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PSYCHOLOGICAL PREDICATES AND THE SYNTAX-SEMANTICS INTERFACE

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1 Basic issues

The hypothesis of the autonomy of syntax makes special demands on one of the central issues in linguistic theory: the specification of correspondences between a lexical conceptual and syntactic structure. One strategy is to distinguish several layers of lexical representation and allow only one of them to be "visible" to syntactic and morphological processes (cf. Pinker 1989, Grimshaw 1990). A recent implementation of this strategy is the *Aspectual Interface Hypothesis (AIH)* advocated by Tenny since 1987. The AIH is driven by the assumption that there is a direct and uniform association between *telicity*, or what Tenny calls "aspectual measuring-out" of events, and the internal direct object argument in the d-structure.

The AIH has attracted considerable attention (see Pinker 1989, Grimshaw 1990, Jackendoff 1990, Pustejovsky 1991, Levin and Rappaport Hovav 1991, Gropen 1989, Gropen, Pinker, Hollander and Goldberg 1991, Dowty 1991, and others). Its appeal is understandable given that telicity and related semantic notions play an important role in the syntax-semantics interface in the domain of argument structures (see Van Valin 1987, 1990, 1991; Dowty 1988, 1991 and Zaenen 1988, 1993, for example). The AIH also promises to provide additional semantic support for the Unaccusative Hypothesis proposed by Perlmutter (1978) in Relational Grammar and adapted in GB Theory by Burzio (1981, 1986) (cf. Tenny 1989:18ff., 20-1).

Nevertheless, empirical evidence strongly suggests that the AIH should be rejected. As a case in point, I will take psychological predicates, as they occupy much of the current debates on theories of linking. Drawing on data from English and Czech I will argue that the syntax-semantics interface in the domain of psychological predicates cannot be based on telicity or the aspectual property of "event measuring", contrary to the AIH. I will contrast the AIH with an approach that relies on a monostratal syntax and a direct linking between the semantic and syntactic representations. The linking approach proposed here presupposes that the relevant classes of psychological predicates can be differentiated in

terms of their thematic structures. To give a thematic characterization of verbal arguments I will adopt Dowty's (1991:571ff.) view of thematic roles as prototypes. Such a thematic characterization along with Dowty's Argument Selection Principle can account for all the observations which have been used in support of the AIH and multistratal syntax. The proposed linking approach has the advantage that it avoids some of the problems and ad hoc explanations that weaken linking approaches combined with multistratal syntactic accounts. It can also accommodate the full range of data, including those from languages with rich morphological case marking systems like Czech.

2 Aspectual Interface Hypothesis (AIH): Tenny (1987-1994)

2.1 Basic characterization

(1) **Aspectual Interface Hypothesis** (Tenny 1994:115-6)

The universal principles of mapping between thematic structure and syntactic argument structure are governed by aspectual properties relating to measuring-out. Constraints on the aspectual properties associated with direct internal arguments, indirect internal arguments, and external arguments in syntactic structure constrains the kinds of event participants that can occupy these positions. Only the aspectual part of thematic structure is visible to the syntax.

The driving force behind the AIH is the claim that the internal direct object argument in the d-structure of verbs of change or motion is associated with the argument in the lexical conceptual structure (LCS) that aspectually delimits or "measures out" an event. Tenny uses the "measuring-out" property "in an informal sense, as a convenient metaphor for uniform and consistent change, such as change along a scale" (Tenny 1989:7); "the endpoint of the scale can be established in absolute rather than relative terms" (Tenny 1992:7-8). What is meant by this can be best illustrated by the following examples:

(2-a) *I ate* **an apple.**
(2-b) *John went* **to the post office.**
(2-c) **The butter** *melted.*

The typical understanding of (2a) involves the knowledge that there was an eating event during which an apple was gradually consumed, part by part, until all its parts were consumed, at which point the eating event *necessarily* ended. In this sense the participant denoted by the NP *an apple* "measures out" the event. In (2b) the internal indirect object *to the post office* (Goal) introduces a terminus that delimits the denoted event and the implicit path measures the event (this complies with the *Terminus Constraint on Indirect Internal Arguments*). In (2c) the whole piece of butter undergoes a series of consecutive transformations until it becomes

liquid. This marks the necessary end of the melting event. Change-of-state verbs like *melt* denote events whose part structure can be correlated with the degrees on some property scale associated with the changing participant.

Aspectual (or telic) properties of verbs are encoded with 'aspectual roles' assigned by a verb to its arguments. They are invariably linked to internal arguments (direct and indirect) in the d-structure. Hence, external and internal arguments are asymmetrical with respect to telicity (cf. also Verkuyl 1972, 1981, 1989). The privileged status of aspectual roles with respect to linking motivates the **modular** relationship between aspectual and non-aspectual (thematic) information in the LCS (cf. Tenny 1992:14, 1994:190ff.). Variations in the surface alignment of aspectual roles (cf. ex. (2c)) are accounted for by means of transformational movement.

2.2 Psychological predicates and the "measuring-out" of events

In terms of the expression of the Experiencer argument, two main classes are distinguished in English (cf. Chomsky 1965, Postal 1971, Lakoff 1970, Jackendoff 1990, Levin 1993), as is shown in (3).

(3-a) **FEAR class: Experiencer-subject**
admire, detest, enjoy, hate, miss, respect; marvel at.

(3-b) **FRIGHTEN class: Experiencer-object**
amuse, embarrass, irritate, worry; appeal to.

The linking in the domain of psychological predicates is problematic if we assume that there is a direct and uniform association between thematic (or lexical semantic) arguments and syntactic arguments (see the *Uniformity of Theta Assignment Hypothesis* by Baker (1988:46), for instance) and that psychological predicates of the *frighten* and *fear* type are analyzed as taking the same thematic roles, Experiencer and Theme, for example. The problem then arises, because psychological predicates differ in the way they map thematic roles into syntactic arguments. The AIH solution to this problem rests on the proposal that it is not thematic roles, but aspectual principles that govern linking. Only Experiencers of causative psychological predicates of the *frighten* type "measure out" the denoted event (cf. Tenny, 1987:294; 1988:13) and this justifies their realization as internal direct objects in the d-structure. Psychological predicates of the *fear* type are stative. The AIH implies that stative predicates in general have no aspectual roles. Consequently, Experiencer arguments of stative psychological predicates do not "measure" events and are realized as external arguments in the d-structure.

The main objection against this account has to do with the application of the "measuring-out" property to the Experiencer arguments of causative psychological predicates. Given that the "measuring-out" property is understood as entailing telicity (or delimitedness), and vice versa (cf. Tenny 1994:15-6), such predicates are by definition telic. However, a close look at the data reveals that only psychological predicates that partially overlap with Vendler's achievements, namely those denoting instantaneous changes from one mental state to another (e.g., *frighten*, *strike (as)*, *astonish*, *shock*, *startle*), are telic. Although their Experiencer arguments can be said to "measure out" events, they do so only in a trivial way. What is more troubling is the analysis of causative psychological predicates that entail or allow for a gradual change in the Experiencer participant: *calm, disillusion, sadden, soothe, disarm.* The problem is that it is not the kind of change that can be measured "along a scale with an absolute end-point", because they are atelic. This observation can be illustrated by the co-occurrence restrictions with adverbs like *halfway*, as is shown in (4):

(4-a) *?The music halfway saddened John.*
(4-b) **The high-pitched noise halfway distracted her.*
Van Voorst (1992:89)

In general, to make a felicitous assertion about a half of an event, one needs to know what state exactly constitutes the final stage of the event. Hence, the incompatibility of a predicate denoting an extended event with *halfway* indicates that the predicate in question is atelic. Although it is possible to monitor the process of John's becoming more and more sad, there is no point at which we can say that John is halfway sad and on his way to being completely sad. The reason is that we would need to know what state exactly constitutes the stage of somebody's being sad or distracted beyond which that person cannot be sadder or more distracted. However, predicates like *sadden* do not entail such a well-defined final stage, they are not telic.

The observation that causative psychological predicates denoting gradual changes are atelic can be also confirmed by the standard Vendler-Dowty tests. (For a detailed discussion of Vendler-Dowty tests and psychological predicates see Van Voorst 1992.)

Tenny (1987:291, 1988:13 and 1994:20) adduces two tests in support of the claim that the "measuring-out" property is inherent in the meaning of causative psychological predicates. The first exploits the observation that a resultative predicate can only be applied to the internal Experiencer argument of the *frighten* type predicates, but not to any argument of the *fear* type predicates. This is shown in (5) and (6) (examples are taken from Tenny 1988:13):

(5-a) *The news frightened [John]$_i$ [to death]$_i$.*
(5-b) **[The news]$_i$ frightened John [to the end]$_i$.*
(6-a) **[John]$_i$ feared the movie [to death]$_i$.*
(6-b) */??*John feared [the movie]$_i$ [to the end]$_i$.*

Although it holds that the resultative predicate can be applied to an argument that is entailed to undergo a change of state (cf. Goldberg 1992/1995), to an Incremental Theme argument to be more precise (cf. Filip 1993), the whole complex verbal predicate to which the argument in question belongs may be telic (*John broke the vase to pieces*) or atelic (*The horses dragged the logs smooth*). The compatibility of a complex verbal predicate with a resultative predicate does not provide any conclusive evidence about the telic or atelic nature of the complex verbal predicate.

The second test, the modification with "expressions referring to increments, such as *a little (bit)*" (Tenny 1994:20), does not work, because it concerns attenuation of events taken as whole entities and not their increments or proper parts. For example, *The music saddened John a little bit* does not express a part of a larger event expressed by *The music saddened John*, but rather it denotes a whole psychological event that is of low(er) intensity. Notice that attenuation of events can be also conveyed by derivational affixes on verbs: *spark* vs. *sparkle*.

The above objections strongly suggest that causative psychological predicates like *calm, disillusion, sadden, soothe, disarm* lack the "measuring-out" property, because they are atelic, just like stative predicates in the *fear* class. It is important to emphasize that such causative psychological predicates are by no means exceptional in this respect. There are other classes of predicates that entail a change in the referent of their internal direct object argument, but it is not the kind of change that falls under the universal *measuring-out constraint on the internal direct object argument*. Take, for example, atelic predicates like *stir (the soup)* and unaccusative predicates like *sweat, breath, shiver (from cold), suffer*. Their internal direct object is associated with a participant that does not (necessarily) change part by part or degree by degree in one of its properties and the denoted change cannot be measured on a scale with a definite end-point. Notice that the existence of atelic unaccusative predicates indicates that the 'telic-atelic' distinction is not co-extensive with the 'unergative-unaccusative' distinction, and hence the AIH cannot be said to explain the distribution of verb meanings across unergative and unaccusative classes.

In the light of the above observations we may conclude that the AIH applies to a smaller class of eventive predicates than it is intended

to. The reason is that the notion of "measuring-out" on which it rests is not sufficiently constrained. This notion overlaps with the familiar and explicitly constrained notion of 'Incremental (Path) Theme' (cf. Dowty 1988, 1991 and proposals by Hinrichs 1985 and Krifka 1986). Furthermore, if a number of causative psychological predicates lacks the "aspectual measuring-out" property, then this property cannot serve to constrain the linking in the domain of psychological predicates.

In general, there is no uniform association between the internal direct object argument and an argument in the LCS that "measures out" the event or the narrower notion 'Incremental Theme'. Not only are there internal direct objects of eventive predicates denoting participants that do not "measure out" events, but also certain participants that "measure out" events are not invariably realized as internal arguments. Take, for instance, the following example: *The carnival procession was slowly crossing the street*. Here, the length of the procession "measures" the denoted event, yet the NP *the carnival procession* is clearly an external argument (cf. Filip 1990, 1993; Dowty 1991).

3 Czech psychological predicates

3.1 Data

With their tripartite division and case-marked arguments Czech psychological predicates non-trivially differ from English psychological predicates and thus provide good testing data for the AIH (and any other theory of linking for that matter). This is shown in (7). A similar tripartite division of psychological predicates as in Czech can be found in other Indo-European languages, Russian (Holloway-King 1993), Bulgarian (Slabakova 1994), Dutch (Zaenen 1988, 1993), Italian (Perlmutter 1984, Belletti and Rizzi 1988), French (Legendre 1989), and in South Asian languages (cf. Verma and Mohanan 1990), for example.

(7-a)

Václav	*miluje*	*Marii.*	**Nominative-Experiencer**
Václav-NOM	loves	Mary-ACC	

'Václav loves Mary.'

Other examples: *nenávidět* 'hate', *chtít* 'want', *bát se*+GEN 'fear', *divit se*+DAT 'wonder', *pohrdat*+INSTR 'despise', *toužit po* 'long for'.

(7-b)

Václav	*baví*	*Marii.*	**Accusative-Experiencer**
Václav-NOM	amuses	Mary-ACC	

'Václav amuses Mary.'

Other examples: *zlobit* ‘anger’, *přitahovat* ‘attract’, *překvapovat* ‘surprise’, *nudit* ‘bore’.

(7-c)

Václav	*schází*	*Marii.*	**Dative-Experiencer**
Václav-NOM	lacks	Mary-DAT	

‘Mary misses Václav.’

Other examples: *chybět* ‘lack’, *líbit se* ‘like’, *hnusit se* ‘disgust’, *vadit* ‘annoy’, ‘harm’, *svědčit* ‘be beneficial to’, *prospívat* ‘do good to, benefit’, *vyhovovat* ‘comply, satisfy, please’, *být vhod* ‘suit’, *škodit* ‘harm’, *nesedět* ‘bother’.

3.2 The Aspectual Interface Hypothesis and Czech psychological predicates

The class of nominative-Experiencer predicates in Czech roughly corresponds to the class of Experiencer-subject predicates in English (e.g., the *fear* type) and the class of accusative-Experiencer ones to the class of English Experiencer-object predicates (e.g., the *frighten* type). In Slavic languages, the nominative argument of a predicate and the controller of verb agreement is the morphological subject. An argument in the accusative case is the basic morphological encoding of the direct object. The application of the linking principles determined by the AIH to Czech psychological predicates will be invalidated by the same objections as those brought forward in the case of English predicates. In addition, the question arises what to do with the dative-Experiencer class. The dative case is the basic morphological encoding of the indirect object. As is well-known the dative case is the typical exponent of three thematically related arguments: Goal, Recipient and Experiencer. Given this, one way to accommodate the dative-Experiencer within the AIH would be to extend the Terminus Constraint on indirect internal arguments to include also cases in which the Path and Terminus are transposed from the concrete spatial domain into the abstract domain of psychological events. It is doubtful whether such a move, which presupposes semantic properties motivated by the theory of metaphors (cf. Lakoff 1993) or some other extension of the syntax-semantics interface, could be accommodated within the AIH. Alternatively, we could motivate the assignment of the dative case to the Experiencer argument by language-particular linking rules or delegate it to idiosyncratic lexical rules. The latter has been proposed for comparable classes of psychological predicates in Italian by Belletti and Rizzi (1988) within Government and Binding Theory, in Dutch by Zaenen (1988, 1993) within Lexical-Functional Grammar and in Icelandic by Foley and Van Valin (1984) and Van Valin (1991) within

Role and Reference Grammar. Such proposals presuppose that no properties can be found that can be connected to the dative case of the Experiencer argument.

To account for the full range of data in English and other languages in an adequate way, I will sketch a linking proposal that pays close attention to the systematic semantic differences among the relevant classes of psychological predicates. This proposal crucially differs from Tenny's in assuming a monostratal syntactic representation and a direct mapping between the thematic and syntactic structure, hence there is no need for movement rules. Most importantly, it does not a priori restrict the kind and number of semantic properties that mediate between lexical semantics and syntax. In this respect, I follow a number of semantically-based studies devoted to the argument structure of psychological predicates in the past ten years or so (cf. Croft 1986; Kiparsky 1987; Pesetsky 1987, 1995; Van Valin 1987, 1990, 1991; Dowty 1988, 1991; Rozwadowska 1988; Zaenen 1988, 1993; Condoravdi and San Filippo 1990; Van Voorst 1992).

3.3 Semantically-based accounts

In particular, two proposals stand out, Dowty's (1988, 1991) and Pesetsky's (1987, 1995). Pesetsky suggests that the Experiencer-subject and Experiencer-object predicates differ in the thematic roles assigned to their respective co-arguments. The *frighten*-type predicates take Causer and the *fear*-type ones Target or Subject Matter of Emotion. "Causer is always associated with the *subject* position, and Target is associated with the *object* position" (Pesetsky 1995:56). This can be also represented in the following hierarchy: Causer > Experiencer > Target/Subject Matter. Without going into the details of Pesetsky's proposal, we notice that his linking generalization does not hold for Czech data. The argument that corresponds to what Pesetsky calls 'Target' can be realized as object (with nominative-Experiencer predicates) or as subject (with dative-Experiencer predicates), even though it is lower on the hierarchy than the Experiencer. We need a linking mechanism that can distinguish these two cases.

The most promising way to do just this appears to be within theories of linking that view thematic roles as clusters of semantic properties. Such theories have been advocated by Foley and Van Valin (1984), Van Valin (1987, 1990, 1991), Rozwadowska (1988), Zaenen (1988, 1993), Dowty (1988, 1991), Pinker (1989), Bresnan and Zaenen (1991), Pustejovsky (1988) and Jackendoff (1990). Given that Dowty's theory is the most explicitly articulated, let us consider how he accounts for psychological predicates.

In Dowty's framework, the linking between the semantic and syntactic representations is determined by clusters of verbal entailments, or Proto-Agent and Proto-Patient properties (8).

(8) Dowty (1991:572)

Contributing properties for the Agent Proto-Role: a. volitional involvement in the event or state; b. sentience (and/or perception); c. causing an event or change of state in another participant; d. movement (relative to the position of another participant); (e. referent exists independent of action of verb).

Contributing properties for the Patient Proto-Role: a. undergoes change of state; b. incremental theme; c. causally affected by another participant; d. stationary relative to movement of another participant; (e. does not exist independently of the event, or not at all).

The Argument Selection Principle (9) determines the association of clusters of Proto-Agent and Proto-Patient properties with grammatical relations.

(9) **Argument Selection Principle** (Dowty 1991:576)

In predicates with grammatical subject and object, the argument for which the predicate entails the greatest number of Proto-Agent properties will be lexicalized as the subject of the predicate; the argument having the greatest number of Proto-Patient properties will be lexicalized as the direct object.

Although the Experiencer argument of the *fear* and *frighten* classes are equal in Agent properties, they are unequal in that the Experiencer of the *frighten* class denotes an entity that undergoes a change in the denoted event, and hence it is a 'better' Patient. Therefore, it must be the direct object (cf. Dowty 1991:580).

In this connection it is important to notice that the notion of 'Incremental Theme', which partially overlaps with Tenny's argument that "measures out" the event, plays no role in Dowty's description of psychological predicates. Second, the Proto-Patient property 'Incremental Theme' is not privileged in any way, it is treated on a par with other verbal entailments.

3.4 Suggested analysis

In order to analyze Czech data within Dowty's framework, we need the notion of 'morphological case feature'. Case features are to be distinguished from case morphology. The main reason is that NPs with distinct case features may have the same case morphology, and vice versa. All references to 'case' in this paper, including the glosses, are to be understood as references to case features. The linking rules determine

alignments between clusters of Proto-Agent (PA) and/or Proto-Patient (PP) properties and NPs specified with a given case feature or with PPs which govern NPs with a given case feature. The linking-to-cases in Czech can be formulated without recourse to grammatical relations (cf. also Van Valin 1991:192). This is justified by a fairly high correlation between morphological cases and semantic properties of thematic roles (cf. Langacker 1990 and Comrie 1981), which seems to be tighter than the correlation between thematic roles and grammatical relations (cf. Comrie (1981:73), for example).

For the three main classes of Czech psychological predicates the linking-to-cases is summarized in (10):

(10)

milovat 'to love'	**zlobit** 'to anger'		**vadit** 'to harm', 'to annoy'
<NOM, ACC>	<NOM,	ACC>	<NOM, DAT>
PA:sentience	PA:cause	PA:sentience	PA:sentience
(PA:volition)	(PA:volition)	PP:change	PP: ?
		PP:causally affected	

As the above table shows, all three predicate types entail the Proto-Agent property 'sentience' in one of their arguments (Experiencer). However, only the Experiencer argument of such verbs as *milovat* 'to love', *bát se* 'to be afraid' can be also understood as a volitional Agent that instigates the denoted emotional event. This is reflected in the acceptability of the imperative formation:

(11-a)
Neboj^{I} *se* *ho!*
NEG-fear REFL him-ACC
'Don't be afraid of him!'

The two Proto-Agent properties 'sentience' and 'volition' clearly justify the lexicalization of the Experiencer as subject in the nominative case. By contrast, the dative-Experiencer and accusative-Experiencer denote participants that lack control or that have a very low degree of control and volitional involvement in the event.

The second distinguishing feature concerns the causal event structure. Only accusative-Experiencer predicates are eventive and causative. The referent of the nominative argument is the *cause* of the denoted change of psychological state in the Experiencer participant and it can also be construed as a volitional agent, as is shown in the imperative example (11b). 'Cause' and 'volition', two Proto-Agent properties, motivate the encoding of this argument as subject in the nominative case.

(11-b)
Nezlob^{I} *mě!*
NEG-anger me-ACC
'Don't make me angry!'

On the side of the Experiencer argument the causal event structure is registered in terms of two Proto-Patient properties, 'causally affected by another participant' and 'undergoes a change of state'. This motivates the encoding of the Experiencer in the accusative case.

The above observations suggest that active clauses with accusative-Experiencer predicates are high on the transitivity scale (cf. Hopper and Thompson 1980). It is not surprising then that accusative-Experiencer predicates can freely occur in the passive. Clauses with dative-Experiencer predicates, on the other hand, are very low on the transitivity scale. One

of their distinguishing features is the absence of Proto-Agent properties in their nominative subject argument. This is manifested in the lack of the imperative (11c) construction:

(11-c)

**Nevaď*[I]	*mi!*	*Nechyb[I]	*mi*!
*NEG-annoy	me-DAT	*NEG-lack	me-DAT
'Don't annoy me!'		'*Don't lack me!'	

It can be also seen as motivating the fact that dative-Experiencer predicates do not occur in the passive (although some can form impersonal passives), if we accept that (one of) the function(s) of the passive is the defocusing of an Agent(-like) subject.

The assignment of the dative case to the Experiencer argument may seem at first sight puzzling. Although the Experiencer argument of such predicates as *vadit* 'to annoy', 'to harm' seems to be more thematically prominent than its co-argument (it is associated with the Proto-Agent property 'sentience'), it is marked with the dative case, rather than in the nominative case. We cannot solve this puzzle by claiming that the dative-Experiencer nominal is a 'quirky' subject, because it does not exhibit properties typically ascribed to subjects in Czech. It does not determine verb agreement, for example.

Is it possible to motivate the puzzling dative case assignment to the Experiencer argument on semantic grounds? In general, psychological predicates can be classified along the 'good - bad' scale according to the evaluation of the emotional state or episode they express (cf. Jackendoff 1990). However, only dative-Experiencer predicates incorporate the evaluation along the more specific 'benefit - harm' scale, over and above the basic 'good - bad' scale, as their dominant semantic feature. In other words, dative-Experiencer arguments are typically entailed to be Beneficiaries or Maleficiaries, whereby the qualitative aspects of the emotional state or episode itself are backgrounded. This observation can be confirmed by the fact that dative-Experiencer verbs cannot be freely modified with manner adverbials like *příjemně* 'in a pleasant manner', *vášnivě* 'passionately', *hořce* 'bitterly', *horlivě* 'ardently', for example. However, they can be modified with degree and intensity adverbials like *hodně* 'a lot', *málo, trochu* 'a little', which are related to the expression of benefit or harm.

(12-a)

Ten výsledek	*nás*	*nepříjemně*	*/ hodně*	*překvapil.*
the result-NOM	us-ACC	unpleasantly	/a-lot	surprised

'The result surprised us in a pleasant way / a lot.'

(12-b)

Ten výsledek *nám* **nepřĭjemně* */ hodně* *vadil.*
the result-NOM us-DAT *unpleasantly /a-lot annoyed
'The result annoyed us in an unpleasant way / a lot.'

The evaluation of the Experiencer's mental state along the 'benefit - harm' scale may be viewed as a kind of Proto-Patient entailment. Together with the observation that the Experiencer has low or no control over its mental state, such an additional Proto-Patient entailment may explain why the Experiencer of such predicates as *vadit* 'to harm', 'to annoy' is not encoded in the nominative case. This seems to have an interesting implication for the theory of linking. If it is the case that the evaluation of the Experiencer's mental state, as a Proto-Patient property, prevents the Experiencer from being encoded in the nominative case, then it has more weight than the Proto-Agent property 'sentience' in the linking-to-cases mechanism. This suggests that a possible modification of Dowty's system of mapping could involve the mapping of weighted clusters of properties to grammatical relations and/or morphological cases. I will leave this as a proposal for future research.

Having justified why the Experiencer argument of such predicates as *vadit* 'to annoy' is not encoded in the nominative case, how do we motivate the assignment of the dative case? The use of the governed dative-Experiencer is related to the interpretation of benefit or harm and modality often associated with optional or "free datives", as in *Jana mu koupila košili* (lit.: Jane him-DAT bought shirt-ACC) 'Jane bought a shirt for him', *Zemřel nám kanárek* (lit.: died us-DAT canary) 'Our canary died on us.' The notions of 'benefit' and 'harm' can be viewed as a transposition of the transfer schema from the concrete spatial domain into the psycho-physical domain of mental states. >From this perspective, the Beneficiary and Maleficiary are Recipients of some good or favor and harm, respectively. Such observations dovetail nicely with the view that the Experiencer of psychological predicates is thematically a kind of Location (cf. Anderson's (1971) Localistic Theory of Case), related to both Goal and Recipient, and with the claim made by Kurylowicz (1949/64) that the origin of the IE dative is in a concrete locative inflection. Therefore, it does not come as a surprise that the dative case is the typical exponent of not only Goal and Recipient, but also of Experiencer.

4 Conclusion

It has been shown that the linking between the thematic argument structure and morphologically case-marked NPs in the domain of Czech

psychological predicates is predictable, provided we make reference to the fine-grained properties of the thematic structure of the relevant classes of predicates and general linking principles along the lines suggested by Dowty (1988, 1991). The proposed analysis avoids postulating the assignment of the dative case to the Experiencer argument by idiosyncratic lexical rules.

The linking in the domain of Czech psychological predicates cannot be motivated by a *single* semantic property, regardless whether it is "aspectual delimitedness" (telicity) or some other property. Consequently, it cannot be covered by the AIH or any other universal linking hypothesis that assumes a direct and uniform association between a single semantic property and syntactic arguments. Of course, such hypotheses are not automatically invalidated by the existence of data like Czech psychological predicates. It is to be expected that linking of certain classes of predicates will be exempt from universal linking rules and follow specific language-particular rules. However, if it turns out that universal linking hypotheses like the AIH cannot account for a large number of classes of predicates in various languages, they will have to be rejected. By the same token, we will have to acknowledge that the syntax-semantics interface cannot be constrained by any single privileged semantic property or layer in the lexical representation 'visible' to syntax. To the extent that the thesis of the autonomy of syntax is defended by means of such a narrow interface as the AIH, there will also be reasons to doubt whether it can be upheld.

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