

3 An Overview of Approaches to SA Constructions

This section offers a survey of the relevant literature dealing with SA constructions.

Lyons (1969: 365) views the pair *John walked the horse* – *the horse walked* as an ergative pair, differing from the more common ergative pair *John moved Bill* – *Bill moved* in the agentive character of the participant that occupies the subject position in the intransitive construction and the object position in the transitive construction (Lyons uses the term ‘agentive object’). Lyons points out that the limits on the use of constructions of the *John walked the horse* type are unclear and that verbs that can appear in the pair *John walked the horse* – *the horse walked* represent a highly restricted class. He adds, too, that the difference between *John walked the horse* and “the more common type of ‘double-agentive’ sentence” *John made the horse walk* is that, in the former sentence, John is the direct agent (because he led the horse or rode it) while in the latter no such implication seems to be involved. Interestingly, Lyons takes the semantic role of *John* in *John made the horse walk* as neutral with respect to the distinction ‘direct agent’ versus ‘indirect agent’ (the latter being, in the majority of cases, exemplified by *John had a house built*).

Halliday (1967: esp. 41–47) specifies the semantic role of *he* in *he marched the prisoners* as that of the initiator (because *he* did not carry out the marching) and the role of *the prisoners* as that of the actor (in the intransitive variant *the prisoners marched* the participant in the subject position fulfils a dual role in being both the initiator and the actor). Halliday (1968: 198) takes the relationship between *marched* and *the prisoners* as “a happen-relationship”; the actor is described as the “enforced actor” (1968: 185).⁴

Davidse and Geyskens (1998), elaborating on the theory developed by Halliday (1967, 1968, 1985), regard ergative constructions with intransitive manner of motion verbs as a special class of causative constructions. In these constructions, the active participation of the causee is considerably strengthened in that the causee actually performs the action. The causee thus represents a second energy source. The criteria they use to discriminate between the different types of caused motion situation are

4 Poldauf (1970: 123) points out that Halliday’s description of the transitive *march* in *He marched the soldiers* as ‘cause to march’ is too simplistic.

the following: (a) the presence or absence of physical contact between the causer and the causee in the instigation of the action (this criterion is only optional), (b) the co-extension of the instigation and the induced action (i.e. their co-extensiveness in time and place) and (c) the nature of power asymmetry (i.e. whether there is a strong or a mild power asymmetry between the causer and the causee). Davidse and Geyskens have shown, too, that these constructions do not represent a homogeneous class, both from a semantic and a syntactic point of view. They have singled out six different sub-types and have identified some of the reasons why certain causative situations do not necessitate the presence of directional phrases (against the widely held view that manner of motion verbs can causativize only when they express a directed motion).

Ikegami (1969: esp. 96–99, 162–164) treats the subject in *the man walked* (*the prisoners marched*) as ‘agent’, and the subject and the object in *the man walked the horse* (*he marched the prisoners*) as ‘agentive initiator’ and ‘agent’, respectively. He states explicitly that these two roles “are no more than the variants of one and the same element” (1969: 97) because both refer “to something acting voluntarily” (1969: 96). He observes, too, that due to the semological status (more specifically, due to the association with voluntary movements) of verbs like *march*, *jump* or *gallop*, the object that is caused to move can only be the agent. Interestingly, Ikegami observes that *he* in *he marched the prisoners* displays a low degree of immediacy associated with the agent acting as a causer: *he* “may be a commander who simply gave an order and let his officer take care of the prisoners” (1969: 99). From this fact he concludes that this sentence “is almost synonymous with a sentence involving a simple causative verb: *he caused the prisoners to march*” (1969: 99).

According to Cruse (1972), sentences like *The general marched the soldiers*, *John flew the falcon* or *John galloped the horse around the field* express “causation by command” (1972: 522). They encode situations in which “a human or hominoid causer transmits his will to an obedient, but independent agent” (1972: 521). Contradiction of any element in this causative situation produces the following deviant sentences:

Nonhuman causer: **The floods marched the army further north.*
 Defective transmission of will of causer: ?*John marched the prisoners, who did not understand any of his commands, across the prison yard.* Object not obedient: ?*John galloped the horse, which was being totally unresponsive to his wishes, around the field.*
 Nonagentive object: **John flew the sparks.*

In (1973) Cruse provides some more examples of deviant sentences which serve to substantiate his characterization in terms of “initiation of an action by giving a command” (1973: 20). Command causation necessitates contexts which involve (a) the agentive role of the causee (hence the abnormality of *John galloped the horse, which had died the previous day, round the field*), (b) “a channel of communication” between the causer and the causee (hence the abnormality of *John galloped the horse, with which he had no means of communicating, around the field*) and (c) “the responsiveness” of the causee to the command (hence the abnormality of *The warder marched the prisoners, who were successfully resisting any form of persuasion or command, across the yard*).

Palmer (1974) mentions SA constructions only in passing. He classes them among transitive constructions and takes the subject in a transitive construction as semantically “a further ‘causative’ element”. Though he recognizes the presence of ‘causation’ in the sentence *The sergeant marched the soldiers*, he regards the sentence *He walked the children across the road* as involving “little or no causation” (1974: 92).

In Dušková (1976a), verbs that can enter into the pair *he walked the horse – the horse walked* are treated under the heading of one specific type of verbs, viz. those that are predominantly used in intransitive constructions. Their marked form is thus the transitive one. They can enter into transitive causative construction in which the object is the transposed subject of the intransitive construction: *the prisoners marched – he marched the prisoners, the horse walked – he walked the horse, the horse galloped – he galloped the horse, the horse jumped (over the fence) – he jumped the horse (over the fence)*. The marked character of the transitive construction is a result of “the splitting of verbal action into two components, causation and the particular verbal action, dissociated between the two participants” (1976a: 175) and is manifested in the fact (mentioned also in Halliday 1967: 47) that intransitive constructions cannot be interpreted as involving object deletion. Transitive constructions with this class of verbs represent a special type of transitivity characterized by “the causative role of the subject with respect to the action assigned to the object” (1976a: 174) and by a highly restricted number of verbs that can enter into them.⁵ She observes, too, that the agentive character of the participant in the direct object position does not seem to be essential because the same relationship holds between intransitive and transitive constructions employing verbs that, in their intransitive use, “take non-

⁵ Kubišová, Bázlik and Votruba (2009: 89) also view the participant in the subject position as the causer and the participant in the direct object position as the performer.

agentive, ‘affected’, subjects”: *he starved – they starved him, the horse sweated – don’t sweat your horse* (1976a: 173). She substantiates this claim by appealing to the potential change in the semantic status of the transposed subject in transitive constructions with some of the verbs belonging to this class, namely the verbs *sit up* and *stand* (in transitive constructions with these verbs, the object may be deprived of its agentive character). In spite of this fact, she views the classification of such verbs within the class of verbs of the *march, walk, jump* or *swim* type as justified on the grounds of their syntactic behaviour.

Gruber (1976: 201–202) mentions the types of construction under consideration in passing only. He states that the causative sentence *John walked the dog around the block* has a sense of accompaniment, not present in, for example, *John moved the train along the track*, which, owing to the presence of this additional meaning component, represents a causative construction of a different type.

Pinker (1989: 225–227) observes that many of the transitive causative uses of verbs denoting voluntary locomotion in some manner (like *trot* or *gallop*) are felicitous with nonhumans (usually horses). When used with humans (*He marched the soldiers across the field, She walked her baby across the room*), they either involve accompanied motion or “involve cases that connote something less than freely willed humanness on the part of the actor (such as soldiers or babies)” (p. 226). Pinker classifies *walk* as belonging to a separate class of causativizable intransitives denoting voluntary locomotion, namely, those that involve accompanied motion via some means such as *drive, fly* or *sail* (the verb *walk*, involving manner of motion, is thus an exception in this class).⁶

Brousseau and Ritter (1992: 54–55) treat what they call ‘Compelled Movement Alternations’ (*The trainer jumped the lions through the hoop*) as instantiations of indirect causation. Transitive causative verbs that appear in this type of alternation are derived from intransitive verbs (*The lions jumped through the hoop*) by adding a second active argument (*trainer*). The *trainer*, specified as “an indirect agent of the action”, is only indirectly responsible for the movement. The reason for this is twofold. First, the indirect agent is not the executor of the movement and, second, “although (s)he has some control over the lions, it is the lions who ultimately decide whether or not to do the jumping” (1992: 54). The other argument (*lions*), being the executor of the movement, is taken to be directly responsible for the movement.

6 In this latter class “the intransitive form is not embedded intact as an effect structure in the transitive version,” hence when Bob drives Sue to Chicago, he is not causing her to drive (Pinker 1989: 226).

Levin (1993: 31) describes SA constructions under the heading of “induced action alternation”. She offers the following description: (a) the alternation in question is used mainly with a subset of the *run* verbs (self-agentive manner of motion verbs, cf. Levin 1993: 265–267), (b) it differs from the causative/inchoative alternation in that “the causee is typically an animate volitional entity that is induced to act by the causer”, (c) the causer may often be accompanying the causee and (d) the induced action alternation requires a directional phrase; if a directional phrase is not overtly present, it is understood (as in *Sylvia jumped the horse*). Nevertheless, the discussion presented later in this section will show that the requirement for the obligatory presence of directional phrases need not be met in all the cases (on this see also Davidse and Geyskens 1998).

Tenny (1995) distinguishes “verbs of imparting motion” (*carry, push, pull, tow, drag, etc.*) and “verbs of consuming distance” (*walk, run, march, swim, dance, gallop, ride, paddle, drive, amble, jog, stagger, skate, ski, meander, scramble, etc.*). Verbs of imparting motion take an obligatory internal argument (“translated-object”): *Laura carried/dragged the package to the corner* (**Laura carried/dragged to the corner*). Verbs of consuming distance do not have an obligatory internal argument (*Laura ambled/walked/zoomed to her door*). When they occur with an internal argument (*Laura walked/marched/bicycled/flew/paddled/ danced/ helicoptered her friend to her door*), the causee (i.e. the internal argument) is not, strictly speaking, a translated-object. Tenny observes, too, that some of the verbs of consuming distance do not take an internal argument (**Laura ambled/ climbed/ plodded/ crawled her friend to her door*). She records these surface phenomena, without offering an analysis that would explain the partition of the verbs of consuming distance into those that can take an internal argument and those that cannot. As to the constructions of the *Laura walked her friend to her door* type, she refers to their description as provided in Levin (1993) and adds that, due to their agentivity, the causees in these constructions do not represent translated-objects. Although Tenny’s work is more descriptive than explanatory, her observation concerning the status of the causee as the internal argument in transitive causative constructions with verbs of consuming distance seems to point in the right direction. More specifically, it conveys the idea that both the causer and the causee become part of the verb’s theta-grid. This naturally poses the question of the nature of the mechanism that makes it possible to present both the causer and the causee as direct participants in the event rendered in the syntactic configuration ‘NP-VP-NP(-PP)’ and, also, the question of why only a limited set of verbs of imparting distance may appear in this configuration. It will be shown

that the factors licensing this type of construction must be sought not only in the verb's semantics and the semantics borne by the syntactic configuration in question, but also both in the event structuration (i.e. in the type of the causal structuration of the complex situation) and in the degree of the prototypicality of a given scenario.

Smith (1978) makes an important distinction between internally controlled verbs (verbs referring to an activity which can only be controlled by the person or creature engaging in it) and externally controlled verbs. Internally controlled verbs cannot appear in transitive causative constructions (**The green monster shuddered Mary*) because these constructions are only compatible with direct causation. If, however, internal control can be relinquished, the transitive construction is possible (*The nurse burped the baby*). Smith further observes that activities which can only be under internal control "may differ only marginally from others, which can be externally controlled; the difference is reflected by the continuum of acceptability that one finds" (1978: 107). Smith illustrates this point by way of the following examples:

- (3.1) a) John cantered the horse.
 b) John walked the horse.
 c) ?John ambled the horse.
 d) *John meandered the horse.
 e) *John moseyed along the horse.

Smith concludes that the possibility of the verb's entering into a transitive causative construction then depends on whether the activity can be externally controlled.

Drawing on Smith's (1978) distinction 'internal control' vs. 'external control', Levin and Rappaport Hovav (1995) posit the distinction 'internal causation' vs. 'external causation'. In internally caused verbs "some property inherent to the argument of the verb is 'responsible' for bringing about the eventuality" (1995: 91). In agentive verbs of manner of motion, this property is the volition of the executor of the movement; internal causation thus subsumes agency. (The reverse, however, does not hold. For example, verbs of manner of motion such as *tremble* or *shudder* are not agentive, although they are internally caused.) That is, agentive verbs of manner of motion are internally caused and as such are basically monadic and non-causative (Levin and Rappaport Hovav 1995: 110–112 and 187–189). Their transitive counterparts in transitive causative structures are derived by a process of causativization (the causative form is thus the derived form, cf. also Levin and Rappaport Hovav 1994).

All of the constructions in question imply some sort of coercion (Levin and Rappaport Hovav 1994: 72), which is why verbs describing aimless motion (*stroll*, *mosey*, *meander* and *wander*) cannot causativize (these verbs denote activities that cannot be brought about by coercion):

- (3.2) *We strolled (/moseyed/meandered/wandered) the visitors to the museum.

As opposed to the referent of the direct object in sentences like *John broke the vase*, the referent of the direct object in sentences like *The general marched the soldiers to the tents* retains a degree of agentivity. The “cause” argument can only be an agent in the true sense as attested by these examples:

- (3.3) *The downpour (/The tear gas) marched the soldiers to the tents.
 (3.4) *The lightning (/The whip/The firecracker) jumped the horse over the fence.

In addition, the transitive causative use of agentive verbs of motion requires that directional phrases be present (if a directional phrase is not present, it is understood, cf. Levin 1993: 31):

- (3.5) a) The soldiers marched (to the tents).
 b) The general marched the soldiers to the tents.
 c) ?? The general marched the soldiers.
 (3.6) a) The horse jumped (over the fence).
 b) The rider jumped the horse over the fence.
 c) ? The rider jumped the horse.
 (3.7) a) The mouse ran (through the maze).
 b) We ran the mouse through the maze.
 c) *We ran the mouse.

Building on Perlmutter’s (1978) classification of intransitive verbs into unergatives and unaccusatives, Levin and Rappaport Hovav (1992, 1994, 1995) claim that the obligatory presence of directionals stems from the unaccusative status of the verbs.⁷ Levin and Rappaport Hovav claim that

⁷ Unaccusative verbs are monadic verbs whose subjects are deep-structure objects

the presence of a directional phrase (*John walked (/ran) to the store*) re-categorizes these verbs into unaccusative verbs, i.e. verbs whose subjects originate as deep-structure objects (cf. also van Hout 2004, Tubino Blanco 2011, Van Valin 1990, *inter alia*). Their single argument is a direct internal argument, which means that the position for the external argument is not filled and can thus be taken by an external cause. That is, subjects of unaccusative verbs originate as deep-structure objects, which is why unaccusative verbs can undergo causativization (on unaccusativity in relation to causativizability cf. Borer and Wexler 1987). Transitive causative structures with self-agentive verbs of locomotion therefore require the presence of directional phrases because these phrases effect the shift of the verbs from the class of unergatives to the class of unaccusatives.⁸ Levin and Rappaport Hovav (1992, 1994, 1995) therefore contend that manner of motion verbs such as *dance*, *walk* or *march* can appear in transitive causative structures only when complemented by a directional phrase.

However, an analysis along these lines poses problems not only with respect to the claim concerning the obligatory presence of directional phrases but also with respect to what is taken to be the overt signals of the verb's unaccusative/unergative status. This issue will be dealt with in Chapter 4.

The requirement of an unaccusative status for an agentive manner of motion verb in a transitive causative construction also figures in Geuder and Weisgerber's (2006) account. They observe that verbs of the *run* class (Levin 1993) can only appear in causative constructions with directional path phrases because causativization necessitates a syntactically unaccusative structure. The conceptual meaning of the verb is "not lost" (the structures thus encode indirect causation) in spite of the fact that a directional phrase brings about a change in the verb's syntactic categorization (2006: 127). They take the causative constructions in question as instantiations of indirect causation with "a chaining of causes" (*ibid.*): the highest argument in *The psychologists ran the rat through*

(unaccusative verbs are described as lacking an external argument). Thus the subjects of unaccusatives (*come*, *go*, *arrive*) are not agents but patients or patient-like arguments: *John came to the store*, *John went to the door*, *John arrived at the station*. Unergative verbs, to which self-agentive manner of motion verbs belong (e.g. *walk*, *run*, *swim*, *march*, *dance*), are monadic verbs expressing eventualities that are internally caused. That is, unergative verbs are intransitive verbs whose subjects are agents: *John danced (/walked/swam)*.

8 The purported obligatoriness of directionals also stems from the fact that unaccusativity is often claimed to be linked to telicity as one of its determinants. Unaccusative structures thus require that a path phrase encoding a spatial goal be expressed.

the maze is the indirect causer and the other argument is the immediate causer because it is the one that executes the movement.

Filipović (2007) discusses the analysis proposed by Rappaport Hovav and Levin (1998) with regard to some aspects of the formation of transitive causative constructions with agentive manner of motion verbs. Filipović is not inclined towards Levin and Rappaport Hovav's account, because it takes the meaning and shape of transitive causative constructions as determined by syntactically relevant elements of verb meaning only. She refers to Žic-Fuchs's (1991) analysis, which acknowledges not only components of meaning that are "relevant for syntax and argument structure, but also those that are responsible for the difference in the hierarchy of components within the lexical meaning of the verb, which is then put in an adequate construction (depending on which component of the meaning of the verb needs to dominate in order for the verb to be used in a particular structure)" (Filipović 2007: 146–147). Filipović further remarks that causative constructions with agentive manner of motion verbs "do not have the meaning 'caused somebody to move in a certain way', but the meaning is slightly more shifted from the pure distinction between 'move (in the way specified by the verb)' and 'cause somebody to move (in the way specified by the verb)'" (2007: 147).

Rosen (1996) also objects to Levin and Rappaport Hovav's (1995) suggestion that the addition of a goal or a path argument causes a verb to switch from the class of unergatives to the class of unaccusatives. Such an account, she claims, "provides no *a priori* way to determine whether there has been a semantic class shift and where there has not" (1996: 197). She argues that lexical causativization is determined by event structure rather than verbal semantics. It is the entire VP, not the verb itself, that determines whether causativization is possible. An event must be delimited (must have an end point) if it is to undergo causativization (cf. also Ritter and Rosen 1998 and 2000):

- (3.8) a) Sue danced. – *Bill danced Sue.
 b) The horse jumped. – ?? The trainer jumped the horse.
 c) Bill walked. – *Sue walked Bill.

But:

- (3.9) a) Sue danced across the room. – Bill danced Sue across the room.
 b) The horse jumped across the fence. – The trainer jumped the horse across the fence.
 c) Bill walked home. – Sue walked Bill home.

The goal phrases in (3.9) function as delimiters, hence the verbs in (3.9b) meet the requirement of lexical causative formation. If an event is not delimited, it cannot be causativized:

- (3.10) a) Bill danced Sue around the room in 15 minutes. (delimited event)
 b) *Bill danced Sue along the hall in 15 minutes. (non-delimited event)
- (3.11) a) Sue walked Bill home in an hour. (delimited event)
 b) *Bill walked Sue along the beach in an hour. (non-delimited event)

Although all these examples cannot be disputed, Rosen's claim concerning the obligatory telicity of the event is too strong. In some cases causativization is possible even if the event is not telic. For example, *Bill danced Sue around the room for 15 minutes* is grammatical, in spite of the presence of a durative adverbial (*for 15 minutes*). Consider also the following two examples from Randall (2010: 262):

- (3.12) a) The general marched the soldiers mercilessly yesterday.
 b) The coach swam the team hard.

In line with the account proposed by Rosen (1996), Ritter and Rosen (1998) argue that the locus of the explanation of certain aspects of transitivization can be found in the syntactic encoding of event structure and syntactic assignment of event roles. They argue that structures like *John walked Bill (/the letter) to the dean's office* or *John danced Bill across the room* do not represent causative-inchoative alternations because the subject here is the argument of the verb and the object is the argument of a secondary predicate. That is: "John walked and thereby got Bill (/the letter) to the dean's office" and "John danced and thereby got Bill across the room" (1998: 157). The subject executes the motion, whereas the object, being the argument of the secondary predicate, need not (or even cannot, as is the case in walking the letter somewhere). One troubling aspect of Ritter and Rosen's analysis is that, under favourable circumstances, sentences of this type can be grammatical even without a path phrase, e.g.: *The nurse walked the patient every day*. Also, the subjects in sentences encoding an accompaniment scenario do not necessarily have to execute the motion encoded in the verb. For example, when one walks someone to the door, one may move in a wheelchair (in fact, the

same may also be valid for walking someone to the dean's office). In addition, the causal structure in *John walked Bill to the dean's office* differs from the causal structure in *John walked the letter to the dean's office*. Although the latter sentence can, indeed, be paraphrased as "John walked and thereby got the letter to the dean's office," this paraphrase is problematic for the former sentence ("John walked and thereby got Bill to the office") because it is not John's movement but John's entire action (whose part is John's walking) that is causally related to Bill's displacement. In discussing the sentences *The psychologist ran the rats through the maze* and *The lion-tamer jumped the lions through the hoop*, Ritter and Rosen themselves observe that the subjects are derived via the causative alternation. That is, they are not selected by the verb but are introduced in the syntax. They are causers and hence need not perform the action denoted by the verb (the psychologist did not run and neither did the lion-tamer).

Boas (2006, 2008) claims that what is needed is a more fine-grained description of verbal semantics and offers an approach combining insights from lexical decomposition, frame semantics and verb descriptivity. Among other things, Boas (2008) shows that, contrary to Rappaport Hovav and Levin's (1998) account, not all agentive verbs of manner of locomotion display the same syntactic behaviour (cf. also Kudrnáčová 2008). One of the syntactic patterns he considers is that corresponding to a SA construction, which Boas (2008: 24) illustrates by way of the following examples:

- (3.13) a) The coach ran the athletes around the track.
 b) ? The coach jogged the athletes around the track.
 c) ? The coach promenaded the athletes around the track.
 d) *The coach staggered the athletes around the track.
 e) *The coach roamed the athletes around the track.
 f) *The coach ambled the athletes around the track.

Drawing on Snell-Hornby's (1983) theory of descriptivity, Boas tests and confirms Snell-Hornby's observation that there is a correlation between the degree of the verb's descriptivity (roughly, the specificity and complexity of the verb's meaning,) and the verb's syntactic applicability (Snell-Hornby 1983: 34). Boas (2008, which constitutes an extension of Boas 2006) offers an analysis of 20 verbs evoking the 'Self motion frame' in relation to their usability in the following syntactic patterns:⁹

9 The 'Self motion frame' is defined as "[a] living being, the Self-mover moves under

Inclusion of a location PP: *Gerry walked down the street.*

Zero-related nominal: *a walk*

Resultative construction: *Cathy walked herself to exhaustion.*

Caused-motion construction: *Cathy walked Pat off the street.*

Locative preposition drop alternation: *Julia walked the town.*

Induced action alternation: *Julia walked the dog down the street.*

Adjectival passive participle: *the walked dog*

A note is in order here. It is not quite clear on what ground Boas differentiates between a ‘caused-motion construction’ and an ‘induced action alternation’ – to repeat, the term ‘induced action alternation’ (Levin 1993: 31) covers what we term a SA construction. Boas (2006: 143) gives the following examples of a caused-motion construction (in 3.14a) and an induced action alternation (in 3.14b):

- (3.14) a) Cathy walked (*paraded/*staggered/*tottered) Pat off the street.
 b) Claire walked (paraded/*staggered/*tottered) the dog down the street.

The difference seems to be that, in contrast to an induced action alternation (= SA construction), a caused-motion construction (at least as exemplified by Boas) implies direct physical contact between the participants. This interpretation seems to be corroborated by the fact that Boas adduces the following sentences as examples of a ‘resultative pattern’ (Boas 2008: 42):

- (3.15) a) Kim jogged Pat off the street.
 b) *Kim crawled Pat off the street.
 c) *Kim tottered Pat off the sidewalk.
 d) *Kim wandered Pat off the street.

On the basis of their syntactic distribution, Boas classifies the verbs under analysis into 4 groups. The first group (with *walk* as its only member) displays the highest degree of syntactic usability. The second group (*jog*, *jump* and *waltz*) is less flexible, the third group (*parade*, *bustle*, *hike*, *swim* and *wander*) even less flexible and the fourth group (*amble*, *crawl*, *creep*, *frolic*, *limp*, *meander*, *scurry*, *stagger*, *totter*, *trot*, *wade* and

its own power in a directed fashion, i.e. along what could be described as a path” (Johnson et al. 2001: 159).

wander) is the least flexible (Boas 2008: 35).¹⁰ Boas observes that the degree of syntactic applicability is correlated with the degree of the verb's descriptivity: the higher the degree of descriptivity (roughly, the higher the number of meaning components encoded in the verb), the lower the degree of the verb's syntactic applicability. The meaning components that Boas identifies include aspects like 'laborious motion', 'amount of energy', 'steady movement', 'movement on feet', 'controlled body movement', 'speed', 'aimlessness', 'casualness', 'location of motion', 'purpose', 'positive evaluation by the speaker', etc.

Boas observes that the verb *walk*, constituting the first group, displays the lowest degree of descriptivity (*walk* can thus be used in an induced action alternation). The only verb from the second group which is claimed to appear in an induced action alternation is *waltz*. The fact, however, is that *jump* can appear in an induced action alternation, too (e.g., *The tamer jumped the lion through the hoop*). As regards the third group, the only verb claimed to be used in an induced action alternation is *parade* (but again, contrary to Boas's contention, the verb *swim* can also appear in this type of construction – cf., e.g., *The coach swam the team hard*). The only verb from the fourth group (which displays the highest degree of descriptivity) which can appear in an induced action alternation is the verb *wade*.

Boas's analysis provides convincing evidence that the level of a verb's descriptivity has an impact on the range of syntactic patterns in which the verb may appear. Nevertheless, the analysis does not make clear which meaning components decide on the verb's applicability in a certain syntactic pattern (in an induced action alternation in our case) and which meaning elements are more important than others. This adds a flavour of arbitrariness to Boas's otherwise insightful analysis. All the identified verbal groups (with the exception of the first group with the verb *walk* as its only member) thus contain verbs that do not display the same behaviour as regards their applicability in a certain syntactic pattern. More specifically, they contain verbs that can appear in an induced action alternation but also verbs that cannot.

Folli and Harley (2006) provide a structural, not a lexically-based approach. They point out that although telicity (in terms of the end-boundedness of the path of the motion) is a frequent feature of transitive causative constructions with agentive manner of motion verbs, it is not a crucial factor. Therefore, both open-scale prepositional phrases

10 Boas does not explain why the verb *wander* is listed among the verbs in both the third and the fourth group.

and closed-scale prepositional phrases allow the formation of this construction:

- (3.16) a) John waltzed Matilda around and around the room for 3 hours (*in 3 hours).
 (The open-scale prepositional phrase induces an atelic interpretation.)
 b) John waltzed Matilda into the bedroom in 5 minutes (*for 5 minutes).
 (The closed-scale prepositional phrase induces a telic interpretation.)

Folli and Harley view the constraints imposed on this type of construction as primarily syntactic. For them, this construction represents a specific syntactic configuration, viz. the one containing a small clause. According to the small clause hypothesis, the sentence *John waltzed Matilda into the bedroom* is structurally identical with the sentences *Mary drove John crazy* or *Mary considers John crazy*. The sentential segments *Matilda into the bedroom* and *John crazy* represent predicative small clauses embedded under the matrix verb. (The postulation of a small clause configuration in SA constructions is, however, highly problematic. The arguments against the small clause hypothesis will be offered in the following chapter.)

Folli and Harley add to the purely syntactical requirement that must be met (that demanding the presence of a small clause configuration) also the following three requirements from a purely semantic domain:

- a) both the participants in the caused motion event of the *John waltzed Matilda around the room* type must be agents,
- b) the verb must involve a traversal of a path,
- c) the causing event must be co-temporaneous with the caused motion.

The requirement in (a) excludes an unintentional subject of the verb of motion (the authors illustrate this point in the sentences **Anxiety ran Mary to her house*, **Elation danced John around the room*, **The call from the hospital rushed John out of the door*). From the requirements in (a) and (b) it follows that this type of construction admits only verbs that involve agents and that, at the same time, designate motion traversing a path. That is, this construction admits only a limited set of verbs (Folli and Harley adduce the verbs *walk*, *run* and *swim*) that involve the combination of both of the features, i.e. agentivity and traversal of a path.

Therefore, the following verbal sets are ruled out: *whistle*, *hiss* and *sing* (/+Agent/ and /-Path/), *shudder* and *tremble* (/Agent/ and /-Path/), and *roll*, *float* and *slide* (/Agent/ and /+Path/). The requirement in (c) then explains the unacceptability of the following sentence:

- (3.17) *Mary whistled Rover down the path. (meaning “both Mary and Rover were going down the path”)

According to Folli and Harley, the requirement of the co-temporaneousness (total overlap) of the causing event and the caused event excludes the verbs *whistle* from this type of causative construction. The only well-formed causative construction with *whistle* is represented by the sentence

- (3.18) Mary whistled Rover to her side. (meaning “Mary’s whistling will normally stop long before Rover arrives at her side”)

The requirement that the agent’s action must be co-temporaneous with the Theme’s movement along the path also explains the unacceptability of the sentence

- (3.19) *John walked the child onto the stage. (meaning “John mimed walking confidently in the wings and then the child was encouraged and walked onstage herself”)

and the acceptability of the sentence

- (3.20) Mary walked John to his house. (meaning “Mary and John both walked to John’s house”)

3.1 Against the Small Clause Hypothesis

The first reason for the non-acceptability of the small clause hypothesis concerns the configuration of a small clause itself. It requires not only the presence of the Theme (i.e. the participant undergoing a change of location) which functions as the subject of a small clause predication but also the presence of a directional phrase. Folli and Harley argue that the omission of a directional phrase results in the ungrammaticality of the sentence, which serves as evidence in favour of the small clause hypothesis. They adduce the following examples:

- (3.21) a) *John walked Matilda.
 b) *John waltzed Matilda.
 c) *John ran the dog.
 d) *John jumped the horse.

It certainly cannot be denied that the above sentences can be rescued by adding a directional phrase:

- (3.22) a) John walked Matilda to his new flat.
 b) John waltzed Matilda into the bedroom.
 c) John ran the dog over the bridge.
 d) John jumped the horse across the ditch.

However, the plausibility of sentences like *Have you walked the dog yet?* or

- (3.23) A horse that has been continually galloped by one owner, is not going to change its expectations of being ridden just because it has been bought by someone who wants to travel at a more sedate speed! (BNC)

shows that a directional phrase is not a syntactic element necessary to create a grammatical sentence. In fact, the obligatory use of directional phrases in certain causative scenarios can be explained on purely semantic grounds, by appealing to the conceptual link as holding between the causer's prior intention (which is, as we shall see, one of the factors licensing this type of construction) and the purpose of motion, which is, in motion events, prototypically (though not always) represented by a spatial goal.

The other difficulty arising from a small clause analysis is connected with the specification of the resultant state of the Theme as the subject of a small clause. A small clause predication requires that its subject be in a resultant state. To give an example taken from a non-motion domain, in *John drove Mary crazy* the resultant state is "Mary is crazy". In the motion domain, the possibility of specifying the Theme's resultant state is dependent on the type of directional phrase. An explanation of this claim will be in order at this point. Delimited path phrases yield a telic semantic interpretation. This enables one to specify the resultant state of the Theme in, e.g., *John walked Mary to his new flat* as "Mary is in John's new flat". Positing a resultant state along these lines is, however, difficult with non-delimited directional phrases (the motion is di-

rected towards a certain spatial point but this spatial point – irrespective of whether it is a desired goal or whether it serves as a mere spatial orientation of motion – is not reached). It is highly questionable whether the resultant states possibly entailed in

(3.24) John walked Mary towards his new flat.

(3.25) John waltzed Matilda around (and around) the room.

can be worded as “Mary is towards John’s new flat” or “Matilda is around (and around) the room.”

At this point, a counter-argument may be raised, namely, that Mary’s movement must, after all, have ended in some specific place (i.e. at some point on the route between the starting point of motion and the location specified in the prepositional phrase). Such a counter-argument must, however, be rejected because the interpretation along these lines goes beyond the sentence in that it points to the (conceivable) extra-linguistic situation, not to what is expressed in the sentence itself. Folli and Harley are aware of this difficulty and argue for the possibility of positing a resultant state by appealing to the capacity of English path phrases to function as predicates with the copula in the narrative present tense and in the present perfect tense. They state that path phrases have this capacity irrespective of whether they are delimited or not and, to substantiate their claim, they adduce the following examples:

(3.26) The halfback is into the end zone!

(3.27) The runners are now around the turn and into the home stretch.

(3.28) John has been to France.

(3.29) Mary has been around and around the world.

(3.30) Sue has been into the Uffizi.

Deriving from these linguistic facts, Folli and Harley conclude “that the failure of these PPs to behave as neutral location predicates has to do with the interaction of their extended-location semantics and the temporal structure of stative verbs, and not with any general ban on such PPs as predicates” (2006: 140).

It cannot be overlooked, however, that the path phrases in all the examples are delimited ones. The prepositions *to* and *into* (*into the end zone*, *into the home stretch*, *to France*, *into the Uffizi*) delimit the paths by virtue of their own semantics. By contrast, the semantics of the preposition *around* (*around the turn*) is not pre-determined (in the sense that

around may denote both an unbounded and a bounded path). From this it follows that the factor determining the character of the path is the nature of the location expressed in the nominal expression. *The turn* is a semicircle, hence it excludes the possibility that the same motion is repeated in an uninterrupted sequence. In other words, the motion complemented by the prepositional phrase *around the turn* is always bounded and, as such, does not involve a potential cyclicity as, for example, the motion complemented by *around the room* or *around the building*. That is, the sentences *John walked around the room* or *John walked around the building* may, depending on the context, mean that the motion is not bounded, i.e. that it is – considering the circular shape of these objects – cyclic. As to the path in the phrase *around the world* in example (3.29), its delimited character is enforced by the type of verb used: the stative verb *be* imposes a stative semantic interpretation by profiling the last kinetic quantum, i.e. the quantum involving the resultant end point.

There is yet another factor that underlies the resultant state interpretation of all the analyzed sentences, namely, the presence of a pronounced semantic link between the past, in which the movement is set, and the time of speaking – observe the use of the narrative present tense and the present perfect tense. A change of tense would thus make the sentence implausible:

(3.31) *Mary was around (and around) the world.

The reduplication of the preposition (*around and around the world*) serves to accentuate the quasi two-dimensional rendering of the path. Again, further explanation of this point may be helpful. The world is, certainly, a 3-dimensional object but the path of motion (as a sequence of contiguous spatial points) can only be linear, i.e. one-dimensional. Therefore, if a rocket orbits around the world it traverses a linear path. If a person travels around the world, he traverses a linear path too, but the linguistic presentation of the facts of reality (“travelling around the world” means, roughly, “visiting so many places in the world that one can say that the travelling covers the whole world”) re-evaluates the (logical) one-dimensionality of the path into (a kind of) 2-dimensionality. It does so by profiling the fact that the motion covers “the whole world”, i.e. that it covers an *area*, which is a 2-dimensional entity.

As can be seen, then, the above sentences encode resultant spatial positions of the Themes by virtue of the delimitedness of their path phrases. They specify the path of motion in such a way that its final kinetic quantum (involving the spatial end point) is expressed in the nomi-

nal expression in the prepositional path phrase (the preposition, then, expresses the type of path traversed). This explains why path phrases with this semantic potential can also combine with stative verbs – stative verbs are necessary to activate the stative (“resultant”), meaning component as present in those path phrases (note the difference between, e.g., the stative *be to France/into the Uffizi* and the dynamic *go to France/to the Uffizi*).

Dynamic verbs do not, by virtue of their nature, have the capacity to deactivate the processual meaning component as present in path phrases. Since dynamic verbs encode the dynamic, processual aspect of motion, the resultant localization of the Theme is dependent on the type of path phrase. A delimited type of path phrase (*travel to France, walk into the shop*) includes a spatial point that functions as an end-point of motion (the resultant state of the Theme then represents the entailment of the given sentence: “be in France/in the shop”). By contrast, a non-delimited path phrase does not include such a point (*to travel towards France, to walk towards the shop/ around the room*), hence it does not involve the resultant state of the Theme. Let me point out that the facts adduced here demonstrate the dynamic (processual and interactive) way of constituting meaning, commonly referred to as the principle of compositionality.

Another difficulty connected with Folli and Harley’s analysis concerns the fact that they take into consideration only such caused motion events as present a given motion (whether telic or atelic) by means of the simple form. As is well known, the simple form renders the event as a fact (the simple imposes an external perspective onto the event), whereas the progressive renders it as a process (the progressive imposes an internal perspective onto the event). Consider in this connection the use of the progressive in the following SA construction:

- (3.32) I can remember the very first time it happened – I was out walking the dog with my mum and a car tooted at us, and my mum said, “Oh, someone thinks your bottom’s nice.” (BNC)

The progressive, by profiling the motion as unfolding in time, presents the motion as a phasal sequence, not as a bounded unit (i.e. such as involves a terminal point). This fact serves as another argument against the interpretation of caused motion constructions as necessarily involving the Theme’s resultant localization.