-occur with any of the Dets: The next step is to observe that D and Det do not only occupy two different linear

(1)

- t te 'this claim of mine'. I(-NOM) this ezen állítás-om claim-POSS, 1SG
- Ġ, * Z 듡 this ezen claim-POSS.1SG állítás-om

(12)

- 'Janka's every dish' Janka Janka(-NOM) every minden étel-e dish-POSS.3SG (Upper Tisza)
- munden étel-e

the every dish-POSS.3SG

in (13b). In the latter case, however, an article appears obligatorily. 'letter'), as in (13a), or it may be separated from it by a Det (here: valamennyi 'each'), as kapott 'received from you'. This may either immediately precede the head noun (here: level The other relevant construction is the one with a prenominal participial modifier, e.g., toled

(23)

- each Valamennyi [tőled from-2SG received kapott] levél letter(-NOM) short provid was volt.
- ġ the .'Each letter received from you was short. from-2SG [tőled received each kapott] valamennyi levél letter(-NOM) rōvid volt.

short was

- * 'idem' valamennyi [tőled kapott] <u>levél</u> rovid volt.
- 냢 each from-2SG. received letter(-NOM) short was
- *[Tőled from-2SG kapott] received each valamennyi levél letter short rovid volt. was

its surface realization is restricted. The emergent generalization is as follows: It is therefore convenient to assume that an article is underlyingly present in all cases, but

- (14) Haplology
- some intervener. The co-occurrence of D and Det is grammatical if they are linearly separated by
- Contiguous strings of the type D Det, or D D, are ungrammatical. Ungrammaticality constituent that contains Det or the second D. can be eliminated either by deleting a(z) of D in Phonetic Form, or by moving the

deletion again: because it would be adjacent to minden. (16d) represents the alternative of moving minden fiu to [Spec, DP] and leaving the outer D intact. Notice that if the possessed noun had a indicated by #. In (16) minden fiu appears as a possessor. In (16c) the outer D is deleted are related to the same head noun or to different head nouns. This is borne out by the This rule requires that the D Det or D D string be eliminated regardless whether both items Det, as in (17), possessor movement would result in a D Det sequence, triggering Dderives from *a minden fiú 'the every boy' via article deletion, as in (15). examples in (15)-(17). In analogy to (11) and (13b), I assume that minden fiù 'every boy' Deletion is

- (15) *a minden fiú ∞ # minden fiú the every boy every boy
- (16) ٥ Ò. d. Lpp Lpp # minden [DP [D' # [DP # Lop (p. a [pp # [pp [p, a [pp He. Ę every the minden nuj boy(-NOM) minden every $fi\acute{u}$ - nak_i][D. a to boy(-DAT) the every minden fiú] boy(-NOM) fiú) boy(-NOM) hat-POSS.3SG hat-POSS.3SG hat-POSS.3SG hat-POSS.3SG kalap-ja]] kalap-ja]] kalap-ja]] kalap-ja]] - (b,c) or (b,d)

'every boy's hat'

 $\widehat{\Xi}$ Ò, # مما مما | 40] 40J [DP [D # [DP # LDP LD' 2 LDP 'every boy's every hat' every every minden minden the ы minden fiú] every fii-nak] [D # t minden boy(-DAT) every $fi\acute{u}$ - nak_i] [D. a t_i boy(-DAT) the every minden boy(-NOM) every fiú] boy(-NOM) every every minden minden minden kalap-ja]] hat-POSS.3SG kalap-ja]] kalap-ja]] hat-POSS-3SG hat-POSS.3SG kalap-ja]] hat-POSS.3SG ⇒ (b) or (c,d)

offending string undergoes deletion. Haplology is discussed from a more general perspective in Miller (1992). to differ from the Hungarian one only in that the second, not the first, element of the An extremely similar case of haplology is quoted in Abney (1987); the Papago rule seems

				ņ	(18)
'under the table'	the	b. 'am	the	* am	
	table	[miisa]	the	8	
	underneath] weco	table underneath	miisa] weco	
'under the table'		ဂ			•
	the	c. 'am			
	underneath	weco			
	þe	ହିବ		(Pap	
	table	misa]		(Papago, from Hale)	

offer, but I suspect the reason may not be a very deep one. This is corroborated by the fact e may now ask why the DD and DDet sequences are excluded. I have no explanation to following piece of data: that some such sequences occur even in English. I am grateful to Andrew Radford for the

(19) (He has to endure) the every whim of Mrs. Thatcher.

Furthermore, similar sequences occur in Modern Greek, Korean, and Japanese, for instance (I owe the data to G. Agouraki, J-W. Chang, K. Ohta, and T. Sano).

		(22)			લ	(21)			မှာ	(20)
'my e	the	SO	`peop!	every	motun		every	every child	kathe	
'my every book'	GEN I	no	'people (generic)'	pe	salan		child'	child	pedhi	
Š,	I	watasi	řic),	person	an	-				
	GEN	no							•	
•	every	subete			ċ.				· b. to	
	GE	no	'all the	this/the	i/ku		every :	the e		
	GEN book	hon	'all the(se) people'	every	motun		'every single child'	ery child	kathe pedhi	
		-		person	salan		•			

3. C and D as subordinators

determiners in current semantic theories. occur. The significance of these data can be seen when we consider the interpretation of be distinguished, on the basis of the fact that they occupy different positions and even co-In the preceding section I argued that two categories of determiners, D and Det, need to

suggest that Dets play the traditional role, and D needs an as yet unrecognized role. determined" in its sense, whence either D or Det must have some different role. The data Hungarian data are problematic for this approach because a noun cannot be denotations (or, equivalently, they bind the external argument place of the noun) same role: they are interpreted as functions from noun denotations to noun phrase In Montague Grammar and Generalized Quantifier Theory, all determiners play the "doubly

using standard assumptions. could be called familiar or novel. Thus no interpretation can be assigned to 'the every N' quantified noun phrases are not assumed to have corresponding discourse referents that promising, but the Hungarian data are equally problematic for it. The reason is that bifurcation is reminiscent of the D versus Det distinction, this approach may look more interpreted as global instructions for the construction of discourse representations. As the phrases that are interpreted as familiar or novel discourse referents (familiarity corresponds articles (together, presumably, with the demonstratives) contribute to the creation of noun to definiteness, In Discourse Representation Theories determiners do not play the and novelty to indefiniteness). Quantifiers, on the other hand, same role.

to assign it to a functional category that is analogous to the complementizer C in that its possessor extraction. As (2) indicates, the syntactic position of a(z) makes it very natural from that of quantifiers in the broad sense. The first clue comes from the analysis of Spec position serves as an escape hatch for extraction. This is the assumption expressed in In view of these observations our task is to find a role for the article that is distinct

proposal will be refined below): functions to D and C. Following Szabolcsi (1986, 1987) the suggestion is as follows (the The critical question to be answered now is whether we can attribute analogous

(23)

- Only phrases in the canonical argument format can function as arguments of thetarole assigning heads.
- Both the complementizer and the article are "subordinators" in the sense that they enable the clause or noun phrase to act as arguments.

embedded finite clauses, infinitival clauses, phonetically null. Small clauses are a misfit because they do not have a complementizer but besides noun phrases, are assigned thematic roles. In terms of Chomsky (1981), they are arguments in the above sense come with a subordinator. First consider what categories, require a thematic role. However, Stowell (1990) argues that they in fact undergo infinitival clauses are standardly assumed to have a complementizer, whether overt or There are general syntactic considerations that lend some plausibility to the claim that and small clauses. Embedded finite and

restructuring, at S-structure or at LF. He proposes that this is forced by a principle like (24a) or (24b):

(24)

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- a. A predicative category may not function as an argument.
- Only a referential category may function as an argument.

can be regarded as "matrix noun phrases" and they do not tend to have articles, either. counterpart among noun phrases? As was pointed out in Szabolcsi (1986, 1987), vocatives other hand, are not arguments and do not tend to have a complementizer. Do they have a Consider: On this proposal, small clauses no longer constitute an exception. Matrix clauses, on the

(25) *That John left

a. Der Peter kommt.
'The Peter comes.'
(27)

(26)

Jön a Péter. comes the Peter(-NOM)

Ġ

a. (*Der) Peter, komm!
'Peter, come'

b. (*A) Péter, gyere! the Peter come-IMP.2SG

N-to-D movement. For some reason, no similar movement into D is possible in Hungarian: 'John my' differs from argumental il mio Gianni 'the my John' in that Gianni underwent Related facts are discussed in Longobardi (1990), who proposes that vocative Gianni mio

(38)

a. Kicsi János! little John

'Little John'

versus

*János kicsi! John little

Ö

The syntactic aspects settled, what can be the canonical argument format in semantic terms?

(67.

- argumental noun phrases denote generalized quantifiers. In Montague Grammar terms, all argumental clauses denote propositions, and all
- Ò, In Discourse Representation terms, all argumental phrases have a discourse referent corresponding to them.

(31): as in (30); Szabolcsi (1986, 1987) proposed to analyze the (N+I)P-Propositions are sets of possible worlds; generalized quantifiers are sets of properties. Groenendijk and Stokhof's (1982) proposed to analyze the S—S' (i.e., IP—C') transition -D' transition as in C') transition

30 Mary walks, IP

walk_(a)(m)

ō that Mary walks, C' where a is a variable over possible worlds

 $\lambda a[walk_*(a)(m)]$

whether Mary walks, C' $\lambda i[walk_*(a)(m)=walk_*(i)(m)]$

where i is a variable over possible worlds

minden ember, (N+I)P

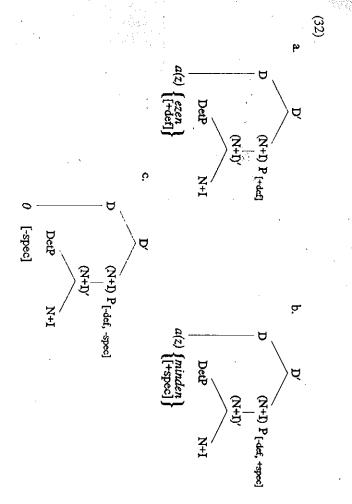
a minden ember, D'

 $\lambda P \forall x [man(x) \rightarrow P(x)]$ $\forall x[man(x) \rightarrow P(x)]$

operators that serve to close off these open expressions by binding their free variables. which I find very reasonable.) The subordinators are now seen as syncategorematic lambdaand a property variable, respectively. In matrix clauses and in vocatives these remain free. (In particular, vocatives are interpreted as tiny sentences containing a free VP-variable, According to these analyses, IP and (N+I)P each contain a free variable: a world variable

however. discourse referents. Providing a detailed proposal goes beyond the scope of this paper, subordinators create Kálmán (1990) are a possible candidate. If this approach is correct, then we can say that motivation for establishing discourse referents even for quantifiers. Group referents as in quantifiers enter into - cf. E-type anaphora and related phenomena - can be seen as As regards DRT, I wish to suggest that the existence of a variety of anaphoric relations canonical arguments by serving as, or marking the existence of

in D, whereas the third triggers the selection of "indefinite" 0. there is no overt Det within (N+I)P? I propose that in this case the features [+definite], contains a Det like ezen 'this', the content of (N+I)P; and similarly for the indefinite article. For instance, if (N+I)P responsible for the definiteness of the noun phrase, it is merely selected in agreement with Hungarian has a mere subordinating function. Crucially, the definite article is (1983) and current literature. The first two of these trigger the selection of "definite" a(z)[-definite, Returning to noun phrase internal affairs, this proposal implies that the article in +specific] or [-specific] occupy the DetP position; on specificity, see Szabolcsi the definite article will be selected. But what happens when



To ensure the derivation of the correct surface forms, the following additional assumption is made concerning these features:1

(33)

- numeral or Det; If N+I is non-possessive, (N+I)P can only be specific in the presence of an overt
- 9 The feature [+spec] is a "visible Det" for (14), hence triggers a(z) deletion in Phonetic Form;
- The feature [+def] is not a "visible Det," hence does not trigger a(z)-deletion.

It am glossing over a number of subtle descriptive points here: (i) whether proper names surface with or without an article depends both on the dialect and on the type of name, and (ii) the haplology rule would need to be refined in order not to exclude a minden könyvet elolvasó ember 'the every book-ACC reading man = the man who reads every book'. For some reason, D Det is fully acceptable when the second element of the sequence belongs to a prenominal participial clause. See Kornai (1985) and Szabolcsi (1986) for some discussion.

4. Subordinator conflation: parametric variation

and articles, respectively, in some languages they do. For instance ((34) is Korean and (35) is Romanian): first is that although matrix clauses and vocatives do not "tend to" have complementizers There are at least two puzzling facts that remain to be explained by the above proposal. The

- (34) John-i 'John came' John-NOM come-PAST-DECL wa-ss-ta
- 'my brother [vocative]' brother-the meu!

dinators. These data are in conflict with the claim that articles and complementizers are subor-

subordinator role of their own? occur in Hungarian and, to a more restricted extent, in some other languages (cf. (20)-The second puzzling fact is that while articles and quantifiers or demonstratives can coin many other languages they cannot. Why is that so, if articles have a distinct

provide further support for the proposals. made in the previous sections, they can be accommodated in a coherent way and thus I wish to suggest that while these data certainly call for a refinement of the proposals

carried by two separate morphemes. They cite the following Korean paradigm, for instance: morpheme. In many languages with robust agglutinative morphology, however, these are clause-type. complementizers have two distinct functions: to serve as subordinators and to indicate Bhatt and Yoon (1992) argue that items broadly classified cross-linguistically as In languages like English these two functions are lexicalized in a single

(36)

- John-i Wa-ss-1a
- John-NOM come-PAST-DECL
- Bill-un Bill-TOP John-NOM [John-i come-PAST-DECL-SUB wa-ss-ta-ko] thinks-DECL sayngkakhan-ta
- John-i wa-ss-ni?
- John-NOM come-PAST-INTERROG
- p. Bill-un Bill-TOP John-NOM [John-i come-PAST-INTERROG-SUB wa-ss-nya-ko] asked-DECL

mwuless-ta

and Hungarian. To wit, the Hungarian morpheme hogy 'that' co-occurs with both question questions (it is in complementary distribution with question intonation): words and the interrogative particle -e in embedded clauses. -E is also possible in matrix Some further languages that they claim exhibit the same property are Japanese, Kashmiri,

- 'n Nem 'I. don't know where John is.' tudom, know-1SG SUBhogy holwhere is van János. John(-NOM)
- not Nem tudom, 'I don't know whether John has arrived.' know-1SG SUBhogy came-INTERROG megjött-e John(-NOM)
- Megjött-e came-INTERROG János?

'Has John arrived?' John(-NOM)

with it when V ceased to be final.) assume that -e cliticized onto V during the SOV period of Hungarian, and moved along (-ä, the equivalent of -e in strictly SOV Ob-Ugric languages, is a clause-final particle. I

complementizer is a pure clause-type indicator, there is nothing strange about its appearance subordinators or conflate the subordinator and the clause-type indicator functions. If a those complementizers are not expected to appear in matrix clauses that are either pure in a matrix context. Bhatt and Yoon's observations offer the following solutions to our puzzles. First, only

a matter of parametric variation. does not speak against the plausibility of the analysis. On the contrary, it can be seen as article is indeed a pure subordinator. If these assumptions are tenable, then the fact that the whereas Hungarian systematically lexicalizes them as separate morphemes: the Hungarian separately. I submit that languages like English typically conflate these two functions, of clause-type indication. These two functions can also be either conflated or lexicalized a subordinator and that of a quantifier/demonstrative, the latter being a natural counterpart exact details of the analysis of Hungarian noun phrases do not carry over to, say, English, Second, it seems reasonable to look upon determiners as having two functions: that of

risk the following: also have separate subordinating and clause-type indicating complementizers. Thus, we may for the co-occurrence of certain articles/demonstratives and quantifiers; and these languages at the noun phrase levels. Let us recall now from Section 2 that Korean and Japanese allow It is interesting to observe that Hungarian has a pure subordinator both at the clausal and

(38) Conjecture:

conflation in a language. There is a correlation between clause-level and noun-phrase level subordinator

if (38) does not turn out to be correct. analysis of complementizers and my analysis of determiners may well be maintained even consistent, there is no theoretical necessity for (38) to be true. Thus Bhatt and Yoon's development, too.) Note, though, that while languages tend to be indicating complementizers, often lack an article. (The Hungarian article is a relatively late according to Bhatt and Yoon, typically have distinct subordinating and clause-type makes (38) somewhat difficult to check is that agglutinating SOV languages which, The verification of this conjecture requires much further empirical research. One factor that cross-categorially

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