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Remarks on involuntary agent constructions

Abstract. The present paper discusses formal and semantic features of so-called “Involuntary Agent Constructions” (IAC for short) from a cross-linguistic perspective. The label refers to constructions that express the meaning ‘do sth. accidentally/involuntarily’. This means that in contrast to a canonical agent the feature of volitionality is lacking. The paper shows that volitionality (and thus agency) is an important part of linguistic transitivity, since in many languages IAC’s are formally less transitive constructions than canonical transitive clauses. On the basis of their formal features, IAC’s will be divided into four types. In addition to the formal typology of IAC’s, the paper also discusses semantic features that condition the use of IAC’s in languages. These include the semantics of events and the nature of the agent. On the basis of these features it is shown that IAC’s are constructions that express the unexpected low degree of agency associated with an event. For example, forces like ‘wind’ do not readily appear in IAC’s due to their inherently low degree of agency. Also the additional functions that IAC’s can express are discussed.

1. Introduction. Prototypical transitive events are instigated by volitionally acting human entities that directly and, more importantly for the purposes of the present paper, purposefully target their actions at a patient affected as a result of this action (see e.g. Hopper and Thompson 1980:252 and Givón 1995:76). Events that deviate from this brief definition, i.e. events whose agents are less-of-agents and/or patients less-of-patients are in many languages encoded using formally less transitive constructions, which means, for example, that the Agents and Patients¹ of these constructions are marked differently from those in typical transitive clauses (which describe highly transitive events). The goal of the present paper is to study one such deviation in detail. The construction at issue is the “Involuntary Agent Construction” (term adopted from Martin Haspelmath’s grammar of Lezgian (Haspelmath 1993:292)). By an involuntary agent construction (henceforth IAC for short) I refer to the linguistic encoding of (originally) transitive events whose semantic and formal transitivity is decreased, since the agent is accidentally or involuntarily (as opposed to voluntarily) causing an event to occur. Paraphrases for these constructions include clauses containing adverbs

like ‘accidentally’, ‘unintentionally’ or ‘inadvertently’ (for example, “he accidentally broke the mirror” as opposed to “he broke the window on purpose”).² The label “involuntary agent construction” emphasizes the involuntary participation of agents in events, i.e. they have not intended nor wanted to be an agent in the event profiled. A more detailed definition of the construction type and the underlying event is given in section 2. Two examples of IAC’s are given in (1) and (2) (Please see Appendix for key to abbreviations used in glosses.):

German (personal knowledge)

- (1a) *ich hab-e de-n Teller (absichtlich/unabsichtlich) zerbochen*
(I.NOM have-3SG.PRES ART-ACC plate (voluntarily/involuntarily) break.PARTIC)
‘I have broken the plate (voluntarily/involuntarily)’
- (1b) *mir ist der Teller (*absichtlich/ unabsichtlich) zerbrochen*
(I.DAT be.3SG.PRES ART.NOM plate (on purpose/involuntarily) break.PARTIC)
‘I accidentally broke the plate (?voluntarily/*involuntarily)’

Russian (examples courtesy of Katja Gruzdeva)

- (2a) *muzhchin-a uroni-l-Ø chashk-u (sluchajno/special'no)*
(man-MASC:SG:NOM drop-IND: PAST-SG:MASC
cup-FEM:SG:ACC (accidentally/on purpose))
‘The man dropped the cup (accidentally/on purpose)’
- (2b) *u muzhchin-y upa-l-a chashk-a (sluchajno/*special'no)*
(PREP man-MASC:SG:GEN fall-IND:PAST-SG:FEM
cup-FEM:SG:NOM (accidentally/*on purpose))
‘The man happened to drop the cup (accidentally/*on purpose)’

Example (1a) illustrates the typical transitive clause of German, and (2a) the corresponding construction of Russian; the Agent occurs in the nominative, while the Patient bears accusative encoding in both cases. The verb morphology is transitive. The (b)-examples differ from (1a) and (2a) in two respects. First, the argument marking pattern has changed from NOM-ACC to DAT-NOM or PREP-NOM, i.e. the Agent bears oblique marking, while the Patient occurs in the nominative. The verb has been intransitivized, which means that the auxiliary is *sein* instead of *haben* in German, while in Russian the lexeme used in (2b) is intransitive. The formal transitivity of (1b) and (2b) is thus lower than

that of (1a) and (2a). What is also noteworthy here is that (1b) and (2b) involve “involuntary semantics”; since adverbs like ‘on purpose’ cannot be added to these clauses. This follows from the meaning of the constructions in (b), since both agentive and unagentive adverbs are possible in the (a)-examples, which are *per se* neutral with regard to agency (this is manifested also in that verbs denoting events like ‘see’ or ‘hear’ that clearly deviate from the transitive archetype can in many languages occur in formally transitive clauses). The use of agentive adverbs is incompatible with the meaning of IAC’s, while the use of accidental adverbs simply stresses features directly inferable from the semantics of IAC’s.

In the present paper I will study the semantics of IAC’s (from the perspective of the events that are encoded using IAC’s), and propose a formal typology. The typology itself (in section 3) is purely formal and is based on how the event type briefly described above is expressed cross-linguistically. The goal of the paper is to show that differences in agency indeed constitute a very important feature of transitivity. It also shows that many languages do have a distinct IAC-category devoted to denoting events like ‘the man broke the mirror accidentally’ only. Not the mere low degree of agency suffices for using those constructions, but the nature of the agent also makes a contribution in this respect. This is discussed in section 4. What makes the study of IAC’s interesting as regards the notion of transitivity is that IAC’s can be labeled as a kind of intermediate form between typical transitive and typical intransitive events, and they share features with both of these. First, they are similar to transitive events in that they involve two participants, one which causes the event, while other is affected by it. Second, events profiled by IAC’s occur more spontaneously than typical transitive events, which makes the association with intransitive events evident. This intermediate status is also reflected formally, as will be shown in section 3.

2. Defining involuntary agents (and the corresponding events).

2.1. Preliminaries. In the present section, I will scrutinize the semantics of the event type whose linguistic encoding will be studied in section 3. The event type in question will be referred to as “Involuntary agent events” (henceforth IAE) in accordance with the label Involuntary Agent Construction. In accordance with this, the agents in these events are labeled as involuntary agents. In what follows, semantic features relevant to distinguishing IAE’s from typical transitive events will be discussed. The most important single feature to be discussed is volitional-

ity, or rather the lack of it, which means that the agent is an agent in the given event involuntarily. This is not to be confused with involuntarily acting causes, but the agents of interest in the present context participate in events without any intent to do so, and without being manipulated by an external agent. In order to define IAE's as exhaustively as possible, they will also be compared with other seemingly similar event types.

The involuntary participation of an agent in an event may follow either from the basic nature of an event, or this may be motivated independently of event type. First, there are many events that are inherently instigated involuntarily and thus the agents in them are by definition involuntary. Examples comprise different instances of experiencing. This means, for example, the 'agents' in events like "the child fears Santa Claus" or "the father loves his children" are not controlling the events (or rather states) they are parts of. Second, the involuntary instigation of an event may be independent of its inherent nature, as in "the limnologist broke the cup accidentally" (as opposed to "on purpose"). The affectedness of the patient remains constant and it is not relevant to the differences between basic transitive events and IAE's. This also means that the most important differences between basic transitive events and IAE's lie in agency and the features of the agent. In other relevant respects, the given events are more or less equal. For example, an event that results in breaking of a thing can be considered breaking regardless of whether the event is instigated purposefully or not. As a result, the starting point of the discussion here is agency and features related to the agent, not the basic semantics of events. This means that only the latter type of events noted above will be considered below.

2.2. On proto-agent. As already noted above (and as has been stated by numerous authors before, see e.g. Keenan 1976, DeLancey 1984 and Dowty 1991 among others), agents in typical transitive events act volitionally, control the events they are parts of, target their actions directly at the participant affected by the event and are also aware of the consequences of their actions. Furthermore, the agent also plans his/her actions and participation in different events and can control the event during its whole duration. Hence, features like control, volition and animacy are relevant to the notion of agency (see e.g. DeLancey 1984:181). One of the most influential definitions of the agent prototype has been proposed by Dowty (1991:572), who defines the proto-agent on the basis of the following criteria:

1. Volitional involvement in the event or state
2. Sentence (sic) (and or perception)

3. Causing an event or change of state in another participant
4. Movement (relative to the position of another participant)
- (5. exists independently of the event named by the verb)

Dowty understands agency as a granular notion that consists of the features listed above. Similar definitions have been proposed also by Keenan (1976) and DeLancey (1984:181). The definition above is applicable to the present study, since it makes it possible to focus on one relevant parameter of agency at a time, and to study its effects on the linguistic coding of the notion in question. If there are differences, this feature makes a contribution in this regard. In the present paper, the feature in question is volitionality (or rather the lack of it), i.e. feature number 1 above. This means that I will focus on the linguistic encoding of events whose agent can be seen as a less-of-agent due to the lack of volitionality, which means that a given agent is involuntarily causing an event to occur. In other respects, the examined entities retain their agentic properties. They are, for example, primarily responsible for causing a change in another participant (feature 3), they are sentient beings (feature 2), and they are actively doing something that results in another event (feature 4).

2.3. Other kinds of event with reduced volitionality. Since the notion of involitionality can be understood in different ways, and it may be motivated by different parts of events, a more detailed discussion of the notion follows. Three event types will be paid special attention to in this context. These comprise (i) events instigated by forces; (ii) events targeted at a patient not intended as the target of a given action; and (iii) instances of indirect causation. All of these are discussed in detail in what follows by comparing them with events involving involuntary agents as the notion is used here. Events whose instigation can be regarded as inherently involuntary (cf. above) will not be discussed below. The goal of the following discussion is twofold. First, it aids us in excluding certain events types from IAE's, and second, as, resulting from this, it also renders it possible to identify genuine IAE's better.

2.3.1. Events instigated by IA's vs. events instigated by forces. As noted above, IA's are less volitional agents that do not control or volitionally instigate events they partake in. This makes IA's similar to forces (defined as a semantic role, see e.g. Van Valin and LaPolla 1997:85) like 'wind', 'fire' and 'flood'. IA's and forces both clearly deviate from the agent prototype noted above due to this. As a result, we are tempted to group these roles together as a single role displaying a

deviation from the agent prototype. However, these two agents can (and should) be distinguished on the basis of the rationale behind the decreased agency. As noted above, IA's are sentient beings and thus highly agent-worthy entities. The reduced agency associated with IA's thus constitutes a deviation from what we expect based on the semantic properties related to the entity in question. The agent of an IAE is also capable of initiating the same (kind of) event with full intent. Forces, on the other hand, are inanimate entities without underlying agentative semantics. This means that feature 2 in Dowty's definition of proto-agent distinguishes between IA's and forces, which has the consequence that the contrast between agentive and unagentive readings is lacking with forces. The difference is thus not merely of theoretical value, but is linguistically relevant in many languages, including Samoan, Lezgian and Finnish:

Samoan (Mosel and Hovdhaugen 1992:423ff.):

- (3a) *na tapuni e le matagi le faitoto'a*
(PAST close ERG ART wind ART door)
'The wind closed the door'
- (3b) *na tapuni i le matagi le faitoto'a*
(PAST close LOC ART wind ART door)
'The wind closed the door'
- (3c) *na va'ai e le fafine le pule=ā'oga i l=o=na ofisa*
(PAST see ERG ART woman ART rule=school LD
ART=POSS=3SG office)
'The woman saw the principal at her office'
- (3d) *na va'ai le fafine i le pule=ā'oga i le maketi*
(PAST see ART woman LD ART rule=school LD ART market)
'The woman saw the principal at the market (accidentally)'

Finnish:

- (4a) *mies/syöpä tappo-i kissa-n*
(man.NOM/cancer.NOM kill-3SG.PAST cat-ACC)
'The man/the cancer killed the cat'
- (4b) *mies tul-i tappe-nee-ksi kissa-n*
(man:NOM come-PAST:3SG kill-PART.PERF-TRANSL
cat-ACC)
'The man accidentally killed the cat'

- (4c) *kissa kuol-i syöpä-än*
(cat-NOM die-3SG.PAST cancer-ILL)
'The cat died of cancer'

Lezgian (Haspelmath 1993:292, Moor 1985:112)

- (5a) *zamara-di get'e xa-na*
(Zamira-ERG pot break-AOR)
'Zamira broke the pot'
- (5b) *zamara.di-waj get'e xa-na*
(Zamira-ADEL pot break-AOR)
'Zamira broke the pot accidentally/involuntarily'
- (5c) *ničayval-di ruš q'ena*
(disease-ERG girl killed)
'The disease killed the girl'

As the examples in (3)–(5) show, not the mere deviation from the agent prototype determines the marking of events in Samoan, Finnish and Lezgian, but the underlying reason for this is also relevant. The languages above encode the differences between basic transitive clauses, IAC's and Force constructions a bit differently. In Samoan and Finnish, basic transitive events and events instigated by forces may be coded in the same way, as in (3a) and (3c) from Samoan and (4a) from Finnish. In addition, both languages also have a formally less transitive way of denoting these events illustrated in (3b) and (4c). Samoan and Finnish also have a distinct IAC, as shown in (3d) and (4b), which is formally distinct from Force constructions. In Samoan, IAC's differ from basic transitive clauses and also Force constructions in case marking, while in Finnish the difference is expressed either by manipulating the verb morphology in the case of IAC's (Finnish also has other kinds of IAC), while Forces are distinguished from typical agents via case marking. In Lezgian, only IAC's constitute a distinct construction type, while events instigated by agents and forces are encoded in the same way.

The data from the three languages above point to two important facts related to IAC's. First, all of them show that we might evaluate the effects of decreased agency incorrectly, if we merely consider the encoding of forces in this respect. The languages in (3)–(5) may give the impression that agency is not relevant with regard to formal transitivity of clauses, since the encoding of basic transitive clauses and Force constructions may coincide. Second, the languages above also underline the

fact that IAC's and Force constructions are distinct categories in a number of languages and should not be treated as a single deviation from the agent prototype. This distinction is important also in light of Dowty's proto-agent definition, since IA's differ from proto-agent only due to one feature, while two features are lacking in the case of forces (1 and 2). The data in (3)–(5) also stresses the fact that the use of IAC's is usually obligatory, while less transitive Force constructions are only optionally employed. This is evident in Finnish and Samoan in both of which the use of constructions like (3b) and (4c) is merely an option. This probably follows from the fact that differences between basic transitive clauses and Force constructions do not have any drastic effects on the reading of clauses, since the semantic nature of the agent makes only a less agentive reading possible. Whether the given entity is marked as a typical agent or not is rather irrelevant with regard to how the clause is interpreted. On the other hand, in the case of human agents, the decreased agency is a deviation from the expected case, because of which the use of IAC's is mandatory in case the intended reading is that the agent did not act volitionally or voluntarily. We have to rely on linguistic cues when distinguishing between IAE's and typical transitive events, since available non-linguistic information does not ensure the intended reading in the case of IAE's. The agents of IAE's are humans, which means that the lower degree of agency associated with them does not automatically follow from their inherent properties.

2.3.2. Events targeted at ‘wrong’ patients. In section 2.3.1., I briefly illustrated differences (and similarities) between events instigated by IA's and events instigated by forces. In this section, I will turn to discussing another kind of accidental construction, which will also be excluded from further consideration in Section 3. The notion relevant in this regard is the ‘scope of accidentally’, i.e. which part of the agent's participation in an event is seen as involuntary or accidental. IAE's are events that are instigated involuntarily, which has the consequence that the lack of volitionality extends to the event in question as a whole. The agent is thus unable to control the event during its whole duration. This complete lack of control along with the primary scope of accidentally (which lies on the instigation of events) is what distinguishes IAE's from the kinds of event denoted in (6) and (7) below:

Sinhala (Wijayawardhana et al. 1995:108)

- (6a) *laməya bat kæəva*
(child.NOM rice eat:PAST.ACT)
‘The child ate rice’

- (6b) *laməya-tə vaha kævuna*
(child-DAT poison eat.PAST.PASS)
‘The child (accidentally) ate something poisonous’
- (6c) *laməya kooppe binda*
(child.NOM cup break.PAST.ACT)
‘The child (deliberately) broke the cup’
- (6d) *laməya-atin kooppe biñduna*
(child-INSTR cup break.PAST.PASS)
‘The child (accidentally) broke the cup’

As the translation of (6b) shows, the profiled event can also be considered accidental and could thus be regarded as a subtype of IAE's. However, there are evident differences between IAE's and the event in (6b). First and most importantly, the participation of an IA in an event is fully involuntary in every relevant respect. On the other hand, the event profiled by (6b) is inherently controlled and the agent is thus voluntarily partaking in it. Thus, in contrast to genuine IAE's, the participation of an agent in these events cannot *per se* be considered involuntary. One cannot eat or drink anything completely accidentally, but the given action is always volitionally instigated and controlled. The agent is in full control of events in (6b). The accidentally manifests itself only in that the target of the event deviates from what it was supposed to be and the overall intentionality with the event can be regarded as somewhat lower. In other words, the ‘scope of accidentally’ is not the same as in IAE's (i.e. the instigation of events), but is confined to the ‘affectedness phase’. This distinguishes these events from IAE's. What is also relevant to the present purposes is that in languages like Sinhala the two different accidental event types are encoded differently, so the distinction is also linguistically relevant.

The difference at issue here is relevant also in another respect. This refers to the fact that the participation of an agent in an IAE is accidental or involitional only as regards the event profiled by an IAC, which does not exclude control altogether. This is not unexpected, since the instigators in IAE's are inherently potential agents due to their non-linguistic properties. An example is provided by a scene in which someone is smoking a cigarette (a controlled event) and by doing this accidentally starts a fire that destroys his/her own house (IAE). The typical way to describe the latter event would be *s/he accidentally burnt his/her house*. On the other hand, we wouldn't say *s/he accidentally smoked a cigarette* in this context, since ‘smoking’ is controlled. What is important for the present purposes is that the control is exclusively restricted to ‘smoking’, while the extension to the event of burning a house is involitional, and thus constitutes an IAE. This means that although the person in question

is responsible for the occurrence of the latter event as well (it would not have occurred without the controlled event of smoking), his/her involvement in this event is involuntary and not planned. What is important here are the differences in volitionality associated with the events. Only IAE's constitute fully involitional events of these two.

2.3.3. IAE's vs. indirect causation. The last feature to be discussed in this section is illustrated by indirect causation, which clearly shares semantic features with involitional or accidental causation of events. The causation of IAE's can also be regarded as less direct, since the agent of an IAE is not intentionally or directly targeting his/her action at the affected patient. However, despite this seeming similarity, involuntary and indirect causation can also be distinguished, i.e. involitional causation does not entail indirectness or vice versa. First, agents of IAE's are primarily responsible for an event (even though they are not volitionally initiating it), since the event would not occur without the agent. Second, agents of IAE's are actively doing something that happens to get extended to a patient that was not meant as a target of the event in question (see also feature number 4 of the proto-agent definition). The agent is also in some kind of physical contact with the patient in cases where the nature of event implies this. Third, the agent of an IAE can usually directly witness the result of his/her action, like the breaking of a vase in (6d). All of these features are less evident in the case of indirect causation, like in "s/he caused the man to die by not helping him out of the water". First, the agent is not the primary reason for the effect on the patient, but it is rather the water where the patient is located during the event. The agent can be seen as responsible for the event in question only since s/he could prevent the event from happening, but does not do this. Closely related to this, the agent may be passive and even absent during the whole event. This naturally excludes the need for some kind of physical contact between agent and patient. Moreover, also the volitionality clearly differs in these two cases. IAE's are involitionally instigated events, while indirect causation may be completely purposeful. The agent may deliberately refuse to prevent the event from happening, although s/he may be capable of doing that. The event types are encoded differently at least in Finnish:

Finnish

- (7a) *agronomi tul-i rikko-nee-ksi maljako-n*
 (agronomist.NOM come-3SG.PAST break-PARTIC.TRANS
 vase-ACC)
 'The agronomist broke the vase accidentally'

- (7b) *maljakkö rikko-utu-i agronomi-n takia*
 (vase.NOM break-INTRO-3SG.PAST agronomist-GEN for)
 'The vase broke because of the agronomist'

Example (7a) illustrates an IAC, while (7b) denotes an instance of indirect causation. The semantics of the two constructions are clearly different, and (7a) can only denote an IAE, while (7b) can only mean that the referent of the subject has indirectly caused the event to occur. There are thus good reasons for regarding the two events as distinct in Finnish. Finnish is very unlikely the only language that displays the difference illustrated in (8).

3. Formal typology of IAC's.

3.1. Preliminaries. The discussion in section 2 leaves us with the definition that an IAE involves an agent that instigates the given event without any intent to do so, even though s/he is potentially a typical agent on the basis of her/his intrinsic non-linguistic properties (the IA's are almost always humans, see also section 4.2.). The most notable difference between an IA and a typical agent is thus the lack of volitionality in the former, which means that only feature 1 of Dowty's proto-agent properties distinguished between these two. In this section, I proceed to illustrate the ways in which languages encode this event type. The construction type at issue will be labeled as "Involuntary Agent Construction" as stated already in the introduction. Only constructions that overtly express this meaning are relevant to the proposed typology. This means that constructions like the English passive *the documents were destroyed* that under favorable circumstances can express involitionality lie outside the scope of this paper. The illustration is further confined to IAC's with two overt arguments, which excludes intransitive constructions from the discussion. There are primarily three reasons for doing this. First, the feature of 'causing an event or change of state in another participant' is regarded as one of the proto-agent properties by Dowty (1991:572, see above), and the goal here is to focus as exclusively as possible on the effects of lack of volitionality on the encoding of the events. If a further property of proto-agent is lacking, it is harder to tell which of these primarily determines the attested changes. Second, even though the absence of two proto-agent properties may intuitively be thought of as causing more extensive changes in the clause structure, it is, however, more probable that the lack of volitionality affects the clause structure much the same way regardless of transitivity of the underlying clause. This is attested at least in Manipuri, as illustrated in (8):

Manipuri (Bhat and Ningomba 1997:104, 141)

- (8a) *əy-na tebal-də theŋŋi*
(I-NOM table-LOC touched)
'I touched the table (volitionally)'
- (8b) *əy tebal-də theŋŋi*
(I table-LOC touched)
'I touched the table (involuntarily)'
- (8c) *əy-na ləymay-də olli*
(I-ERG floor-LOC rolled)
'I rolled (intentionally) on the floor'
- (8d) *əy ləymay-də olli*
(I floor-LOC rolled)
'I rolled (unintentionally) on the floor'

Irrespective of transitivity of clauses, the involitional participation of the agent in an event is expressed by omitting the ergative marker. This means that we will not miss anything relevant, if we focus exclusively on transitive clauses in our study. This would be more probable, if transitive clauses were excluded from the examination. This is the third reason for confining the discussion to IAC's with two arguments.

The organization of the present section is as follows. In 3.2., I will briefly discuss adverbial, lexical and morphosyntactic IAC's. In 3.3., the morphosyntactic IAC's will be divided into four types on the basis of their formal properties.

3.2. Adverbial, lexical, morphosyntactic IAC's. To begin with, IAC's can be divided into three types depending on the linguistic mechanisms employed in their expression. These are here referred to as adverbial, lexical and morphosyntactic types. The focus of the typology in section 3.3 lies on the last of the types, but in order to do justice to IAC's as a whole, the two other types are taken account of as well here.

Examples of the adverbial type include the semantic paraphrases for IAC's like *he broke the window accidentally* and *he unintentionally hit me*. In these cases, the employed adverb alone emphasizes the accidental nature of an event. The verb itself and also the semantics of the construction without the adverb are neutral in this respect (cf. (1)–(2) above). This means that without the adverb *accidentally* or *unintentionally* the action by the agent is ambiguous with regard to agency, and the action of the agent may be volitional or involitional. By choosing an agentive (*intentionally*) or unagentive (*accidentally*) adverb either read-

ing can be highlighted. There are no other changes in the clause structure in pure adverbial IAC's.

IAC's are here labeled as lexical in cases in which accidentality is an inherent component of a lexeme. Examples include the likes of the English *misplace* and *mislaid* (as opposed to *put* or *place*) and their equivalents in other languages (e.g. Finnish *hukata*). Thus, a lexeme that is neutral with regard to volitionality is replaced with a lexeme whose semantics inherently involves lack of volitionality (the basic meaning of the verb remains more or less constant). In the purest cases of the lexical type, there are no morpho-syntactic differences in the clause structure.

Morphosyntactic IAC's are constructions in which the verb morphology and/or argument marking is manipulated for expressing the meaning 'do sth. accidentally'. Examples have been provided in e.g. (1b) and (2b). The difference between typical transitive events and IAE's is not expressed lexically or adverbially, but by morphosyntactic means. In the case of morphosyntactic IAC's the accidentality is an integral part of the employed construction. In contrast to lexical IAC's, the semantics of the verbal lexeme is *per se* neutral with regard to whether the events are viewed as accidental or not, but the intended reading is assured only by manipulating morphosyntax. As noted above, the typology proposed in section 3.3. will consider only morphosyntactic IAC's. Other types will be excluded from the discussion.

Above, I briefly discussed the three different kinds of IAC's as distinct types. This is justified, since there are clear cases of each type. There are, however, also instances in which the types clearly overlap. For example, lexically expressed accidentality is often accompanied by other changes as well, as for example in the following sentences from German:

German

- (9a) *ich hab-e ihn getroffen*
(I.NOM have.PRES.3SG. he.ACC meet.PARTIC)
'I met him'
- (9b) *er ist mir begegnet*
(he.NOM be.PRES.3SG I.DAT meet.PARTIC)
'I accidentally met him/I bumped into him'

In (9b), accidentality is expressed primarily by choosing the lexeme *begegnen*. This is, however, accompanied by changes in argument mark-

ing, i.e. both lexical and morphosyntactic means are used to express the accidental nature of the event denoted. Example (9b) differs from typical morphosyntactic IAC's since in (9b) accidentality is primarily expressed by changing verbal lexemes, and the changes in the argument marking follow from this. On the other hand, in typical morphosyntactic IAC's, the semantics of verbs is neutral with regard to unintentionality, and an IAC-reading of a clause is achieved employing morphosyntactic means only.

3.3. The morpho-syntactic typology. In this section, IAC's will be divided into four types depending on how typical transitive clauses and IAC's differ from each other formally. The typology is based on argument marking and changes in verb morphology. The quadripartite division is illustrated in Figure 1.

| Argument marking | | Transitive | Intransitive |
|------------------|--------------|------------|--------------|
| Verb | Transitive | (1) (2) | |
| | Intransitive | (3) (4) | |

Figure 1

The division in Figure 1 is based on the notion of formal (in)transitivity, and it is thus in order to define this notion in detail. The formal (in)transitivity of argument marking and verb morphology is based on whether these notions in IAC's coincide with those in basic transitive clauses (defined on the basis of canonical transitive events). If they do, the given notion is regarded as transitive also in IAC's. On the other hand, if there are differences, the notion in question is considered intransitive (only the distinction transitive vs. intransitive is relevant here, no further subdivisions will be made). Argument marking is more straightforward in regard. It is very easy to manifest whether arguments of IAC's and transitive clauses are marked in the same way or not. For example, in (4b) from Finnish they are, while in (5b) from Lezgian they are not (the marking of Agent has changed from ergative to adelative). Thus, in Finnish the argument marking is regarded as transitive, while in Lezgian it is intransitive (the arguments marked in the same way as the arguments in transitive clauses are here further regarded as core arguments). Verb morphology represents a trickier issue in this respect. If changes in the verb morphology are accompanied by changes in the argument marking, we can say that the verb

morphology has been intransitivized. Furthermore, the affixes used for this usually have other intransitive uses elsewhere. Cases like (4b) from Finnish pose greater problems in this respect, since the verb morphology is manipulated, but it cannot be argued that it would have been intransitivized. In the present context, I have followed the principle that if a verb affix employed in an IAC can be shown to have intransitivizing functions (such as passive, reflexive or antipassive) outside IAC's, the verb morphology is deemed as intransitive. If such functions do not exist, verb morphology is considered transitive. This distinguishes between types 1 and 3.

On the basis of the brief discussion above, Figure 1 can be elaborated as in Figure 2 (where the number of the types correspond to those in figure 1).

| Transitive clause | IAC | Intransitive clause |
|--|--|---|
| Transitive verb/ two core arguments | 1. transitive verb/two core arguments 2. transitive verb/two arguments 3. intransitive verb/two core arguments 4. intransitive verb/two arguments | Intransitive verb/ one (core) argument |

Figure 2

Type 1 clearly reflects transitive features of IAC's most directly, since both verb morphology and argument marking can be considered transitive. In type 2 the only difference to typical transitive clauses is that only one of the arguments is core. Type 3 illustrates a "hybrid type" and it is most clearly a combination of transitive and intransitive clauses; it has retained transitive argument marking and inherited verb morphology from an intransitive construction. Differently from type 4, the intransitivity of the verb morphology does not affect argument marking. In what follows the four types noted above will be illustrated in light of examples from a variety of languages.

3.3.1. Type 1. As noted above, type 1 comprises IAC's the verb morphology of which is not intransitivized in addition to which there are no changes in the marking of arguments. The former means that the changes in the verb morphology do not correspond to intransitive uses elsewhere in the language. The argument marking remains constant, and can thus justly be considered transitive. Adverbial and (purely) lexical IAC's (i.e. the likes of *he mislaid the present* as opposed to *he hid*

the present) presented above both exemplify this type, but are not considered below, since manipulation of the verb morphology (without intransitivization) is a prerequisite for a language to be classified as belonging to type 1. The type is illustrated in (10)–(11) below:

Thompson River Salish (Klaiman 1991:150)

- (10a) *k'atxw-e-t-θ-és*
(sever-directive extension-TRANS-3P-3A)
'He (intentionally) cut it off'
- (10b) *k'atxw-s-t-θ-és*
(sever-s-TRANS-3P-3A)
'He cut it off accidentally'

Chickasaw (Payne 1982:362)

- (11a) *pam-at okka' lhatab-li*
(Pam-SUBJ water spill-ACTIVE)
'Pam spilled/poured water (on purpose)'
- (11b) *pam-at okka' in-lhatapa*
(Pam-SUBJ water 3_D-spill)
'Pam spilled the water (by accident)'

The languages in (10) and (11) illustrate the purest and least controversial instances of type 1. The transitivity of the verb is most evident in Thompson River Salish, since the verb is overtly marked as transitive both in (10a) and (10b). The only difference between the examples is that in (10b) the affix *-s-* is attached to the verb. Furthermore, the cross-referencing of the arguments is constant. Also in Chickasaw the differences between (11a) and (11b) are confined to the verb, and moreover, the verb is not intransitivized in (11b). The suffix *-li* that underlines the volitional involvement of the agent in the event denoted is replaced with the prefix *in-*, which for its part highlights the involuntary instigation of the profiled event.

The inclusion of examples like (10) and (11) in type 1 of the proposed typology is justified. Somewhat different manifestations of type 1 are illustrated in (12) and (13):

Finnish

- (12a) *hän poltt-i talo-n*
(s/he.NOM burn.TR-PAST.3SG house-ACC)
'He burnt the house (on purpose)'

- (12b) *hän tul-i polttaneeksi talo-n*
(s/he.NOM come-PAST.3SG burn.TR-PAST-TRANSL
house-ACC)
'S/he burnt the house accidentally/he happened to burn the
house'

Kammu (Svantesson 1983:106)

- (13a) *kæ̡ p-háan trák*
(3SG.M CAUS₁-die buffalo)
'He slaughtered the buffalo'
- (13b) *kæ̡ tòk háan müeuc*
(3SG.M CAUS₂- die ant)
'He happened to kill an ant'

Also in (12) and (13), the number along with the marking of the arguments is retained. Moreover, the verb morphology of (12b) or (13b) does not have intransitive uses outside IAC's. What distinguishes (12) and (13) from (10) and (11) is their more bi-clausal nature. In Finnish, the verb *tulla* 'come' is used to form the IAC in (12b). This verb behaves much like an auxiliary and the same verb is also used to form the future tense. However, we have no just grounds for claiming that the predicate of (13b) is intransitive. Hence, the construction in question is here regarded as belonging to type 1. Examples from Kammu illustrate a similar case. Direct causation is signalled by attaching a causative prefix *p-* to the verb, as in (14a), while accidental causation is expressed by using a causative verb *tók*. The nature of this verb is not discussed in any more detail by Svantesson and it is thus hard to state definitely whether (14b) illustrates a bi-clausal construction. The verb seems, however, to be confined to expressing the function of accidental causation, i.e. it does not have genuine intransitive uses, whence it is included in type 1 here.

3.3.2. Type 2. Type 2 comprises cases in which the verb morphology remains completely unaffected, and IAC's are distinguished from basic transitive clauses on the criterion of argument marking. The changes may affect the Agent, Patient or both arguments. Examples are illustrated in (14)–(16):

Lezgian (Haspelmath 1993:289, 292)

- (14a) *zamira.di get'e xa-na*
(Zamira.ERG pot break-AOR)
'Zamira broke the pot'

- (14b) *zamara-di-waj get'e xa-na*
 (Zamira-ADEL pot break-AOR)
 'Zamira broke the pot accidentally/involuntarily'

Samoan (Mosel and Hovdhaugen 1992:424)

- (15a) *na va'ai e le fafine le pule=ā'oga i l=o=na ofisa*
 (PAST see ERG ART woman ART rule=school LD
 ART=POSS=3SG office)
 'The woman saw the principal at her office'
 (15b) *na va'ai le fafine i le pule=ā'oga i le maketi*
 (PAST see ART woman LD ART rule=school LD ART market)
 'The woman saw the principal at the market (accidentally)'

Chepang (Naess 2003:114, cited from Caughley 1982:68)

- (16a) *həw-kay pu?nis-?i sat-?a-thəy*
 (younger.brother-GOAL older.brother-DL-AG kill-PAT-GOAL)
 'The two older brothers killed the younger brother'
 (16b) *pu?nis-?i həw sat-?aka-c-u*
 (older.brother-DL-AG younger.brother kill-PAT-DL-AG)
 'The two older brothers killed the younger brother
 (accidentally)'

In Lezgian, only the marking of Agent is affected in IAC's. The ergative marker is replaced with an adelative suffix (see also (8) from Manipuri, where the ergative affix is simply eliminated). In Samoan the marking of both Agent and Patient is affected, and the changes are thus more idiosyncratic than in Lezgian. Examples from Chepang illustrate a very interesting manifestation of type 2. As noted in section 2, events encoded by IAC's deviate from the transitive archetype mainly due to decreased agency. In Chepang, this is expressed by manipulating the marking of the Patient. The Agent retains the agentive affix in both (16a) and (16b). The verbal cross-referencing is also affected as a result of this. Chepang provides us with evidence that intentional involvement of an agent in an event not only contributes to the marking of Agent, but it also is relevant to the use of basic transitive clauses in more general terms.

3.3.3. Type 3. Type 3 comprises cases in which the verb morphology is affected in IAC's and can, in contrast to type 1, be considered formally less transitive than the verb morphology of clauses from which

IAC's are derived. There are no changes in the argument marking. Hence, type 3 is very similar to type 1, and these differ from each other in that in (17)–(18) below, the employed mechanism has clear intransitive uses outside IAC's. The intransitive nature of IAC's is thus motivated indirectly, i.e. it is based on other genuinely intransitive (or less transitive) uses elsewhere, which are lacking in type 1. On the basis of whether the verb morphology of IAC's or the clauses from which IAC's are derived is more elaborated, two types can be distinguished. In the first case, the IAC's represent the marked case, while in the second the number of affixes in IAC's is lower than that attested in the basic transitive clauses. The first type is illustrated in (17) and (18):

Yidiñ (Dixon 1994:61, 1977:275)

- (17a) *waguja-ŋgu bana-Ø wawa-l*
 (man-ERG water-ABS see-PRES)
 'The man sees the water (on purpose, e.g. was looking for it)'
 (17b) *waguja-ŋgu bana-Ø wawa-:ji-ŋ*
 (man-ERG water-ABS see-ji-PRES)
 'The man sees water (accidentally)'
 (17c) *wagu:ja giba:dimu*
 (man-ABS scratch.di.PAST)
 'The man scratched himself'

Dhivehi (Cain and Gair 2000:60, 38, 58)

- (18a) *hassan ali gai-gā jehi*
 (PN PN body-LOC hit.PAST)
 'Hassan hit Ali'
 (18b) *hassan sofura gai-gā jehunu*
 (PN PN body-LOC hit.IN.PAST)
 'Hassan hit Sofura (accidentally)'
 (18c) *doru leppunu*
 (door close.IN.PAST)
 'The door closed'

In both languages above, the predicate of IAC's (i.e. (17b) and (18b)) is morphologically identical to a morphologically intransitive predicate, but the argument marking remains unaffected. The intransitive nature of the affix employed in IAC's is illustrated in (17c) and (18c). In Yidiñ, the affix of IAC's also expresses reflexive (the same affix is also used

with forces). In Dhivehi, the involitive affix of (18b) also has an anti-causative function, as in (18c).

In (17) and (18), the IAC predicates are overtly marked for intransitivity. The other possible realization of type 3 is illustrated by languages in which a transitive affix attested in transitive constructions is omitted in IAC's. Two examples are given below in (19) and (20):

Komi-Zyrjan (Kalinina et al. 2003:5)

- (19a) *t'ajə n'an'sə kol-əd-yə tan'a*
(this.ACC bread.ACC leave.TR.PAST Tanja)
'Tanja deliberately left this bread here (in a shop)'
- (19b) *t'ajə n'an'sə kolys tan'a*
(this.ACC bread.ACC leave.PAST Tanja)
'Tanja left this bread here by chance (she forgot it)'

Godoberi (Kibrik 1996:128)

- (20a) *mak'i-di təni čib-ali*
(child-ERG water splash-CAUS.PAST)
'The child splashed the water (purposefully and repeatedly)'
- (20b) *mak'i-di təni čibi*
(child-ERG water splash.PAST)
'The child splashed the water (perhaps involuntarily)'

Komi-Zyrjan and Godoberi illustrate the exact opposite of the languages in (17) and (18) as regards the verb morphology of IAC's. The lower degree of transitivity associated with the predicates of (19b) and (20b) becomes evident only in comparison with (19a) and (20a). As such, the predicates of (19b) and (20b) are typical transitive predicates, while in (19a) and (20a) the predicate is transitivized by adding a causative affix to the verb. It is thus rather the case that Komi and Godoberi have mechanisms for highlighting high degrees of agency, and the lack of these elements can (potentially) be taken as a sign of decreased agency. However, since IAC's in (19) and (20) lack an evident feature of formal transitivity attested in clauses denoting events caused by an intentionally acting agent, these cases are included in type 3 in the present context.

3.3.4. Type 4. Type 4 comprises IAC's in which both the verb morphology and the marking of arguments are affected. The type in ques-

tion thus constitutes a combination of types 2 and 3; with regard to case marking it shares common features with type 2, while in light of verbal morphology it is close to type 3. The intransitivization of the verb also affects the marking of arguments, and type 4 therefore comprises the formally least transitive IAC's. The only feature of formal transitivity is the presence of two overt arguments. Identically to type 3, cases examined in (21)–(25) can be divided into two on the basis of whether the verb morphology of IAC's or that of the transitive constructions is more elaborated. The equivalent of (17) and (18) is illustrated in (21) and (22):

Diyari (Austin 1981:154)

- (21a) *ŋatu yinana danka-na wara-yi*
(1SG.ERG 2SG.O find-PARTIC AUX-PRES)
'I found you'
- (21b) *ŋani danka-tadi-na wara-y yiŋkanu*
(1SG.NOM find-ANTIP-PARTIC AUX-PRES 2SG.LOC)
'I found you (accidentally)'

Guugu Yimidhirr (Haviland 1979:125, 101)

- (22a) *ngayu galga nhanu dumbi*
(1SG.NOM spear.ABS 2SG.GEN.ABS break.PAST)
'I broke your spear (on purpose)'
- (22b) *ngadhun.gal galga nhanu dumbi-idhi*
(1SG.ADESS spear.ABS 2SG.GEN.ABS break-REFL.PAST)
'I broke your spear (by accident)'
- (22c) *warrbi gada=ba-dhi*
(tommyhawk break-PAST)
'The tommyhawk got broken'

In (21) and (22), the lower degree of formal transitivity associated with IAC-predicates is manifested directly. In Diyari, one of the functions of the affix *-tadi-* is to express accidental instigation, as in (21b). The construction in (21b) is formally a typical antipassive, but the function expressed is accidental instigation. In another Pama-Nyungan language, namely Guugu Yimidhirr, the reflexive affix can be used to also express the function of IAC's. Differently from Diyari, only the marking of Agent is affected in (22b). What is also interesting in the IAC of Guugu Yimidhirr is that the IAC-predicate is morphologically intransitivized, since the reflexive affix *-idhi* is attached to the verb, but despite this the

transitivity of the lexeme is retained. The lexeme is the same as in (22a), and different from the intransitive lexeme illustrated in (22c).

In (21)–(22), the lower formal transitivity of IAC-predicates is overtly marked. In addition, identically to type 2, there are also cases in which the intransitivity is implicit and expressed via the omission of a transitivity marker:

Tsez (Comrie 2000:365)

- (23a) *už-ā č'ikay y-exu-r-si*
(boy-ERG glass.ABS II-break-CAUS-PAST.WIT)
'The boy broke the glass'
- (23b) *uži-q č'ikay y-exu-s*
(boy-POSS glass.ABS II-break-PAST.WIT)
'The boy accidentally broke the glass'

Tatar (Lyutikova and Bonch-Osmolovskaya 2002:4)

- (24a) *marat samat-ny yčyra-t-ty*
(PN PN-ACC meet-CAUS-PAST)
'Marat met Samat (deliberately)'
- (24b) *marat-ka samat yčyra-dy*
(PN-DAT PN meet-PAST)
'Marat met Samat (accidentally)'

Tsez and Tatar illustrate the equivalent of (19) and (20) of type 3, but naturally with the difference that the argument marking is also affected above. In Tsez and Tatar, the causative affix attested in the case of typical causation is omitted in IAC's. The argument marking is also affected as a result of this. In Tsez, the Agent occurs either in the possessive or in the lative case instead of the ergative (for the latter, see Comrie 2000:368). In Tatar, the case frame changes from NOM-ACC to DAT-NOM in addition to the omission of the causative affix in (26b).

3.4. Concluding remarks. The four types illustrated in sections 3.3.1.–3.3.4. diverge in which features associated with accidental instigation of events they focus on.³ In Type 1, the event is construed as transitive. There is an agent who does something that instigates an event with two participants. In contrast to typical transitive events, the action by the agent is not volitional, which is expressed by manipulating the verb. Type 1 stresses the transitivity features present in IAC's. This man-

ifests itself most directly in argument marking. In type 2, the relation to transitivity is also direct as regards the verb morphology. Differently from typical transitive clauses, though, the argument marking is modified. Type 2 can be claimed to reflect the most crucial feature of IAE's directly, since in most instances of type 2, the only affected formal feature of clauses is the marking of Agent. IAC's of type 2 are semantically more "specific" than IAC's of type 1. In type 1, the accidentality is rather regarded as a feature of the whole event. Type 3 is very similar to type 1, since the event is construed as involving an agent responsible for the event. The event as a whole is regarded as less transitive than typical transitive events, but not explicitly as being involuntarily instigated. The accidental reading is due to the clause structure in type 3, since the same predicate can express a variety of other functions as well. The mere verb morphology does not suffice for expressing accidentality unambiguously. What is formally interesting in type 3 is that the verb appears in an atypical syntactic environment, since the case frame employed is transitive despite the intransitive verb morphology. Type 4 illustrates the least transitive type of IAC's formally, which makes it the most explicit type semantically. The event denoted is deemed intransitive in both aspects of transitivity relevant to the present discussion. The rationale behind this type lies in the effects of lower agency for transitivity in general. Type 4 can also be regarded as denoting basically anti-causative events caused by peripheral agents. In contrast to type 3, the peripheral nature of the instigator is specified by manipulating the marking of Agent. As opposed to type 2, on the other hand, IAC's of type 4 can be considered somewhat too explicit, since the mere changes in the marking of Agent suffice to express the meaning of IAC's overtly.

4. A closer look at the semantics of IAC's. In section 2, IAE's were defined as events instigated without any intent, which renders the participation of an agent in these events as involuntary. In section 3, a formal typology of the constructions employed in the description of these events was proposed. In this section, certain semantic aspects of IAC's will be discussed in more detail, and from a different perspective. The examined properties comprise the effects of event semantics and the nature of the agents on the use of IAC's. It is interesting that languages seem to associate IAC's with similar "additional" functions, which cannot be a mere co-incidence. The goal of the present section is to shed more light on the semantics of IAC's, and in so doing to show that the feature of accidental causation indeed is an important part of the semantics of IAC's. It is in order to state explicitly that many of the

properties below are discussed in a preliminary way, and many of these need a more detailed systematic cross-linguistic study of the phenomena in a greater number of languages than is the case below. I thus hope that other scholars will find these correlations worth studying further.

4.1. The effects of event semantics. In this section, I will take a look at how the event semantics affects the use of IAC's. The contrast between an agentive and an unagentive reading is relevant in this regard. This means that IAC's are less felicitous or fully ungrammatical, if the semantics of a predicate excludes this (see also Levin 1993:101ff. for a detailed discussion of similar phenomena in English). First, the agency associated with an event may be inherently very high, which excludes an unagentive reading of an event and the use of IAC's. This is the conditioning factor in (25)–(27) below:

Lezgian (Haspelmath 1993:292)

- (25a) *zamara.di-waj get'e xa-na*
(Zamira-ADEL pot break-AOR)
'Zamira broke the pot accidentally/involuntarily'
- (25b) **taibat.a-waj rak aq'haj-na*
(taibat-ADEL door open-AOR)
(Taibat accidentally opened the door)

Tukang Besi (Donohue 1999:213)

- (26a) *ku-sala-pa-‘ita-‘e te boku*
(1SG-accident-CAUS-see-3OBJ CORE book)
'I accidentally showed them the book'
- (26b) **ku-sala-hoko-leama-‘e*
(1SG-accident-FACT-good-3OBJ)
(I accidentally really improved it)

Finnish

- (27a) *miehe-ltä puto-si kuppi*
(man-ABL drop-3SG.PAST cup.NOM)
'The man accidentally dropped the cup'
- (27b) **miehe-ltä maala-utu-i talo*
(man-ABL paint-REFL/ANTIC-3SG.PAST house.NOM)
(the man accidentally painted the house)

Lezgian, Tukang Besi and Finnish all have genuine IAC's illustrated in (25a), (26a) and (27a). In all these languages, the use of IAC's is (among other factors) conditioned by event semantics. 'Breaking', 'showing' and 'dropping' are all events that can be instigated both voluntarily and involuntarily. 'Break' and 'drop' can even be claimed to exemplify the paradigm examples of events that can be instigated accidentally, even though the semantics of these events does not exclude intentionality. Consequently, both a typical transitive clause and an IAC can be employed in the description of these events (only IAC's are illustrated above in order to save space). However, as the ungrammaticality of the (b)-examples above implies, the instigation of the event in question needs to be fully involuntary for rendering IAC's possible. This is not the case in the (b)-examples, because of which IAC's are infelicitous. Doors or windows are usually opened as a result of an intentional act, which makes (25b) ungrammatical. The same holds for German and Georgian, in which the verb 'open' cannot occur in an IAC (Nino Amiridze, p.c.). It is also very hard to think of a situation in which an agent happens to improve something without being actively involved in the event that results in this kind of change in the patient. Painting is also an event instigated volitionally, which makes (27b) utterly ungrammatical in Finnish. Also in Georgian, Russian, Greek and Malay verbs like 'wash' and 'eat/drink' are excluded from IAC's due to their highly agentive nature (Alexander Nikolaev, Nino Amiridze, Stavros Skopeteas, Foong Ha Yap, p.c.).

Examples above illustrate cases in which the (un)grammaticality of IAC's is directly conditioned by event semantics. Since the semantics of certain events is inherently related to high agency, the contrast between agentive and unagentive readings is lacking rendering the use of IAC's ungrammatical. It is also possible that not the grammaticality as such, but rather the reading of clauses is conditioned by event semantics. Examples are illustrated in (28) and (29):

Finnish

- (28a) *tul-i poltettua talo*
(come-3SG.PAST burn.TR.PARTIC house.NOM)
'(I) burnt the house accidentally' (IAE) or '(I) accidentally burnt the house (instead of the barn)'
- (28b) *tul-i maalattua talo*
(come-3SG.PAST paint.PARTIC house.NOM)
'(I) accidentally painted the house (instead of the barn)', *((I) painted the house accidentally)' (IAE)

Malay (examples courtesy of Foong Ha Yap)

- (29a) *dia ter-pecah pasu itu*
(3.SG *ter*-break vase the/that)
'S/he accidentally broke the vase'
- (29b) *dia ter-cat rumah itu lain*
(3SG *ter*-paint house the/that different)
'S/he accidentally painted someone else's house'

Finnish is a language with three distinct IAC's. The one relevant to the discussion here is illustrated above. Formally, the constructions in (28) are identical and they are both fully grammatical, but the readings vary. Example (28a) illustrates a canonical IAC semantically. It also allows the other accidental reading given, where the unintentionality is restricted to whether the patient targeted by the action is the one intended or not. In (28b), only the latter reading is possible, and a genuine IAC-reading is excluded. This follows from the inherently high degree of agency associated with the event 'paint'. This event cannot be instigated fully unintentionally, which of course confines the lack of intention to the 'choice' of patient (see (27b), which is ungrammatical with 'paint'). In Malay, accidentality is in general expressed by the verb prefix *ter*. As regards the reading of clauses with a *ter*-marked verb, Malay shares common features with Finnish. The use of *ter*- becomes less acceptable, if a given event is inherently highly agentive, as in (29b), which can, however, be made acceptable by overtly stressing the fact that involitionality is confined to the patient.

The (in)felicity of IAC's above is determined by the inherent semantics of distinct events. Another (very general) property of events relevant in the present context is (future) tense. We can plan only deliberate actions, while accidental events, by definition, occur spontaneously without any deliberate planning. This implies that overtly coded future tense and the use of IAC's are incompatible with each other, since the agentive semantics associated with future tense and the semantics of IAC's disagree. Examples that support this are given below:

Finnish

- (30a) *miehe-ltä puto-si maljakko*
(man-ABL drop.INTR-3SG.PAST vase.NOM)
'The man accidentally dropped the vase'

- (30b) *miehe-ltä tul-ee kohta / ??huomenna putoamaan maljakko*
(man-ABL come-3SG:PRES soon / ??tomorrow
drop.INTR.INF.ILL vase.NOM)
'The man will accidentally drop the vase soon (i.e. it is slipping out of his hands)/??tomorrow'

Lhasa Tibetan (DeLancey 1984b:132, 137)

- (31a) *ja-s dkaryol bcag-pa-yin / chag-soj*
(I-ERG cup break-PERF-VOL / break-PERF.INVOL)
'I broke the cup purposefully/accidentally'
- (31b) *ja(-s) dkaryol bcag-gi-yin*
(I(-ERG) cup break-FUT-VOL)
'I will break the cup (deliberately)'
- (31c) *ja-s dkaryol chag-gi-red*
(I-ERG cup break-FUT-INVOL)
'I will break the cup (inadvertently)' (I inevitably do such things)

Example (30a) illustrates the IAC of Finnish in the past tense. Example (30b) illustrates the same construction in the future tense. As such, (30b) is a grammatical construction, but the reading is not a typical IAC. Example (30b) could be used to describe a scene in which a man carries a cup carelessly and we can thus expect that it will soon drop. The clause is fully grammatical with an adverb like 'soon'. However, if 'soon' is changed to 'tomorrow', the felicity of (30b) clearly decreases. This follows from the fact that we no longer have 'evidence' for the likely occurrence of an uncontrolled event, since it is placed further in the future. In (30b) the nature of the action by the man (which may, for example, be very careless) indicates an accidentally instigated event may soon take place. If this cannot be inferred from something that is already happening and that we can witness, IAC's become less felicitous and may even be deemed ungrammatical. The examples from Lhasa Tibetan are in some respects very similar to Finnish. In the past tense, both a volitional and an involitional affix can be attached to the verb. The use of latter produces an IAC. In the future tense, differences in meaning arise. In (31b), the profiled event is very close to its volitional counterpart in the past. The only difference is tense. On the other hand, (31c) can only be interpreted as a reference to the habit of the agent to involuntarily instigate events like those profiled in (31c). No specific event is intended, and the accidentality is thus not 'concrete'.

4.2. The effects of the nature of the agent on the use of IAC's. In this section, the effects of the nature of agents on the felicity of IAC's will be discussed. The goal is to show that the function of IAC's is to highlight the low degree of agency of highly agent-worthy entities. As a result, entities whose agency is inherently low do not readily appear in IAC's. The paradigm examples of these are illustrated by forces, like 'wind' or 'fire'. However, not only forces, but also other entities that inherently rank lower for agency do not readily occur as agents of IAC's. All of these will be exemplified and discussed below. As above, the contrast between agentive and unagentive readings makes a contribution here.

In section 2.3.1., it was shown that IAC's and what was labeled as "Force constructions" are marked differently in a number of languages including Finnish and Samoan. In languages in which the two constructions are overtly distinguished, they are also functionally distinct, which means Forces cannot appear in IAC's. Examples are examined below:

Finnish

- (32a) *mies tul-i rikko-nee-ksi lasi-n*
(man:NOM come-3SG.PAST break.TR-PARTIC-TRANSL
glass-ACC)
'The man accidentally broke the glass'
- (32b) *kuume tappo-i hään-et*
(fever.NOM kill.PAST-3SG s/he-ACC)
'The fever killed him/her'
- (32c) *mies kuol-i kuume-eseen (*karhu-un / *nais-een)*
(man.NOM die-3SG.PAST fever-ILL (*bear-ILL /
*woman-ILL))
'The man died of fever (*of a bear/*a woman (accidentally))'
- (32d) **kuume tul-i tappa-nee-ksi hään-et*
(*fever:NOM come-PAST:3SG kill-PARTIC-TRANSL
s/he-ACC)
'(The fever killed him/her accidentally)'

In Finnish, IAC's are overtly distinguished from Force constructions, in addition to which both of these constructions are further separated from the basic transitive clause. The examples in (32) also show that the use of the two constructions is strictly confined to the expression of IAC's or Force constructions only. Human or animate entities cannot be marked as Forces, as (32c) shows. What is, however, more important in the present context is that forces are utterly ungrammatical as agents of

IAC's. Examples like (33d) are simply infelicitous. The same restrictions are attested also in Malay, Greek, Georgian and Russian, where Forces are not eligible for Agents in IAC's (Foong Ha Yap, Stavros Skopeteas, Nino Amiridze, Alexander Nikolaev, p.c.).

In (32), a case was examined in which entities whose inherent degree of agency is practically nonexistent cannot occur in IAC's. These can justly be considered canonical examples of unagentive entities, which explains the ungrammaticality of (32d). The deviation from the agent prototype may, however, be less evident, as in (33)–(34):

German

- (33a) *der Mann /das Baby /die Katze ha-t de-n Teller zerbrochen*
(ART.NOM man /ART.NOM baby /ART.NOM cat
have-3SG.PRES ART-ACC plate break.PARTIC)
'The cat/the baby/the man broke the plate'
- (33b) *de-m Mann / ?de-m Baby / ?? -de-r Katze ist der Teller
zerbrochen*
(ART-DAT man /ART-DAT baby /ART-DAT cat
be.3SG.PRESS ART.NOM plate break.PARTIC)
'The man/?the baby/?the cat broke the plate accidentally'

Malay

- (34a) *orang /bayi /kucing itu pecah-kan pasu itu*
(person/man/baby/cat that break-CAUS vase that)
'That person/man/baby/cat broke the vase'
- (34b) *orang / ?bayi / ?kucing itu ter-pecah pasu itu*
(person/baby/cat that ter-break vase that)
'That man/?baby/?cat broke the vase accidentally'

The examples in (33)–(34) profile events instigated by animate agents. In this regard, they differ from (32). However, irrespective of the animacy of agents in (33)–(34), the given entities display differences with regard to the degree of inherent agency associated with them. In German and Malay, babies and cats (and probably all other animals as well) are considered more like forces, since they cannot occur in IAC's.

The examples in (32)–(34) reflect animacy hierarchies rather directly, since entities whose animacy is clearly different behave differently with regard to whether they can appear as Agents of IAC's or not. Humans and forces constitute the two extremes of the agency contin-

uum ranging from highly agent-worthy to fully unagentive entities. This difference is manifested in the fact that humans can readily occur in IAC's in languages with a distinct IAC-category, while Forces are excluded in this function. On the other hand, the languages above diverge with regard to whether entities like cats and babies are eligible for IAC-agents. In Malay and German, cats and babies are less felicitous as agents of IAC's (the same applies to Greek and Finnish). In Russian, all humans readily occur in IAC's, while animals are excluded (Alexander Nikolaev, p.c.). In Georgian, animacy in general is decisive here, which makes both cats and babies as potential agents of IAC's excluding Forces (Nino Amiridze, p.c.). We may thus propose the generalization that the lower the degree of inherent agency associated with an entity is the less probably it surfaces as an agent in an IAC. What needs to be explained is why the animacy and thus the inherent agency associated with different entities is manifested in this way and not the other way around. The latter is also intuitively plausible, since IAC's express decreased degrees of agency, and thus Forces constitute the ideal IAC-agents. However, since this is not attested above, examples in (32)–(34) can rather be taken as evidence for the fact that the function of IAC's is to highlight an unexpected low degree of agency related to an entity. It thus states that the result of the event was not the one intended by the agent. The contrast between an intentional and an unintentional reading is readily available for humans, who can both plan their actions in advance as well as be involuntarily involved in an event. On the other hand, this contrast is not possible with forces, which inherently rank low for agency. In other words, whether the event instigated by a force is 'voluntary' or 'involuntary' is irrelevant. As a consequence, (32d) (along with IAC's of Georgian, Greek, German and Russian) are ungrammatical. Thus, the mere low degree of agency does not suffice for using an IAC, but the agents of IAE's need to be canonical agents on the basis of their intrinsic properties, which makes the contrast between agentive and unagentive readings possible (see feature 2 of Dowty's proto-agent properties). Moreover, the languages above show that humans outrank other animates, like animals, in agency, since the morpho-syntactic behavior of humans and animals is different with regard to their occurrence in IAC's. Humans readily occur in IAC's, while animals are excluded in most of the languages discussed here. This is expected, since humans can, for example, better plan their actions than other animates, and they are also better aware of the consequences of their

actions. This, however, implies that the cognitive capabilities of a human are enough developed for this purpose. This renders babies less-of-agents, since their actions are more instinct-like than those of adults. This has the consequence that babies are less felicitous as agents of IAC's in some languages. The contrast in agency between a voluntary and an involuntary action of a baby or a cat is not conceived of as significant enough to render the use of IAC's possible. An interesting example in this regard is attested in Ewondo in which IAC's are formed by changing the class index co-referencing the subject from index I (humans) to index III (denoting certain animals and inanimates) (see Lazard 1998:178, cited from Redden 1979:81). This could be taken to imply that clauses denoting events instigated by animals do not allow an IAC-derivation in Ewondo, either, since the relevant mechanism cannot be employed anymore.

4.3. Semantic similarities with other constructions. In this section, some of the most frequent "additional" functions associated with IAC's will be discussed. The functions examined below stress other, not directly accidental, features that can be regarded as features of IAC's. IAC's seem to have similar additional functions cross-linguistically, so we can presume some semantic similarities between IAC's and these functions. In some languages (like Samoan, see Mosel and Hovdhaugen 1992:175), the pattern used for IAC's generally expresses events low in transitivity (like 'love'), but these will be ignored below.

The functions associated with IAC's across languages can be divided basically into three different categories, all of which will be illustrated and discussed from the perspective of their connection to the "true" meaning of IAC's. The first function related to IAC's is illustrated by events instigated or completed against expectations:

Japanese

- (35a) *kodomo ga isu o kowashite shimatta*
(child NOM chair ACC break.*te* come(AUX).PAST)
'The child accidentally broke the chair'
- (35b) *kodomo ga otona o mochiagete shimatta*
(child NOM adult ACC lift.up.*te* come(AUX).PAST)
'The child managed to lift the adult up (unexpectedly)'

Bagwalal (Daniel 2001:216f. I thank Dmitry Ganenkov for these data.)

- (36a) *di-č'ali o=w w=ič'a*
(I.OBL-chali that=M M=die)
'He died because of me (I killed him accidentally, I didn't want to do this)'
- (36b) *o-ššu-č'ali b=ažéri/uhā hinč'a=b hinc'a čihī hec'-āla*
(that-OBL.M-chali N=can/can big=N stone up
rise-CAUS.POT.INF)
'He managed to lift a stone (nobody could do this, but he did it, this happened against his own expectations)'

Japanese and Bagwalal have in common that IAC's can also be used to highlight the unexpected participation of an agent in an event (see also Cain and Gair (2000:57f.) for a similar case in Dhivehi). That IAC's can also express this kind of meaning does not strike us as odd, since the event is not expected to happen in either of these cases. The participation of the agent in a given event can thus be regarded as unexpected in both cases, even though this is motivated differently. The agent is purposefully initiating the event and is controlling it in (35b) and (36b), but the result is not what we expect. In IAC's, on the other hand, the initiation is accidental, which naturally makes the whole event unexpected.

The other notable additional function expressed by IAC's is illustrated by languages in which IAC's can also express the meaning 'manage to do something', cf.:

Thompson River Salish (Klaiman 1991:150, see also e.g. Kroeber 1999:28)

- (37) *k'atxw-s-t-ϕ-és*
(sever-s-TRANS-3P-3A)
'He cut it off accidentally' or 'He ultimately managed to get it cut off'

Kammu (Svantesson 1983:106f.)

- (38a) *kæə tòk háan míúc*
(3SG.M CAUS₂- die ant)
'He happened to kill an ant'
- (38b) *?ò? tòk háan rwàay*
(I CAUS₂- die tiger)
'I managed to kill the tiger (e.g. with my bare hands)'

Finnish

- (39a) *tul-i poltettua talo*
(come-3SG.PAST burn:TR.PARTIC house.NOM)
'(I) burnt the house accidentally/(I) effortlessly burnt the house'
- (39b) *tul-i viimeinkin kirjoitettua kirja*
(come-3SG.PAST at.last write:TR.PARTIC book.NOM)
'I managed to write the book (finally)/I effortlessly wrote a book'

As has been noted above, the degree of control exercised by an agent in an IAE is lower than in the typical transitive events. This feature aids us in explaining why there are languages like Salish and Kammu. In both IAE's and 'manage to do sth.'-events the degree of agency is lower than in typical transitive events, even though the lower degree of agency is related to different phases of events. In IAE's the agent is not controlling the initiation of events, whereas in cases like (37)–(38) the lower degree of control follows from the inability of the agent to complete an event, while the initiation is fully intentional. After having tried for a long time, the agent finally succeeds in doing what s/he was aiming at. The common feature is here the lower degree of control exercised by the agent, even though, similarly to (35) and (36), this is related to different phases. The IAC of Finnish illustrated in (39) can also express the meaning 'manage to do sth.', in which function it is very similar to (37) and (38). In addition, (39) can have the meaning 'do sth. effortlessly', which can perhaps be seen as an ironic extension of the 'manage to do sth.'-meaning. However, the connection to IAC's is rather obvious also in this case, since the agent is not making any effort at all to bring about a given change in the patient in an IAC, since its participation in the event is involuntary, which can also be claimed to be the case in (39b).

The third major additional function associated with IAC's is represented by cases in which the agent is adversely affected as a result of the profiled event. This polysemy is attested for example in Finnish and German, as shown below:

Finnish

- (40a) *miehe-ltä puto-si kuppi*
(man-ABL fall.down-3SG.PAST cup.NOM)
'The man accidentally dropped the cup'
- (40b) *miehe-ltä kuol-i koira*
(man-ABL die-3SG.PAST dog.NOM)
'The dog died on the man'

German

- (41a) *mir ist der Teller heruntergefallen*
(I.DAT be.PRES.3SG ART.NOM plate fall.down:PARTIC)
'I accidentally dropped the plate'
- (41b) *mir ist mein Hund gestorben*
(I:DAT be.PRES.3SG my dog die:PARTIC)
'My dog died on me'

The similarities of IAC's and maleficiary readings are completely different from those in (35)–(39), but the features in common are nonetheless rather evident. The most notable of these is that instigators of IAE's are more likely to be adversely affected as a result of the given event than typical agents (this polysemy is attested also in Greek, Stavros Skopeteas, p.c. and Japanese, Nobufumi Inaba, p.c.). This follows from the unplanned occurrence of the event. Typical agents typically (yet not always) participate in events due to their own advantage. Events denoted by genuine IAC's, on the other hand, were not supposed to happen in the first place, which often implies that the resulting change in the patient is not what the instigator wished for, and can thus in many cases be deemed adversative. For example, in cases like 'the man accidentally broke the vase' it is likely that the agent is somehow adversely affected by the breaking, since this was not supposed to occur. On the other hand, if the agent deliberately breaks the vase, it is more likely, but not mandatory, that this does not affect the agent in any evidently negative way.

5. Conclusions. The present paper has discussed the formal and semantic aspects of so-called "Involuntary Agent Constructions" from different perspectives. In section 2, IAC's were defined as constructions that unarguably express the meaning 'X did Y accidentally'. The primary difference between IA's and canonical agents is the lack of volitionality in IA's (this corresponds to feature 1 of Dowty's proto-agent definition). In other respects, IA's are identical to canonical agents. This distinguishes them from forces, like 'wind' and 'fire' that also lack feature 2, since they are not sentient beings. The paper thus focussed on studying how the lack of one feature of the proto-agent definition affects the linguistic encoding of these kinds of event.

Involuntary participation of an agent in an event may be motivated in a number of ways. There are, for example, events whose semantics make their 'agents' inherently involuntary. Typical examples of this

include experiencing, like 'love' and 'hate'. These events were, however, not considered in the present paper, but the focus was on events instigated by agents whose low degree of agency is not determined by event semantics. This means that the given events also have a fully transitive counterpart. Events instigated by forces can also be excluded from IAC's on the basis of this, since they also lack a transitive counterpart (semantically). Examples of these thus comprise events like 'the man broke the window accidentally'.

As noted in the introduction, one of the main objectives of the present paper was to show that IAC's unarguably express the meaning 'do sth. accidentally'. This is an integral part of the semantics of IAC's. This is reflected, for example, in the fact that in many languages adverbs like 'on purpose' cannot appear in IAC's, which is expected, since this is incompatible with the semantics of IAC's. What is also important in this regard is that the construction in question is also devoted to denoting events instigated by a highly agent-worthy entity, which means that the main function of IAC's is to highlight unexpected low degrees of agency related to these entities. This is directly manifested in the fact that in many languages with distinct IAC's, forces are not eligible for Agents in IAC's (this is the case in all the languages I have reliable data for). The most probable reason for this is that the contrast between highly agentive and less agentive readings is lacking, since forces inherently rank very low for agency. Also the basic semantics of events may exclude the uses of IAC's. This may be due to an inherently high degree of agency associated with an event, or the inherent agency of an event may be low. In either case, the contrast between agentive and unagentive readings is not available. The rationale behind the infelicity of IAC's is very much the same as with forces, but this is motivated differently.

The distinction between genuine IAC's and Force constructions also points to another important feature of linguistic transitivity and agency. This refers to the fact that not the mere decrease in agency suffices to explain certain transitivity alterations exhaustively, but the underlying motivations need to be considered as well. We may interpret the affects of decreased agency incorrectly, if we take account of only one of the types (i.e. either IAC's or FC's), since in many languages the two are overtly distinguished. What certainly makes a contribution here is economy (understood simply in the spirit of Kibrik (1985:271) who states that only such differences that are hard to recover need to be overtly marked). In the case of forces, only an 'accidental' reading of a clause is possible due to the inherent nature of the instigator of these events. Thus, the deviation from the transitive archetype does not need

to be linguistically highlighted. This is manifested in languages like Finnish, Samoan, German and Russian in that the less transitive marking of these events is optional. On the other hand, the use of IAC's is more obligatory, since the lack of volitionality is not retrievable non-linguistically, even though it is possible to emphasize this meaning by using adverbs like 'unintentionally'.

As shown in section 3, languages display clear differences in the linguistic coding of IAE's. First of all, languages can be divided into three on the basis of whether they encode IAE's adverbially, lexically or morpho-syntactically. The first comprises cases like *the man broke the window accidentally*. In these cases the only difference between typical transitive clauses and IAC's is the presence of unagentive adverbs in the latter. Lexical IAC's are exemplified by cases in which a lexeme that is neutral with regard to agency is replaced with a lexeme whose basic semantics implies accidentality. Examples includes the English *misplace* or *mislay* used instead of *put* or *place*. In these cases the change in the lexemes expresses the meaning of IAC's. IAC's that are formed by manipulating the morpho-syntax (argument marking and verb morphology) of clauses were labeled here as morpho-syntactic. The formal typology proposed in section 3.3. was based on morpho-syntactic IAC's. Morpho-syntactic IAC's were in 3.3. divided into four types depending on the transitivity of argument marking and verb morphology. The formal transitivity of IAC's is usually lower than that of basic transitive clauses; type 1 is the only exception in this regard. In many cases, the case frames employed in IAC's are formally less transitive than those in basic transitive clauses, and/or the verb morphology of IAC's has been intransitivized (in this case the affix employed has fully intransitive and transitive events. In accordance with this they share formal features with both intransitive and transitive constructions in many languages.

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APPENDIX: Abbreviations

| | | | |
|-------|---------------|----------|------------------------|
| A/AG | Agent | INTR | Intransitive |
| ABL | Ablative | INVOL | Involutive |
| ABS | Absolutive | LD | Locative-directional |
| ACC | Accusative | LOC | Locative |
| ACT | Active | M/MASC | Masculine |
| ADEL | Adelative | NOM | Nominative |
| ADESS | Adessive | O/P | Object of a transitive |
| ANTIP | Antipassive | OBJ | Object |
| AOR | Aorist | OBL | Oblique |
| ART | Article | PARTIC | Participle |
| AUX | Auxiliary | PASS | Passive |
| CAUS | Causative | PAST | Past tense |
| CORE | Core argument | PAST.WIT | Witnessed past |
| DAT | Dative | PERF | Perfective |
| DL | Dual | PN | Personal name |
| ERG | Ergative | POSS | Possessive |
| FACT | Factitive | POT | Potential |
| FEM | Feminine | PRES | Present tense |
| FUT | Future | REFL | Reflexive |
| GEN | Genitive | SG | Singular |
| IND | Indicative | SUBJ | Subject |
| INF | Infinitive | TR(ANS) | Transitive |
| ILL | Illative | TRANSL | Translative |
| INSTR | Instrumental | VOL | Volitive |

ENDNOTES

¹I have opted for using the labels *Agent* and *Patient* instead of *subject* and *object* in the present paper. The terms are used in a broad sense, and any reference to the participant responsible for the profiled event will be referred to as *Agent*, while any target is regarded as a *Patient*.

²I also follow the usual practice in which clauses in single brackets (like here) refer to semantics, whereas italics (e.g. *he hit him accidentally*) refer to actual linguistic data from a given language.

³The following illustration is based on the assumption that meaning and form correlate. I have adopted this approach simply for convenience and in order to make the following discussion possible.

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