Non-canonical marking of core arguments in European languages

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1. Introduction: European linguistic unity

Giving an overview of non-canonical argument marking in European languages is not an easy task, but it is made easier by the surprising structural unity of a large part of European languages. In recent years more and more linguists have come to accept the view that there exists a European *Sprachbund* (or linguistic area), much like the Balkan, Meso-American and South Asian areas. This linguistic area may be conveniently called *Standard Average European*, following Whorf (1956) (cf. Dahl 1990, Lazard 1990, van der Auwera 1998, Haspelmath 1998a, Haspelmath 1999). The core members of this *Sprachbund* are the Continental West Germanic and Gallo-Romance languages (especially Dutch, German, French), but it also comprises the other Romance and Germanic languages and the Balkan languages as well as the Slavic languages (particularly West Slavic). Peripherally also the western Finno-Ugrian languages (Finnish, Hungarian) and Maltese may be said to belong to this area.

Some salient properties of Standard Average European (SAE), which justify setting up a linguistic area, are: definite and indefinite articles, participial passives, 'have' possession, dative external possessors, anticausative prominence, 'A and-B' conjunction, resumptive-introductory relative pronouns, particle comparatives, relative-based equatives (see Haspelmath 1998a for more discussion of these features). For most of these features we have sufficient

evidence to show that they are not only not typical of the Indo-European family in general (because they are not found in the Asian branches of the family), but also fairly rare world-wide. That the European linguistic area is not just a reflection of Indo-European genetic unity can also be seen from the fact that most of the Europeanisms cannot have been inherited from Proto-Indo-European (cf. again Haspelmath 1998a), and that the (Indo-European) Celtic languages in the west clearly do not belong to the SAE area. Furthermore, some non-Indo-European languages of Europe, especially Hungarian and the Balto-Finnic languages, clearly share some of the defining features of SAE. In addition to the most salient features mentioned above, there are a fair number of further commonalities (such as AVO/SV constituent order, sentence-initial interrogative pronouns, widespread syllable-initial consonant clusters) which are less characteristic because they are not unique to SAE languages, though they do differentiate them from their western and/or eastern neighbors.

Against this background, it becomes meaningful to ask what the properties of argument marking, and more particularly non-canonical argument marking, are in European languages (i.e. in Standard Average European). Space limitations do not allow me to go into great detail, but these languages are so well known that it will be sufficient to characterize them in their broad outlines, highlighting the contrasts with non-SAE languages. The purpose of this chapter is to present the data from European languages in such a way that they are comparable to the facts of the less well known languages described in this volume.

Argument marking patterns in SAE languages show a lot of internal diversity, but also many commonalities that become salient only once we consider European languages against the background of the world-wide situation. The following four features are the most important features found throughout SAE, though not without exceptions (cf. Lazard 1990). (However, these are not defining features of SAE in the sense that they hardly occur elsewhere in the world.)

(i) SAE languages are accusative (contrasting with ergative Basque in the west, and many ergative languages in the Caucasus and in Indo-Iranian in the east).
(ii) The verb shows person-number agreement with the S/A (or subject) argument. An exception is mainland Scandinavian, which lacks verb agreement. Furthermore, in some languages (especially in the Balkans) weak pronouns ''double'' the O (direct object) under certain circumstances, thus effectively creating a new object agreement (e.g. Spanish

Lo veo a Juan [him see.1SG ACC Juan] 'I see Juan', Bulgarian *Ivan ja prodade kolata* [Ivan it.F sold.3SG car[F].the] 'Ivan sold the car'). By contrast, European non-SAE languages like Basque, Kartvelian and Abkhaz-Adyghean (western Caucasian) languages consistently show A, S/O and E (recipient) agreement in person/number, and many Nakh-Daghestanian (eastern Caucasian) languages only show S/O agreement in gender. (However, exclusive S/A person/number agreement is also found in nearby Turkic languages and in many Uralic languages.)

(iii) In recipient-theme combinations, the theme occupies the O slot and the recipient is an E argument (i.e. SAE languages have a *direct/indirect object* contrast, not a *primary/secondary object* contrast, in Dryer's 1986 terms).

(iv) The subject comprises a wide variety of semantic roles, i.e. SAE subjects go far beyond the agent role, expressing also experiencers (as in *I like her*), possessors (as in *I have it*), even recipients (*I got it*) and locations (*The hotel houses 400 guests*). In Foley and Van Valin's (1984: 123) terminology, SAE languages tend to be *reference-dominated*, contrasting with *role-dominated* languages in the west (Celtic, cf. Lazard 1990: 247) and Caucasian languages in the east.

In addition to these common features, we of course also find a fair amount of internal diversity within SAE. Most prominently, there is a clear difference between two kinds of languages: *case-marking* languages and *configurational* languages. The former, in which case-marking plays an important function for identifying arguments, are found in the central and eastern regions (German, Slavic, Hungarian, and the Balkan languages), while the latter, in which word order is much more important for distinguishing arguments, are mainly found in the west and the north (western and central Romance, English, Scandinavian).

In the next section, we will see to what extent non-canonical argument marking is represented in SAE languages.

2. Kinds of conditions for non-canonical argument marking

Before we look at non-canonical marking of S/A (henceforth, subject) and O (henceforth, (direct) object), let us summarize the canonical marking patterns:

(a) Case-marking languages (German, Polish, etc.): The subject is in the nominative case and triggers verb agreement, the object is in the accusative case.
(b) Configurational languages (English, French, etc.): The subject precedes the verb and triggers verb agreement, the object follows the verb. Pronominal objects and pronominal subjects do show case distinctions, however, and in the Romance and Balkan languages weak object pronouns typically precede the verb.

Now there is a wide variety of conditions under which subject and object marking deviates from this general schema. These can be divided into three classes: (i) reference-related conditions, (ii) clause-related conditions, and (iii) predicate-related conditions. In each case, the factors involved can be related to one of the transitivity parameters of Hopper and Thompson (1980). Deviations from canonical argument marking occur if transitivity is particularly high or particularly low.

One reference-related condition is the high degree of individuation of the object or its high position on the animacy/definiteness hierarchies. In this circumstance, many languages show special case-marking on the object (to distinguish it clearly from the subject, cf. Comrie 1989: §6.2.2), even when the object is completely unmarked otherwise. This kind of non-canonical marking is called *differential object marking* (cf. Lazard (2001) for an overview, Bossong (1998a) for a comparative study of the phenomenon in European languages). Examples are shown in (1)–(2).

(1) Spanish
a. *Ayer vi tu libro.*
yesterday saw.1SG your book
'Yesterday I saw your book.'
b. *Ayer vi a tu hermana.*
yesterday saw.1SG ACC your sister
'Yesterday I saw your sister.'

(2) Maltese (Comrie 1982: 286)
a. *Marija qatlet far.*
Marija killed.3SG.F rat
'Marija killed a rat.'
b. *Marija qatlet lill-far.*
Marija killed.3SG.F ACC.the-rat
'Marija killed the rat.'

Differential object marking may also be head-marking, i.e. verb agreement. For example, in Spanish strong-pronoun direct objects, which are at the top of the animacy hierarchy, require object agreement, whereas this is optional with (non-pronoun) animate objects. In Macedonian, definite direct objects require object agreement, whereas this is impossible with indefinite objects.

(3) Spanish
a. *Me miraron a mí.*
me looked ACC me
'They looked at ME.'
b. (*La*) *miraron a Conchita.*
her looked ACC Conchita
'They looked at Conchita.'

(4) Macedonian (cf. Rehder 1991: 43)
a. *Ja čitam kniga-ta.*
it.F read.1SG book[F]-the
'I am reading the book.'
b. (**Ja*) *čitam kniga.*
it.F read.1SG book[F]
'I am reading a book.'

Another reference-related condition is the situation when an indefinite direct object is only partially involved in or affected by the action, i.e. when transitivity is low. In some European languages (especially in Slavic), the direct object may be in the genitive case in this situation:

(5) Polish (Holvoet 1991: 9)
Zjadłem sobie ciast-a.
ate.1SG self.DAT cake-GEN
'I ate some cake.'

A clause-related condition that affects the transitivity of the construction is its negative/affirmative status. In several European languages, the direct object in negated sentences is in the genitive or partitive case. In French and Basque, this is true of all and only indefinite direct objects (cf. 6–7(b)). In the Slavic languages, sometimes even definite direct objects are in the genitive case in negative clauses (cf. 8).

(6) French
a. *J' ai vu des fourmis.*
I have seen ART ants
'I saw some ants.'
b. *Je n' ai pas vu de fourmis.*
I NEG have not seen GEN ants
'I didn't see any ants.'

(7) Basque (Saltarelli 1988: 32)
a. *Ez ditut lore-ak erosi.*
NEG I.have.them flower-PL.ABS bought
'I haven't bought the flowers.'
b. *Ez dut ogi-rik erosi.*
not I.have.it bread-PTV bought
'I did not buy any bread.'

(8) Russian
Ja ne ljublju ètogo goroda.
I not love this.GEN town.GEN
'I don't like this town.'

A further example of a clause-related condition is the role of aspectuality in determining object case marking in Finnish. In this language, the O argument is in the accusative case when a perfective reading is intended, but in the partitive case when an imperfective reading is intended, as shown in (9) (cf. Tommola 1986: Ch. 3).

(9) Finnish (Tommola 1986: 77)
a. *Luin kirjan.*
read.PAST.1SG book.ACC
'I read the book.'
a. *Luin kirjaa.*
read.PAST.1SG book.PTV
'I was reading the book.'

The third kind of condition for non-canonical argument marking concerns neither the reference of the argument NP nor the clause, but the meaning of the (generally verbal) predicate. This is probably the most important condition for non-canonical marking, and we will be concerned with this kind of condition

in the remainder of this paper. For example, in many languages some two-argument verbs with two human participants do not take canonical nominative-accusative (or subject-direct object) marking, but use dative or oblique marking for the second participant if this is not a typical patient, but shows some semantic features of agents. These verbs could be called ''interaction verbs'' (cf. Blume 1998). Some examples are given in (10), mostly from Blume's study. In German, Polish and Hungarian, there is a dative case, so all the verbs in (10) have dative arguments.

(10)	German	Polish	Hungarian
a. 'answer someone'	*antworten*	*odpowiadać*	*felel*
b. 'wave to someone'	*winken*	*machać*	*integet*
c. 'congratulate someone'	*gratulieren*	*gratulować*	*gratulal*
d. 'thank'	*danken*	*dziękować*	
e. 'threaten'	*drohen*	*zagrażać*	
f. 'obey'	*gehorchen*		*engeldelmeskedik*
g. 'serve'	*dienen*	*służyć*	
h. 'help'	*helfen*	*pomagać*	*segít*

Blume (1998) compares the verb classes that take a second dative argument with the class of ''middle verbs'' in Polynesian languages, which also show special case-marking. Dative-governing verbs in other European languages are described in some detail in the contributions to Van Belle and Van Langendonck (1996).

3. Arguments of experiential predicates

The most interesting semantic class of predicates showing non-canonical marking patterns is the class of *experiential predicates* (often called ''psychological predicates''). There is a rich linguistic literature on the peculiarities of experiential predicates in various languages, and only a general overview of the phenomena in European languages can be given here.

Non-canonical marking in experiential predicates is due to their special meaning compared to causative action predicates such as 'wash', 'break', 'pull'. As has been noted by Croft (1991: 212) and Lazard (1994: 41), canonical marking of transitive clauses in all languages is based on such prototypical action verbs. Verbs with other meanings which do not fit the prototype of transitive

verbs have to be assimilated in some way or other to the prototypical verbs, and here we find extensive cross-linguistic variation. Three important types are what we may call the *agent-like experiencer*, the *dative experiencer*, and the *patient-like experiencer*, respectively.

In the **agent-like experiencer** construction (often called ''experiencer-subject'' construction), the experiential predicate is treated like a normal transitive predicate, with the experiencer as A (as if it were an agent), and the stimulus as O (as if it were a patient). This is illustrated in (11).

(11) a. English *Sergio hates his teacher.*
b. Polish *Bożena nienawidzi nauczyciela.*
Bożena hates teacher.ACC
'Bożena hates the teacher.'
c. Italian *Rudi odia il suo insegnante.*
Rudi hates the his teacher
'Rudi hates his teacher.'

In the **dative-experiencer** construction, the experiencer appears in the dative or a similar case (or marked by a dative preposition), while the stimulus behaves like an S in that it agrees with the verb and bears nominative case in case-marking languages. Examples are shown in (12).

(12) a. German *Mir gefällt dieses Buch.*
me.DAT pleases this book
'I like this book.'
b. French *Ce livre lui plaît.*
this book him.DAT pleases
'He likes this book.'
c. M. Greek *Tu arési aftó to vivlío.*
him.DAT likes this the book
'He likes this book.'

Finally, there is a third type in which the experiencer is treated like an O and the stimulus is treated like an A (i.e. this is the mirror image of the first type). This type will be called **patient-like experiencer** here, and it is illustrated in (13).

(13) a. English *This problem worries me.*
b. German *Dieses Problem beunruhigt mich*$_{\text{ACC}}$.
c. Italian *Questo problema mi*$_{\text{ACC}}$ *preoccupa.*

Of these patterns, at first blush only the second (the dative-experiencer pattern) appears to show non-canonical marking. However, we will see below (§5.5–5.6) that the patient-like experiencer construction shows some peculiarities as well. Furthermore, there is some overlap between the dative experiencer and the patient-like experiencer: In languages lacking any accusative-dative distinction, the two cannot be distinguished.

Let us now ask how these three patterns are represented in the European languages. One of the salient properties of SAE languages is their predilection for agent-like experiencer constructions, which in many cases contrast with dative-experiencer or patient-like experiencer constructions in neighboring non-SAE languages, especially in Celtic in the west and in Finno-Ugrian and in Caucasian languages in the east. This is of course just a special case of the generally high degree of reference domination of SAE that was noted in §1.

The predilection for agent-like experiencers in SAE is one of the clear results of Bossong's (1998b) thorough study of experiencer subject constructions in 40 European languages, both SAE and non-SAE languages. Some examples of the contrast are shown in (14)–(17). In (14)–(15), we see the monovalent verb 'be cold, freeze', and in (16)–(17), we see the bivalent verb 'like'.

(14) SAE: agent-like experiencer ('I freeze, I am cold')

a.	Swedish	*jag fryser*	[I freeze.PRES]
b.	Modern Greek	*krióno*	[freeze.1SG]
c.	Hungarian	*fázom*	[freeze.1SG]

(15) Non-SAE: dative eperiencer ('I am cold', lit. 'is cold to me')

a.	Udmurt	*mynym kezyt*	[I.DAT cold]
b.	Lezgian	*zaz meq'i-da*	[I.DAT cold-COP]
c.	Irish	*tá mé fuar*	[is me cold]

(16) SAE: agent-like experiencer ('I like X')

a.	Portuguese	*gosto de X*	[like.1SG of X]
b.	Norwegian	*jeg liker X*	[I like.PRES X]
c.	French	*j'aime X*	[I love.1SG X]

(17) Non-SAE: dative/oblique experiencer ('X pleases me', lit. 'to me')

a.	Irish	*is maith liom X*	[is good with.1SG X]
b.	Latvian	*X man patīk*	[X me.DAT pleases]
c.	Georgian	*X mo-m-c'ons*	[X PREV-1SG.DAT-pleases]

Of course, there is no clear-cut borderline between SAE and non-SAE languages, so the examples in (14)–(17) give an idealized picture. Furthermore, different predicates behave differently: For instance, 'like' has a strong preference for the dative experiencer and shows it also in some SAE languages (e.g. Dutch *he bevalt mij* [it pleases me] 'I like it'), while 'remember' has a strong preference for the agent-like experiencer and shows it also in some non-SAE languages (e.g. Udmurt *mon todam voźiśko* [I that remember.PRES.1SG] 'I remember it'). Despite these ''noise'' factors, the areal generalization is very striking, as is also clear from Figure 1 (see also Haspelmath 1998a).

As one might expect, the different behavior of different classes of experiential verbs is not accidental (this is noted by Bossong 1998a: 261, but he does not investigate this question systematically). Bossong's data lend themselves easily to a demonstration of this point: He lists translations of ten experiential predicates in 40 languages: three cognition predicates ('see', 'forget', 'remember'), four sensation predicates ('be cold', 'be hungry', 'be thirsty', 'have a headache'), and three emotion predicates ('be glad', 'be sorry', 'like'). In order to make the various constructions of different languages roughly comparable, he divides them into two broad classes, which he calls ''generalized'' (= agent-like experiencer) and ''inverted'' (=dative/patient-like experiencer), and he assigns scores between 5 and 3 to each attested predicate (5 for a prototypical

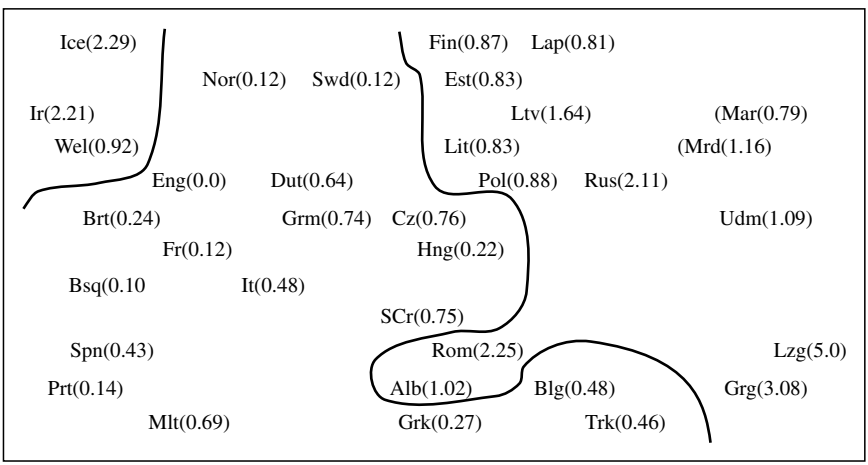

Figure 1. *Predominant agent-like experiencers (center) vs. dative/patient-like experiencers (periphery)*

verb, 4 and 3 for increasing deviations from the prototype, e.g. adjectival constructions, reflexive verbs, prepositional object government, etc.). An ideal SAE language would thus have a score of 50:0 (10 × 5 scores for agent-like (''generalized'') experiencer constructions, none for object-like (''inverted'') experiencer constructions), but in fact most languages have a mixture (for instance, Portuguese has a score of 36:5, Norwegian has 42:5, English has 43:0). The most radical non-SAE language in Bossong's sample is Lezgian, with a score of 0:46, but again the other languages show a mixture (Georgian 13:40, Russian 17.5:42, Icelandic 14:32). By arbitrarily dividing the languages into those showing predominant agent-like experiencers (ratios between 0.0 and 0.8) and those showing predominant dative/patient-like experiencers (ratios between 0.8 and 5.0), we arrive at the geographical tripartition shown in Figure 1. The languages in the center correspond fairly precisely to the Standard Average European *Sprachbund* (though the place of Turkish within the center is exceptional; with respect to other features, Turkish is clearly non-SAE).

After having seen the preferences of languages for one of the two main construction types across predicates, we can now use Bossong's scores to determine the preferences of individual predicates across languages. The result of this count is given in Table 1, where I have given percentages in addition to the score sums.

Despite all the ''noise'' introduced by complicating factors, a clear picture emerges from Table 1. Cognition predicates show the strongest affinity with the

Table 1. *Distribution of experiencer predicates over two broad construction types*

		Agent-like experiencer		Object-like experiencer	
Cognition predicates	'see'	195.0	93%	14.0	7%
	'forget'	178.5	87%	26.5	13%
	'remember'	155.5	83%	31.0	17%
Sensation predicates	'be hungry'	120.5	65%	65.5	35%
	'be thirsty'	113.5	62%	69.5	38%
	'be cold'	92.0	54%	86.0	46%
	'have a headache'	56.5	30%	129.5	70%
Emotion predicates	'be glad'	114.0	52%	106.0	48%
	'be sorry'	83.0	45%	101.0	55%
	'like'	55.0	21%	169.0	79%

agent-like experiencer construction, while emotion predicates are the most likely to be expressed by an object-like experiencer construction, and sensation predicates (with the exception of 'have a headache') are intermediate between cognition and emotion. It is perhaps not surprising that cognition concepts, i.e. the more rational aspects of our mental life, should be assimilated most easily to the transitive prototype of volitional causation, while emotion concepts, i.e. the most irrational aspects of our experience, are the most likely to have the experiencer in object position. But it is unclear whether anyone could have predicted these results before looking at the data. And we should be cautious at this stage: The scores of Table 1 only reflect data from 40 European languages, and we must investigate experiencer constructions on a world-wide scale before we can be certain that the generalization is not caused by areal bias (however, since about half of the 40 languages are not SAE, their typological diversity is fairly great).

4. Non-canonical marking of experiencer predicates in SAE

After the general overview of experiencer predicates and constructions in the preceding section, let us now look in greater detail at the construction patterns that we find in SAE languages. In addition to the marking of the experiencer argument, which can be treated as either subject or direct/indirect object, we should also look briefly at the form of the verb and of the stimulus argument, which may be non-canonical as well.

A typical feature of SAE experiencer constructions is the use of the verb 'have', which indicates that the subject is not an agent but is affected by the situation (as in possessive constructions), e.g.

(18)	a.	French	*j'ai froid* 'I am cold'	[I have cold]
	b.	Spanish	*tengo hambre* 'I am hungry'	[I.have hunger]
	c.	German	*hab Mitleid mit uns* 'have mercy upon us'	[have compassion with us]
	d.	Italian	*ho bisogno di te* 'I need you'	[I.have need of you]
	e.	English	*I have a headache*	

Another characteristic feature of SAE languages is the widespread use of grammaticalized reflexive pronouns in anticausative (or ''middle'') constructions (cf. Haspelmath 1993b, 1998a). This is particularly common in emotion predicates of the type 'be amused', 'be bored', 'be amazed' (i.e. Levin's 1993: 189 *amuse* verbs). For instance, in Italian we have pairs like *arrabbiare* 'make angry'/*arrabbiarsi* 'get angry', *divertire* 'entertain'/*divertirsi* 'have fun', etc. In addition, SAE languages typically have a resultative (or ''stative passive'') form consisting of the copula plus the passive participle of these verbs, e.g. English *be amused*, *be bored*, etc. While English, which lacks anticausatives, only allows two constructions (*Stimulus Vs Experiencer* and *Experiencer is Ved* PREP *Stimulus*), the other Germanic languages, the Romance and the Slavic languages very often have all three constructions: the transitive construction, the resultative construction, and the reflexive construction, e.g. German *begeistern* 'fill with enthusiasm', *begeistert sein von* 'be enthusiastic about', *sich begeistern für* 'be enthusiastic about'. The preposition or oblique case governed by the reflexive or resultative verb is not predictable, and may be different in the reflexive and resultative construction. Some examples from German, French and Polish are given in (19). As in other cases, English turns out to be a less typical SAE language in this respect.

(19)	English	German	French	Polish
a.	*amaze*	*wundern*	*étonner*	*dziwić*
	be amazed (*at*)	*verwundert sein* (*über*)	*être étonné*	*być zdziwionym*
		sich wundern (*über*)	*s'étonner* (*de*)	*dziwić się* (DAT)
b.	*interest*	*interessieren*	*intéresser*	*interesować*
	be interested (*in*)	*interessiert sein* (*an*)	*être intéressé* (*par*)	*być zainteresowanym*
		sich interessieren (*für*)	*s'intéresser* (*à*)	*interesować się* (INSTR)
c.	(*anger*)	*ärgern*	*fâcher*	*gniewać*
	(*be angry*)	*verärgert sein* (*über*)	*être fâché*	*być rozgniewanym*
	(*get angry*)	*sich ärgern* (*über*)	*se fâcher*	*gniewać się*
d.	*sadden*	*betrüben*	*désoler*	*martwić*
	be sad(*dened*)	*betrübt sein* (*über*)	*être désolé*	*być zmartwionym*
		sich betrüben	*se désoler* (*de*)	*martwić się*
e.	*worry*	*beunruhigen*	*préoccuper*	*niepokoić*
	be worried (*about*)	*beunruhigt sein* (*über*)	*être préoccupé*	*być zaniepokojonym*
		sich beunruhigen	*se préoccuper*	*niepokoić się*

There are some lexical idiosyncrasies and gaps in this array, but on the whole it shows a remarkable consistency and symmetry. There is a large number of further verbs in each language that display a comparable behavior. In some cases, cognition verbs also follow a similar pattern (e.g. Italian *ricordarsi* 'remember', cf. *ricordare* 'remind').

The structure of the predicates is relevant for argument marking because reflexive and resultative predicates are intransitive and thus cannot have direct-object marking of the stimulus argument. The stimulus is therefore marked by a preposition (mostly 'about', but also 'of', 'with', 'at', 'in') or an oblique case (e.g. dative or instrumental in Polish).

While the patient-like experiencer construction is very widespread in SAE languages and occurs with a large number of verbs, the dative-experiencer construction appears to be much more restricted in most of the languages. A list of emotion predicates taking dative experiencers in some languages is given in (20). There are not many more such verbs in each language (cf., e.g., Melis 1996: 53 for French).

(20)	French	Italian	German	Polish
'please (X)'	*plaire*	*piacere*	*gefallen*	*podobać się*
'be useful (for X)'	*servir*, *profiter*	*servire*	*nützen*, *bekommen*	*przydać się*
'be sufficient (for X)'	*suffire*	*bastare*	*genügen*, *reichen*	*wystarczać*
'be harmful (for X)'	*nuire*	*nuocere*	*schaden*	*szkodzić*
'be fitting (for X)'	*convenir*, *aller*	*convenire*, *andare*	*passen*	*odpowiadać*
'I am sorry'		*mi spiace*	*es tut mir leid*	*żal mi*

Among sensation predicates, older German had cases such as *mich hungert* [me.ACC hungers] 'I am hungry', *mich friert* [me.ACC freezes] 'I am cold', but these are disappearing from the modern language. The dative is still found in adjectival constructions, e.g. *mir ist schlecht* 'I am sick', *mir ist kalt* 'I am cold'. The Polish equivalents are, e.g., *zimno mi* [cold me.DAT] 'I am cold', *niedobrze mi* [unwell me.DAT] 'I am sick'. In the Romance languages, sensation predicates occur with the agent-like experiencer construction.

Another small class of predicates that can be classified as experiential are modality predicates, i.e. predicates of possibility ('can', 'may') and belonging. These show dative experiencers in a few cases:

(21)

	French	Italian	German	Polish
'X succeeds'	—	—	*es gelingt* X_{DAT}	*udaje się* X_{DAT}
'X is allowed'	—	—	—	*wolno* X_{DAT}
'belong to X'	*appartenir*	*appartenere*	*gehören*	(*należeć do X*)
'X lacks sth'	*manquer*	*mancare*	*fehlen*	*brakować* X_{DAT}
'easy for X'			*leicht für X*	*latwo* X_{DAT}

Finally, a few verbs of propositional attitude take dative experiencers (e.g. *seem*, French *sembler*, Italian *sembrare*, German *scheinen*, Polish *wydawać się*), as well as some verbs of happening (e.g. German *mir passiert X* 'X happens to me', Italian *X mi succede*, French *X m'arrive*).

Several of the dative-experiencer predicates just considered have (near-) equivalents with agent-like experiencers in the same language or in a closely related language. Sometimes the stimulus is then marked non-canonically, especially by genitive case or a genitive preposition. Some examples of this phenomenon are given in (22).[1]

(22)

a.	Italian	*S manca a E* 'E lacks S'	*E manca di E*
b.	German	S_{NOM} *fehlt/mangelt* E_{DAT} 'E lacks S'	E_{NOM} *ermangelt* S_{GEN}
c.	Polish	S_{GEN} *trzeba* E_{DAT} 'E needs S'	E_{NOM} *potrzebuje* S_{GEN}
d.	French	*S profite à E* 'S benefits E'	*E profite de S* 'E benefits from S'
e.	Spanish	*S gusta a E* 'E likes S'	(Portuguese:) *E gosta de S*

5. Behavioral properties of dative experiencers

So far in this paper we have primarily looked at the marking patterns of some special predicate classes (especially experiencer predicates) which deviate from those of prototypical action verbs, i.e. volitional causative verbs (cf. Croft 1991). But do these represent cases of non-canonical marking of S, A, and O? This depends on how one analyzes a sentence like German *Mir gefällt das Buch*/Italian *Mi piace il libro* 'I like the book'. One possibility is that the dative

experiencer is A and the nominative stimulus is O. On this analysis, our languages would show non-canonical marking of both A (which normally is not in the dative case) and O (which normally is not in the nominative case or controls verb agreement). Another possibility is that dative-experiencer constructions are not analyzed as transitive clauses, but as extended intransitive clauses, and that the experiencer argument corresponds to the E argument of Onishi (this volume).[2] Most linguists would make the choice among these alternatives dependent on the behavior of the experiencer and stimulus arguments with respect to a set of ''behavioral subject properties'', i.e. the behavior in special contexts such as complement-clauses with implicit subject, valency-changing derivations, imperatives, control of reflexive pronouns, and various interclausal switch-reference conditions.

Unfortunately, in the case of European languages, many of these tests are often inapplicable, and others give inconclusive results. On balance it seems that dative-experiencer constructions should be regarded as intransitive, i.e. not as ''dative-subject constructions'' (cf. also Dixon's 1994: 122 view on German). However, it is still interesting to examine the evidence. If one admits only two possibilities—either transitive (A/O), or intransitive (S/E)—then the results of this section might appear problematic. However, if one allows the possibility of intermediate stages between intransitive and transitive, then languages can be seen as occupying a particular point on the continuous transitive–intransitive scale.

Let us now examine the individual subject properties.

5.1 *Word order*

Most SAE languages show the basic clausal constituent order AVO (for transitive clauses) and SVE (for extended intransitive clauses). In strictly configurational languages, this word order is changed only in highly special circumstances. However, English is not a typical SAE language, and few SAE languages are as strictly configurational as English. Thus, it is not surprising that Italian and Greek, for instance, allow both stimulus-experiencer word order and experiencer-stimulus order, as can be seen in (23–24)(a–b). (The situation is very similar in German and probably in other SAE languages as well.)

(23) Italian
a. *La sua nuova bici piace a Livia.*
'Her new bike pleases Livia.'
b. *A Livia piace la sua nuova bici.*
'Livia likes her new bike.'

(24) Modern Greek (Anagnostopoulou 1999: 69)
a. *To krasí tu arési tu Pétru.*
'The wine pleases Petros.'
b. *Tu Pétru tu arési to krasí.*
'Petros likes the wine.'

The fact that the (b) sentences show a relatively usual, unmarked word order might serve as an argument that this construction represents a transitive AVO construction, but under such a view the order in the (a) sentences is difficult to account for. If we start from the (diachronically primary) SVE analysis, then the order in the (b) sentences could be attributed to the topical/animate nature of the experiencer argument. However, non-experiential verbs do not allow both word orders as unmarked orders, even when the S argument is inanimate and the E argument is animate, as shown in (25b) for Italian.

(25) a. *Questa statua somiglia a Cleopatra.*
b. (marked:) *A Cleopatra somiglia questa statua.*

Thus, experiential predicates seem to constitute a class of their own with respect to word order, intermediate between normal extended intransitive and transitive verbs.

5.2 *Implicit argument in complement clauses to modal and phasal predicates*

This criterion is clearly fulfilled by a dative-subject language like Lezgian (Haspelmath 1993a), but it is clearly not fulfilled in SAE languages. Example (26a) shows an impeccable Lezgian example with the dative-experiencer verb *akun* 'see', and (26b–c) show two totally ungrammatical SAE examples with the dative-experiencer verb 'like'.

(26) a. Lezgian (Haspelmath 1993a: 296)
Gadadi-z Ø ruš akwa-z k'an-zawa.
boy-DAT [Ø(DAT) girl(ABS) see-INF] want-IMPF
'The boy wants to see the girl.'

b. German
Frau Oberhuber möchte [$Ø_{DAT}$ *ihr Schwiegersohn gefallen*].
'Ms. Oberhuber wants to like her son-in-law.'
c. Polish
Pani Grabowska chce [$Ø_{DAT}$ *podobać się zięć*].
'Ms. Grabowska wants to like her son-in-law.'

Thus, this is an argument in favor of the subject status of the experiencer in Lezgian, but against its subject status in SAE languages.

5.3 *Valency-changing derivations*

The problem with this criterion is that dative-experiencer constructions are stative and non-volitional, and predicates of this semantic type are generally difficult to passivize and to causativize, so we can hardly draw any conclusions from the fact that dative-experiencer verbs in SAE languages cannot be passivized and are difficult to causativize.

However, at least in German causativization is marginally possible, and in these constructions it is clearly the stimulus argument that appears as the O of the causative predicate (cf. 27a). Sentences in which the experiencer is treated as the O (as in 27b) are completely ungrammatical.

(27) a. *?Gott ließ ihm seinen Auftrag gelingen.*
'God made him succeed in his task.'
b. **Gott ließ ihn seinen Auftrag gelingen.*

If we assume that the O status in a derived causative construction is an argument for A status in the basic construction, then the difference between (27a) and (27b) can serve as an argument against the A status of the experiencer argument.

5.4 *Imperatives*

In Lezgian, dative-subject verbs such as *akun* 'see' allow the dative subject to be the imperative addressee, e.g. *aku!* 'see!' (Haspelmath 1993a: 283). In SAE languages, this is completely impossible. It is unclear to what extent this can be regarded as an argument for the non-subject status of the experiencer, because stative non-volitional predicates generally cannot be used in the imperative.

5.5 *Control of reflexive pronouns*

In the simplest case, i.e. in sentences like 'Anna likes herself', it is clearly the stimulus, not the experiencer, that controls reflexivization:

(28) a. Italian
Anna piace a sé stessa.
'Anna likes herself.'
b. Polish
Anna$_{\text{NOM}}$ *się podoba sobie*$_{\text{DAT}}$.
'Anna likes herself.'
c. German
Anna$_{\text{NOM}}$ *gefällt sich*$_{\text{DAT}}$.
'Anna likes herself.'

The reverse pattern, which we find, e.g., in Lezgian (Haspelmath 1993a: 409), is completely impossible in SAE—in case-marking languages it is not even possible to construct examples with a dative experiencer controlling a reflexivized nominative stimulus, because they lack nominative forms of reflexive pronouns.

However, with those few verbs that have a dative experiencer and an oblique stimulus argument, the dative experiencer may control reflexivization in German (cf. Seefranz-Montag 1983: 167):

(29) a. *Peter*$_{\text{DAT}}$ *graut vor sich selbst.*
'Peter is horrified at himself.'
b. *Meiner Tante*$_{\text{DAT}}$ *liegt an sich selbst.*
'My aunt is interested in herself.'

And when the reflexive pronoun is the possessor of the stimulus argument, the experiencer argument may control it (this cannot be illustrated from German or French, because these languages do not have a reflexive/non-reflexive distinction in possessive pronouns):

(30) a. Italian (Belletti and Rizzi 1988: 315)
I propri$_{\text{i}}$ *genitori gli*$_{\text{i}}$ *sembrano i più simpatici.*
'His own parents seem to him the nicest.'
b. Polish
Mojemu przyjacielu$_{\text{i}}$ *się udał swój*$_{\text{i}}$ *największy sukces.*
'My friend had his biggest success.'

These facts could be taken as an argument that the experiencer is a subject at least at some level of analysis (cf. Perlmutter 1983, who takes the dative experiencer to be an underlying (''initial'') subject that is demoted to indirect-object status at a later level of representation). But it seems to me that the facts of reflexivization do not carry as much weight as they have sometimes been given. Notice that the direct-object experiencer may show the same kind of reflexive control, also in English:

(31) a. Italian (Belletti and Rizzi 1988: 312)
Questi pettegolezzi su di sé$_i$ *preoccupano Gianni*$_i$ *più di ogni altra cosa.*
'These gossips about himself worry Gianni more than anything else.'
b. Polish
Te pogłoski o siebie$_i$ *niepokoją Jana*$_i$ *więcej niż cokolwiek innego.*
'These gossips about himself worry Jan more than anything else.'
c. English
Pictures of himself$_i$ *worry John*$_i$.

To account for these cases, one might propose that the experiencer in patient-like experiencer verbs, too, is a subject at an underlying level (see Cresti 1990 for this approach). But in addition, experiencers may serve as antecedents of reflexives even if they are marked with a preposition rather than with dative case, as in (32) (Belletti and Rizzi 1988: 316). Presumably nobody would advocate a subject analysis of the English *to*-experiencer in (32).

(32) *Replicants of themselves*$_i$ *seemed to the boys*$_i$ *to be ugly.*

These data make it quite doubtful whether reflexive control should be associated with subject status at all. Perhaps an analysis in terms of semantic and/or pragmatic properties of the controlling argument is more realistic.

5.6 *Interclausal coreference restrictions*

The final criterion to be considered here is the phenomenon of pivot constraints in looser clause combinations such as coordination and adverbial subordination. In coordination, this criterion is clearly negative: Sentences like German **Gabriel*$_{\text{DAT}}$ *gefielen die Blumen und kaufte sie* ('Gabriel liked the flowers and bought them') are always ungrammatical in SAE languages.

However, the situation is more complex in converbal[3] and infinitival adver-

bial clauses, which typically have an implicit (= non-expressed) subject controlled by an argument of the superordinate verb. Often there are restrictions on this control relation such that the subject, but not the direct object of the superordinate clause may be the controller, cf. (33) from German. (In the examples of this subsection, the implicit subject of the adverbial clause is indicated by Ø with a referential index.)

(33) *Schulz*$_{\text{i}}$ *rief seine Chefin*$_{\text{j}}$ *an, um* Ø$_{\text{i/*j}}$ *die Ankunftszeit mitzuteilen.*
'Schulz called up his boss to tell (her) the time of arrival.'

When the superordinate clause contains an experiential predicate with a dative experiencer, the dative argument may be the controller as well as the nominative argument.

(34) a. *Diese Blumen gefallen mir*$_{\text{i}}$ *zu gut, um* Ø$_{\text{i}}$ *sie nicht zu kaufen.*
'I like these flowers too much not to buy them.'
b. *Diese Blumen*$_{\text{i}}$ *gefallen mir gut, ohne* Ø$_{\text{i}}$ *mich zu begeistern.*
'I like these flowers a lot, but I am not crazy about them.'

Similar patterns can be found in other languages. (35a–b) shows French converbal clauses (Legendre 1990: 111), and (36a–b) shows Italian infinitival clauses (Perlmutter 1983).

(35) a. *Cette femme*$_{\text{i}}$ *lui plaît* [*tout en* Ø$_{\text{i}}$ *ne correspondant pas tout à fait à son idéal féminin*].
'This woman is pleasing to him while not corresponding exactly to his feminine ideal.'
b. *Que la France lui*$_{\text{i}}$ *plaise* [*tout en* Ø$_{\text{i}}$ *n'y ayant jamais mis les pieds*], *toi, ça te surprend?*
'That France is pleasing to him without ever having set foot there, is it surprising to you?'

(36) a. *Giorgio*$_{i}$ *mi pareva talmente nervoso da* Ø$_{\text{i}}$ *non poter dormire.*
'Giorgio seemed so nervous to me that he was unable to sleep.'
b. *Giorgio mi*$_{i}$ *pareva tanto nervoso da* Ø$_{\text{i}}$ *volerlo far visitare da uno specialista.*
'Giorgio seemed so nervous to me that I wanted to have him examined by a specialist.'

For (37) from Modern Greek, Anagnostopoulou (1999: 70) reports that only the

experiencer may be the controller, but probably examples analogous to (35a) and (36a) can also be constructed.

(37) [*Akúghondas* $Ø_{i/*j}$ *tin istoría*], *tis Marías*
hearing the story the Mary.DAT
árxise na min tis arési o Pétros.
began SBJV not her.DAT pleases the Petros.NOM
'While she was listening to the story, Maria started not liking Petros.'

A Polish example of a dative experiencer controlling an implicit converb subject is cited by Weiss (1977: 280):

(38) $Ø_i$ *Słuchając go*, *wstyd mi*$_i$ *było za niego.*
'Listening to him, I felt ashamed for him.'

The situation in English is discussed in detail by Kortmann (1991), cf. the following example:

(39) *It has seemed to me*$_i$ *lately*, $Ø_i$ *watching you with a father's eye*, *that you have shown signs of being attracted by Algernon Fripp.*

Particularly within Relational Grammar (e.g. Perlmutter 1983, Legendre 1990, Cresti 1990), these control possibilities have been taken as evidence for subject status (at least at some level) of the experiencer argument. But the problem with this criterion is that the conditions seem to be much more complex, and pragmatic considerations of discourse salience seem to be relevant in most languages as well. For instance, Cresti (1990: 75) notes that the dative experiencer in Italian must be preverbal to be able to control the implicit infinitival subject, so that (40b), where the experiencer (*a mio marito*) is postverbal, is ungrammatical, unlike (40a).

(40) a. *A mio marito*$_i$ *è talmente piaciuta una compagna d'ufficio da* $Ø_i$ *lasciarci tutti quanti e andare a vivere con lei.*
'My husband liked an office colleague so much that he left us all and went away to live with her.'

b. **Una compagna d'ufficio è talmente piaciuta a mio marito*$_i$ *da* $Ø_i$ *lasciarci tutti quanti e andare a vivere con lei.*
'An office colleague was so pleasing to my husband that he left us all and went away to live with her.'

This word order difference is presumably relevant because only the preverbal

experiencer is sufficiently topical, and topicality is a requirement for control. When the right semantic-pragmatic conditions are present, even participants that are not even core arguments of the superordinate verb may be controllers, as in Kortmann's (1991: 43) English example $Ø_i$ *Looking out for a theme*, *several crossed his*$_i$ *mind*. The issue of implicit-subject control is discussed for converbal constructions in Haspelmath (1995: 29–37), where it is shown that simple syntactic conditions are in general insufficient. Thus, it is difficult to derive an argument for the subject status of the experiencer from these data.

Let us now summarize this section on behavioral properties of the dative experiencer: Dative experiencers in SAE languages do not behave as subjects with respect to the three criteria of (i) implicit argument of complement clauses, (ii) valency-changing derivations, (iii) imperatives, but these tests are difficult to apply because they require a volitional, or at least non-stative, predicate. The criteria of (iv) reflexive control, and (v) interclausal implicit-subject control give mixed results, but it is quite doubtful whether these can be employed as tests for subject status, because the conditions seem to involve crucially pragmatic factors (at present ill-understood) such as discourse salience. Thus, it seems clear that clauses with dative experiencers in SAE languages cannot be regarded as transitive clauses with non-canonically marked A and O, but must be considered as extended intransitive clauses with canonically marked S and E.

However, there is a diachronic tendency for intransitive S-E clauses to change into transitive A-O clauses, which is very relevant in this context. This will be the topic of the next section.

6. From oblique experiencer to non-canonically marked S/A

While dative experiencers in modern SAE languages exhibit few (if any) behavioral subject properties, it might well be that they will acquire some in the future. There is a well-established diachronic tendency for oblique experiencer arguments to acquire behavioral subject properties, which has been described for various languages by Cole et al. (1980). The best-documented language in which this change has been attested is English (cf. Allen (1995) for a comprehensive treatment). Below I will briefly summarize the facts of English, before presenting some new data that suggest that a very similar change is currently ongoing in another European language, Maltese.

Old English had a fairly large number of experiential verbs with non-standard

case-marking patterns, some of which are listed in (41) together with their modern English equivalents (cf. Allen 1995: 68–85 for complete lists).

(41)

hyngrian	feel hunger	*lystan*	wish
langian	long	*eglian*	bother, ail
lician	like	*laþian*	feel loathing
þyncan	think	*ofhreowan*	feel pity, regret

There were a number of different case-marking patterns, but in the present context we are only interested in those verbs that show dative- or accusative-marked experiencers (the stimulus was variously coded in the nominative or genitive). Two examples are given in (42) (cited from Allen 1995: 68 and Harris and Campbell 1995: 83).

(42) a. . . . *him ofhreow þæs mannes.*
he.DAT felt.sorry the.GEN man.GEN
'He felt sorry for the man.' (Ælc. Th. I. p. 192.16)

b. *Þam wife þa word wel licodon.*
the.DAT woman.DAT those.NOM words.NOM well liked.3PL
'The woman (DAT) liked those words (NOM) well.' (Beowulf 639)

By the time of late Middle English, most of these verbs had either disappeared from the language or undergone a drastic change in the grammatical relations and marking patterns: In Modern English, verbs such as *like*, *loathe*, *long*, *think*, *rue* occur primarily with a (''nominative'') subject experiencer. A traditional popular explanation of this change invokes reanalysis due to surface ambiguities that arose after case distinctions had been reduced in Middle English (schematically: *the wife*$_{\text{DAT}}$ *liked*$_{\text{PL}}$ *the words*$_{\text{NOM}}$ is reanalyzed as *the wife*$_{\text{SUBJ}}$ *liked*$_{\text{SG}}$ *the words*$_{\text{OBJ}}$) (e.g., Van der Gaaf 1904, Lightfoot 1979, Harris and Campbell 1995, among many others).

However, the change certainly did not happen as abruptly as is suggested by the reanalysis scenario. On the contrary, Allen's (1995) thorough study confirms Cole et al.'s (1980) view according to which we have here a gradual change starting with original experiencers lacking subject properties, which gradually acquire behavioral subject properties and finally even coding properties such as case-marking and agreement. Allen (1995: 442) writes: ''. . . such evidence as is available suggests that the preposed accusative and dative Experiencers of the Experiencer verbs played the role of subject, rather than object, even in Old English, and the evidence becomes stronger in Middle

English.'' For example, the accusative experiencer of *hunger* could be omitted in coordinate constructions, as in (43) from Middle English (cited from Seefranz-Montag 1983: 133).

(43) *I wat at þou$_i$ has fasted lang and Ø$_i$ hungres nu.*
I know that you have fasted long and Ø(ACC) hungers now
'I know that you have fasted for a long time and are now hungry.'
(14th c., Curs. Mundi 12943)

Seefranz-Montag (1983: 132–4) mentions quite a few further behavioral subject properties which experiential constructions displayed already in older English at a time when the case-marking and agreement showed few traces of subject behavior of the experiencer. Thus, older English experiencer constructions are good examples of non-canonically marked A-O constructions which had presumably arisen from earlier S-E constructions. After acquiring behavioral subject properties, the experiencer argument gradually acquired coding properties of subjects as well, i.e. nominative case and triggering verb agreement. We find examples such as (44)–(45) (cited from Harris and Campbell 1995: 85), in which the experiencer does not have all the coding properties yet (only nominative case-marking in (44), only agreement in (45)). These show that the change is a gradual one, not an all-or-nothing reanalysis (cf. also Haspelmath 1998b).

(44) *Preieþ þanne first for ȝouresilf as* ***ȝe þenkiþ*** *moost spedeful.*
'Pray for yourself as you (NOM!) think (3SG!) most beneficial.'
(The Chastising of God's Children 224, 20)

(45) *Sum men þat han suche likynge wondren what* ***hem ailen****.*
'Some men who have such pleasure wonder what ails (3PL!) them (DAT1).' (The Chastising of God's Children 103, 15)

In Maltese, an offshoot of Arabic that has been in close contact with European languages (Sicilian, Italian, English) for many centuries, a similar change appears to be going on at present. Verbs like *irnexxielu* 'regret' were originally dative-experiencer verbs of the SAE type, and at one time a sentence such as (46) must have been possible (the star in front of (46) can be taken to mean 'reconstructed').

(46) **Irnexxa l-it-tifla t-itfa' il-ballun.*
succeed.PF.3SG to-the-girl [she-throw.IP the-ball]
'The girl managed to throw the ball.'

In contemporary Maltese, however, this sentence is completely impossible (so the star can also be taken to mean 'ungrammatical'). The experiencer argument must precede the verb, and the verb must show a suffixed indirect-object marker agreeing with the experiencer in person/ number/gender, as in (47). This is thus a kind of left-dislocation construction which has become obligatory.[4]

(47) *L-it-tifla rnexxie-lha titfa' il-ballun.*
to-the-girl succeed.PF-to.her [she-throw.IP the-ball]
'The girl managed to throw the ball.'

Now there are signs that the preverbal experiencer is acquiring subject status, i.e. that the construction is gradually shifting from an intransitive S-E structure to a transitive A-O structure with non-canonical marking. Most importantly, the dative case-marking of the preverbal experiencer is not obligatory, and we may have nominative case as well, so that (48) is a perfectly acceptable alternative to (47).

(48) *It-tifla rnexxie-lha titfa' il-ballun.*
the-girl succeed.PF-to.her [she-throw.IP the-ball]
'The girl managed to throw the ball.'

The experiencer argument does not have all the behavioral properties of subjects yet (cf. Haspelmath and Caruana to appear for details). But there is little doubt that what we see here in Maltese is not unlike the change that has been described for Middle English and other languages, i.e. from a non-subject experiencer to a subject experiencer. This is not a change which happens through cataclysmic reanalysis (*pace* Lightfoot 1979), but a gradual change in which the experiencer acquires subject properties (both behavioral and coding) one at a time. This kind of gradual change in grammatical relation is surprising in some frameworks, but it fits well into a theory in which grammatical relations are not a set of given fixed points, but prototypical clusterings of diverse features (Givón 1997, Croft 2001).

Onishi (this volume) asks ''how canonically marked markings have developed from non-canonically marked markings, and, possibly, vice versa''. The general mechanism seems to be the following: The experiencer is increasingly placed in topic position because it refers to a definite human participant, and since most human topics are subjects, it is gradually assimilated to subjects with respect to its morphosyntactic behavior. The reverse change is impossible because there is no motivation for putting an experiencer subject in a non-topical

position, or a stimulus object into a topical position. But why do experiencers appear in non-subject positions in the first place? The reason is simple: Experiential verbs normally arise metaphorically from concrete verbs, e.g. verbs of motion or physical force transmission, e.g. English *worry* < 'strangle, seize by the throat', *preoccupy* < 'seize beforehand', *stun* < 'deprive of consciousness with a blow', *fascinate* 'cast a spell over'. These were originally used as normal transitive verbs with human agentive subjects, but once the metaphorical sense becomes more frequent than the literal sense (and ultimately the literal sense gets lost), the tendency for the experiencer to acquire subject properties will assert itself, eventually resulting in non-canonical subject marking. Since concrete meanings commonly turn into abstract experiential meanings but not vice versa, the process is unidirectional.

7. Conclusion

In this paper I have examined possible cases of non-canonical argument marking in Standard Average European languages. As I noted in §2, non-canonical marking of core arguments occurs in three kinds of circumstances: (i) reference-related, (ii) clause-related, and (iii) predicate-related. While European languages do exhibit a fair amount of non-canonical marking under the first two types of conditions, I conclude that they do not show a great amount of predicate-related non-canonical marking. On the one hand, SAE languages tend to be reference-dominated, i.e their subject-object relations are not determined so much by semantic roles as by topicality and related pragmatic factors. That is, many verbs which are non-canonically marked in other languages are simply canonically-marked transitive verbs in these languages, e.g. English *have*, *need*, *like*, etc. (In this they contrast both with their western and their eastern neighbors.)

On the other hand, dative experiencers generally do not show a large number of subject properties in these languages, so that clauses with dative experiencers cannot be regarded as transitive, and experiencer clauses do not count as non-canonically marked. However, the detailed discussion of possible subject criteria in §5 has shown that European dative-experiencer arguments are not completely unlike ''dative subjects'' either, because they tend to behave like subjects with respect to word order, reflexivization, and interclausal coreference in non-finite adverbial clauses. Diachronically, there is a clear tendency for dative experiencers to turn into (non-canonically marked) subjects. If we

conceive of grammatical relations as continua rather than given fixed points, then European languages clearly contribute to the typology of non-canonical marking, even though such view of grammatical relations also means that the concept of non-canonical marking itself becomes less sharp.

Notes

1. Polish and German, the languages that have retained the old Indo-European genitive case, also show this genitive in verbs such as Polish *oczekiwać* 'expect', *chcieć* 'want', *pragnać* 'wish for', German *harren* 'wait for'. The following abbreviations are used: ABS=absolutive; ACC=accusative; ART=article; COP=copula; DAT=dative; GEN=genitive; F=feminine; IMPF=imperfect; INF=infinitive; INSTR=instrumental; IP=immediate past; NEG=negation; NOM=nominative; PF=perfect; PL=plural; PRES=present; PREV=preverb; PTV=partitive; SBJV=subjunctive; SG=singular.
2. The same issue arises with respect to the ''interaction verbs'' that were mentioned in §2 (cf. (10)). For these verbs, it is even more difficult to say whether the dative argument is an E or an O because languages generally have far fewer O-properties than A-properties.
3. A converb is a non-finite form specialized for adverbial subordination. Language-particular terms for converbs are ''gerund'' (Romance linguistics), ''adverbial participle'' (Slavic linguistics), ''absolutive'', ''conjunctive participle'' (Indian linguistics), and others. See Haspelmath and König (1995) for a detailed cross-linguistic treatment of converbs.
4. The obligatoriness of the construction is reflected in the fact that the morphological form *irnexxa* does not occur, at least not as a form of this lexeme—indirect-object agreement is also morphologically obligatory.

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