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ON THE SEMANTICS OF CONSTRUCTIONS EXPRESSING BODY PART MOVEMENTS

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I

In the present paper I propose to take up some aspects of the relation "person – his/her body parts", in particular the issue of to what degree a person is responsible for the movements of his/her body in terms of the intentional/unintentional instigation of the action (movement). But intention, traditionally used in the explication of the semantics of body part movements, cannot, as the analysis to be presented here will set out to show, by itself explain the complexity of this relation. Other notions must also be taken into consideration. I shall attempt to account for the significance of such notions as ± volitional impulse and ± conscious control over the body part movement.

My attention will be focused primarily on those constructions in which the scope of the body part movement remains limited to the person himself (herself), as is the case in the constructions *to shrug one's shoulders, to move one's hand, to dangle one's feet,* etc. The proposition of these constructions does not imply any direct physical manipulation (or contact, in the broader sense of the word) with any other object or person in the outer world (from the person's point of view). Actions presupposing direct physical contact, i. e. those whose proposition does not imply restriction to the person itself (as in the sentences *She put her arm on his shoulder, She turned the stone with her left hand,* etc.) are left to further investigation.

I also wish to point out that I do not take into consideration those constructions whose predicates have motion or locomotion (i. e. movement of the body part(s) or the whole body) incorporated in their semantico-lexical categorial content, in other words constructions with transitive or intransitive (in semantic terms) verbs of physical action that need not take body part lexemes as their ob-

ligatory object complement, such as *to walk, to eat, to sit down, to hand,* etc.[1] I shall consider only verb plus body part lexeme constructions (irrespective of whether the body part lexeme occurs in the object position, as is the case in *he moved his hand,* or in the subject position, as in *his hand moved*).

The concept of person naturally plays a significant role in body part manipulation and hence claims our careful attention. First of all it should be emphasized that the concept itself does not represent a mere combination mind plus body. Such a semantic formulation employing the word "plus" only obscures the internally coherent and interdependent character of the mind-body relation. As Miller and Johnson–Laird pointed out, the concept of person is a ubiquitous concept (1976.522), psychologically primitive and unanalyzable (1976.102). From what has been said so far it follows that the semantic interpretation of body part movements must pay constant attention to this organic character of the mind-body relation. Let me adduce one clear example: *his hands were trembling.* Here the impulse instigating the body part movement has as its underlying cause a certain mental (physical) state or process uncontrollable by the person's will.

The unanalyzable character of the mind-body relation asserts itself in the direct, non-mediated dependence of the body (body parts) on the person's will, as suggested by Wierzbicka's observation (1976.141) that "the human body is the only thing (physical object) in the world the states of which can be caused directly by the will of the person who "owns" that body". This casts doubt on the generally alleged possessive relation (in terms of inalienable possession) between the person and his/her body parts: how can *you* "possess" your body (body part) if it is *you*? Acceptance of such an idea would ultimately lead to the splitting of the intrinsically coherent, organic mind-body relation.[2]

At this point a few remarks on the notion "body part" should be made. The assumptions taken up by various authors could be dealt with under these headings: body parts are (a) instances of what is termed inalienable possession, (b) instances of the part-whole relation based upon transitiveness, (c) "true" parts. These assumptions do not, in our opinion, reflect the reality with sufficient adequacy. As to (a), I have already touched upon it above, claiming that, from an ontological point of view, the "person – his/her body parts" relation is not built on possessiveness. As to (b), Cruse (1979) has shown with sufficient clarity that the part-whole relation (including body parts) is not a matter of transitiveness but

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[1] Needless to say, these "global bodily movements" (Miller and Johnson-Laird 1976.549) involve simpler bodily movements implicative of their manipulation by their "possessor".

[2] This organic, intrinsically coherent nature of the relation under discussion, supported by Wierzbicka's opinion on the direct dependence of the human body on one's will, is, however, in contradiction with another observation of hers, namely that (Wierzbicka 1975.509) "John's body = the something that is a part of the world and that can be thought of as John", and that "John's soul = the something that is not a part of the world and that can be thought of as John". This formulation suggests that John as a person is a part of the world and at the same time is not. If we were to accept this idea we would have to deny the organic character of the concept of person and interpret the sentence *John cut his finger with a knife* as *John's body cut its finger with a knife.*

a matter of what he calls "functional domains". According to him, the concepts of function, and functional domain, are essential to the explanation of the oddness of certain transitive chains, for instance: the fingernail is part of the hand because the fingernail is part of the finger, and the finger is part of the hand. As to (c), it is intuitively felt that not all body parts are "parts" in the true sense of the word. Cruse (1979) employs the terms "true parts" and "attachments". The latter normally occur in the frame "X is attached to Y" (1979.34), while the former do not: *the fingernails are attached to the fingers, the hair is attached to the head,* but *?the knee is attached to the leg.* It is worth noting that Cruse's observations partly coincide with Wierzbicka's opinions concerning the semantics of body parts – that, for instance, hair or fingernails are not "parts" of the body (Wierzbicka 1972.26–7).

It follows, then, that body parts should be defined in terms of their anatomic position and their (possible) function (functions) as reflected in the linguistic presentation of the facts of reality. For example, one can *dilate one's nostrils,* but one cannot *dilate one's pupils* since pupils are not true parts of the body. They are, in fact, body organs independent of the operation of will (or mind, in a broader sense of the word). Firmly attached to fingers, fingernails are not capable of independent movement and hence one can only *flick with one's nails* as in *Wilhelm flicked the receiver with his nails.* Or, totally free from the operation of will, hair can only undergo a qualitative mutation (it can for example *go grey*).

So much for the concept of person and his/her body parts. In starting our discussion on the (un)intentionality of body part movement, let me first recall one commonly known fact: that constructions denoting physical actions are, in this respect, difficult to explicate. According to Lakoff (1970), so-sentences implying body (part) movements *(John cut his arm and so did Harry)* entail "two purposeful, or two accidental, cuttings" (1970.359). Zwicky and Sadock (1975.31–3), together with the Catlins (1972), proved the acceptability of more than two semantic implications involved in these so-sentences. They also doubt whether the different meanings of these sentences are a matter of intention alone. Nevertheless, they only gloss over this issue by adducing three possible semantic interpretations of the sentence *John hit the wall:* intentional agentive, nonintentional agentive and nonagentive.[3]

Let me mention also Wierzbicka's (1975.522) point concerning body part manipulation (or movement, in the broader sense of the word, since movement, as opposed to manipulation, is not suggestive of the presence of any intention involved in the body part semantics): "[. . .] even in the case of unintentional actions something – at least some movements of the doer's body – seems to be either wanted or at least allowed." Wierzbicka also agrees with Boguslawski's objection to the opinion that the sentence *He moved his hand* implies only "there was a change in the position of his hand because he wanted it" (1975.523). In

[3] On the "purposive" or "accidental" interpretations of physical action constructions see also Kooij (1971.72-88).

other words, *He moved his hand* need not suggest the presence of intention responsible for the movement, since, as Wierzbicka puts it, the sentence "lacks a reference to something about the person in question as the immediate cause of the change" (1975.523).

In examining all these difficulties connected with the (un)intentionality of one's bodily movements one grows increasingly conscious of the obvious impossibility of employing the semantic feature ± intentional (± purposive) as the only feature capable of explaining the complexity of the "person – manipulated body parts" relation. These difficulties are understandable if all the consequences following from the above mentioned unique (because organic, non-mediated) character of the mind-body relation are taken into account. In this connection let me come back to the sentence *His hands were trembling,* to which no one, undoubtedly, would attach the label 'intentional' because the movements of *his hands* are only a visible expression of the person's internal states (processes).

The examples adduced show the necessity of setting the semantic interpretation of body part movements into a broader frame (context) of causes and effects, in other words, into a whole causative chain.[4]

I am fully aware of the fact that the notion of causativity has two slightly different implications. The term is used in connection with the semantic feature 'agentivity'[5] or it is employed to denote a relation between two situations (events).[6] The question whether objects or persons can function as causes or things caused (on this see Vendler 1968.esp.164) does not seem crucial for the present discussion. But what does seem relevant is the idea of a causative chain, i. e. a chain of causally related events, as aptly expounded by Lyons (1978.490): "We can say of a given situation that it was produced, or brought about, by an agent. But we can also say, no less naturally, that it was produced by some prior event or process in which there was no agent involved."

For the purpose of the present discussion let me first draw a rough working outline of the causative chain which appears to be of a considerable explanatory value in the semantics of body part movement. The causative chain will be projected on an axis with its starting point taken up by a cause (conceived in a very broad sense), its intermediary position by the body part movement, and its final position by the effect (aim) intended to be produced.

Obviously, we are now faced with the problem of defining the terms 'intention' and 'volition' because we employ the term 'intention' in connection with the 'effect' pole of the causative axis, i. e. the pole associated with an effect desired to be brought about, and the term 'volition' ('volitional') in connection with the 'cause' pole of the causative axis, i. e. the pole associated with an impulse instigating a physical action (body part movement). I am inclined to reserve the label

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[4] This term is borrowed from Cruse (1972.522).

[5] Scott DeLancey works with a whole scale of directness of causation (1984).

[6] This broad treatment of causativity enables some philosophers to treat all action verbs as causatives (cf. Kenny 1963).

'volitional' for impulses instigating the action (bodily movements) rather than for effects desired. This point needs a somewhat detailed explanation.

Let me start with the notion 'impulse' first. Impulse can be roughly glossed "initiation of an action by giving a nervous command". In view of this working definition, I find the label 'volitional' to be appropriate in connection with the term 'impulse' since volition (as opposed to intention) usually "designates merely the act of making a choice or decision" (Webster 1973.874). I shall therefore employ the term ± volitional impulse for such bodily movements as are not implicative of the final position in the causative chain, i. e. the position occupied by a certain effect (purpose) to be produced. For the time being, I deliberately confine myself to these general comments and shall adduce some illustrative examples later.[7]

Intention, on the other hand, is conceptually related to an effect (purpose, aim) desired to be brought about. I am aware of the fact that I do not use the term in the same sense as some other authors, for instance Kenny. His definition of volition, however, uses a wording that felicitously suggests the final position in the causative axis occupied by the effect to be produced. As I see it, his wording actually fits what I understand by intention. This is why I have used Kenny's wording for my definition of intention: "Where øing is bringing it about that *p*, then A øs voluntarily only if A volits that *p*, and A brings it about that *p, and it is in A's power not to bring it about that p*" (1963.237). And he adds: "So we must add knowledge to our conditions for voluntary action and say that for A voluntarily to bring it about that *p*, he must know that he is bringing it about that *p*" (1963.237–8). This observation is in accordance with Hintikka's view that "in the eyes of the law, people are assumed to intend (and hence to know) the reasonable and probable consequences of what they knowingly do" (1962.35).

In my conception, then, intention is a wider notion covering that of volition since, as opposed to volition, it is implicative of the last position in the causative chain. Seen from a different kind of perspective, all intentional impulses may also be labelled volitional, but not vice versa.

Now let me explain this point by adducing some illustrative examples. The term intention, as noted above, will be employed only in connection with such movements as are aimed at bringing about a certain effect.

For example, the proposition of the sentence *She shook her finger at him* has as its built-in implication "to signal somebody something" (in this case her attitude, perhaps). In other words, the scope of the body part manipulation goes beyond the person (although free from any direct physical contact); the action is directed towards some other person in the outer world in the sense of signalling one's mental (or physical, as we shall see later) states (processes). A signal, then, represents the effect desired.

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[7] The term'volitional', as it is used in this paper, partly coincides with Morley's term 'motivated' in his componential analysis of agentivity (Morley 1983).

In the case of effect-oriented sentences that imply a direct physical contact (including manipulation) with another object/person in the outer world, the situation is even less complicated, for the effect is represented by contact (manipulation) with some other object/person (*She put her arm on his shoulder, She moved the stone with her left hand,* etc.). As stated above, these constructions are beyond the scope of the present paper.

In the light of our sketch of the causative chain, all the effect-oriented bodily movements (irrespective of whether they imply a direct physical contact or not) have, of course, a certain cause underlying the intention, but the cause is backgrounded in that the proposition of these sentences refers to the desired post-action state of affairs rather than to the pre-action state of affairs. In other words, the reference to their backward-looking reasons is overshadowed by the reference to their forward-looking reasons.[8]

Not all bodily movements are effect-oriented; they do not carry an implication of the final position in the causative chain: in *His feet moved angrily under the table,* the impulse (volitional or not) instigating the action has as its underlying cause the person's mental state (anger), in other words, anger made the person move his feet, the movement being an outcome of the person's mental state. In *He turned his head toward the door,* the impulse initiating the action may be only reflexive: the person hears some noise behind the door and automatically turns his head.

In these sentences the physical action remains restricted to the person itself, the aim of the action being implemented by the accomplishment of the action. Seen from a different kind of perspective, the person is a source and at the same time a goal of the physical action.[9] In view of our broader frame of underlying causes and effects, such bodily movements as lack references to desired post-action states of affairs will be labelled cause-oriented (as opposed to the above-discussed effect-oriented movements) because their proposition carries as its built-in implication a reference to the cause underlying the impulse instigating the action, while the reference to the effect to be produced is pushed into the background.

I am fully aware of the fact that the term ± volitional impulse can account for the incitement of the cause-oriented action, but disregards the course of the action (bodily movement). To cite Wierzbicka (1975.522) again: "One can bite one's tongue unintentionally, but even then some voluntary movement of the jaw must be involved." I shall therefore employ the term ± control over the process (the course of the bodily movement). By control I understand conscious control because subconscious control over the process is always present. The organic na-

[8] In the explication just offered I was influenced by Kenny's treatment of the difference between motives and intentions (see Kenny 1963.91–4), in which Kenny uses the terms 'backward-/forward-looking reasons' and 'pre-/post-action state of affairs'.

[9] Here we come very close to Pauliny's distinction internal/external actions (Pauliny 1943).

ture of the mind-body relation always entails subconscious control over the movement owing to complex neurophysiological mechanisms.[10]

II

Our analysis of body part movements will then employ the terms ± intention (in connection with effect-oriented physical actions), and ± volitional impulse, ± control over the process (in connection with cause-oriented physical actions). For this purpose I have excerpted eight books:

Kingsley Amis, Lucky Jim (Penguin Books, Harmondsworth 1975) – KA
Saul Bellow, Seize the Day (Penguin Books, Harmondsworth 1966) – SB
Ernest Hemingway, The Old Man and the Sea (Triad/Grafton Books, London 1987) – EH
Jack Kerouac, On the Road (Penguin Books, Harmondsworth 1979) – JK
D. H. Lawrence, Lady Chatterley's Lover (Penguin Books, Harmondsworth 1982) – DHL
David Lodge, Changing Places (Penguin Books, Harmondsworth 1983) – DL
Katherine Mansfield, Bliss and Other Stories (Penguin Books, Harmondsworth 1977) – KM
Oscar Wilde, The Picture of Dorian Grey (Oxford University Press, London 1974) – OW

Since, as is generally accepted, the verb is the main organizing element in the structure of the sentence, my analysis will pay particular attention to its semanti-co-syntactic properties.

I shall adopt the method of decomposing the lexico-semantic content of the verb into simpler semantic features. Predicates denoting body part manipulation (movement) will be grouped into semantically related subfields in accordance with their characteristic surface structure behaviour.[11]

Our attention will be focused on those grammatical constructions that contain body part lexemes in their subject position (Sbp constructions): *His eyes lowered,*

[10] It should be stressed that our analysis takes into consideration only the state of awareness and disregards the states of sleeping and, for instance, that of a coma or lethargy. Awareness is not, however, a factor decisive for the character of control over the course of bodily movements because a person may be aware of his/her bodily movements and still not able to bring them under control as is the case in bodily movements caused by such mental or physical states as cannot be controlled by the person's will.

[11] In this connection Cruse's observations concerning the linguistic status of semantic features is perhaps worth mentioning: "[. . .] a semantic feature should be regarded as firmly established only if (a) it is intuitively convincing, (b) it is detectable contextually (including syntactically), and (c) it can be shown to have some explanatory value" (Cruse 1973.15–6). A somewhat different viewpoint is taken by Nilsen (1973.175): "[. . .] the use of semantic features provides results that (1) achieve the level of explanatory adequacy, (2) are internally consistent, (3) are intuitively correct, (4) and are language independent."

and those that contain body part lexemes in their object position, the subject position being occupied by the person (Obp constructions): *He lowered his eyes.* Passive constructions *(His eyes were lowered)* are left to further investigation.

It is best to begin with rather extreme cases. No one would dispute the acceptability of *His hands trembled, She wrung her hands,* and the non-acceptability of *He trembled his hands, Her hands wrung.* In the light of purely semantic considerations, I find that on account of their lexico-semantic categorial content, some verbs are not admitted into Sbp and/or Obp constructions. Seen from a different kind of perspective (from the perspective of the formal organization of the proposition), Obp and Sbp constructions have built into them some prior semantic information about ± volitional impulse (or, in effect-oriented constructions, ± intention) interpretation.[12]

Let us concentrate on the Obp constructions first. We find that this construction predominantly resorts to the use of the following set of verbs: *raise, lift, clench, purse, close (firmly), (com)press, bunch, extend, spread out, fling out, twist, wriggle, curl, wrinkle, cross, bend, wave, wag, waggle, roll.*

A closer look at the semantic contents of these verbs reveals that they share the semantic feature (component) /+effort/ (i.e. a considerable high amount of effort has to be exerted in the accomplishment of the particular movement). For example, if we compare *raise* with *lower,* we notice that *raise,* as opposed to *lower,* denotes /+movement upwards/ and hence a higher amount of effort. Or, *wave,* when compared with *dangle,* is free from conveying the semantic feature /+looseness/, in spite of the fact that both the verbs imply a long course that has to be implemented by the body part – in this case hands, legs and feet, i.e. long body parts movable around an axis. Or, *close firmly* is in clear contradiction to *relax,* etc.

The verbs containing the semantic feature /+effort/ may be grouped into subsets according to the character of the course of the body part movement:
clench, purse, close (firmly), bunch, (com)press imply "bringing together" (in the sense "pressing tight") body part surfaces (jaws, fists, teeth, lips, hands):

1. He pressed his lips together, and his tongue went soft. – SB 17.32
2. He closed them [his hands – N. K.] firmly so they would take the pain now . . . – EH 92.26
3. . . . Dixon answered him, putting his hands into his pockets and bunching the fists. – KA 12.09

Extend, spread out, fling out denote /–movement downwards/, *raise* and *lift* clearly imply /+movement up/:

4. It seemed necessary for him to lift one shoulder in order to put his hand into his jacket pocket. – SB 11.34
5. . . . until she wanted to fling out her arms, to laugh . . . – KM 208.02

[12] The rejection of this assumption would in fact mean the rejection of the very idea of diathesis.

6. He spread out his hand with a gesture, and then he sneezed . . . – DHL 238.14
7. He smiled and extended his hand. – DL 85.15

Twist, wriggle, curl, wrinkle, wag, waggle, roll imply, very roughly speaking, /+undulating curve/:

8. She leaned forward and wriggled her shoulders ecstatically as he scrubbed. – DL 233.14
9. Dixon bunched his free hand and waggled its first two fingers. – KA 94.12

Bend, cross, wave share the semantic feature /+curve/:

10. . . . and she bent her spiteful, smiling eyes upon him . . . – KM 217.19

Together with the above-mentioned features denoting a rather complicated course of the movement (/+pressing tight/, /–movement downward/, /+undulating curve/), the semantic feature /+effort/ decides in favour of the presence of control over the course of the body part movement. The tendency of these verbs to enter easily into Obp constructions, implicative of +volitional impulse, is therefore understandable.[13]

Nevertheless, it should be emphatically stressed that +control verbs in Obp constructions do not always offer a +volitional impulse interpretation (and the same, of course, applies to –control verbs, whose semantics will be discussed later).

11. . . . until she left the paper fall and almost fell herself on to the floor by the side of the bed, leaned her cheek against it, flung out her hands as though the last of her poor little weapons was gone and . . . – KM 90.13

Here the impulse instigating the movement of the person's hands (implemented by the verb *fling out*) has as its underlying cause a certain mental state uncontrollable by will (in this case excitement or anger, perhaps). The nonvolitional interpretation of the impulse is, then, not excluded. It is in fact supported by the lexico-semantic content of the verb *fling out:* apart from carrying the semantic feature /+effort/, it also implies quick, sudden and unexpected movement, in other words semantic properties typical of reflexive, uncontrollable movements, i.e. implicative of the presence of a nonvolitional impulse. As we shall see later, the semantic feature /+quick, sudden movement/ very often represents a constitutive semantic feature of verbs that do not imply the presence of control over the course of the movement and hence easily combine with nonvolitional impulses. This issue will be discussed in greater detail in connection with Sbp con-

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[13] One further remark concerning the verbs characterized by the semantic feature /+effort/ should be made here. The vast majority of verbs conveying this semantic feature are employed in Obp constructions; their presence in Sbp constructions, however, is not excluded. I shall come to this point later when discussing Sbp constructions, but what is of some interest for us now is that there are verbs specified by the feature /+effort/ that are not admitted into Sbp constructions: *throw up, hold up, crook, screw up, fold, knit, squeeze.* To illustrate:

Or should I hold up my hand and call out . . . – KM 86.26

The man in the carriage stretched himself out, folded his arms. – KM 217.29.

structions, which are usually implicative of the presence of a nonvolitional impulse.

But to come back to the question posed above, namely the question of the (non)volitional interpretation of the impulse instigating the physical action in Obp constructions. Obp constructions do not always lend themselves readily to the +volitional impulse interpretation. This is especially the case with Obp constructions that contain verbs not carrying any explicit information about the presence of /+effort/ in their lexico-semantic content.

A typical example of such a verb is the verb *move.* Its semantic content is unspecified not only with respect to /±effort/ and /±complicated course of the movement/, but also with respect to the /±specified aim (goal) of the movement/. All the above-discussed +control verbs carried implicit information about the aim of the body part movement (about the outcome of the action, the final position of the body part). The absence of information about the locative aim of the movement makes a decision on the presence or absence of the volitional impulse even more complicated (cf. the sentence *He moved his hand* and its possible "unintentional" explication as offered by Wierzbicka 1975).

At this point one important fact should be realized. It concerns the role played by the situational/verbal context and the speaker's/writer's point of view in attaching the semantic labels ± intention, ± volitional impulse to certain body part movements. This is, as Miller and Johnson–Laird (1976.106) aptly pointed out, due to the fact that "intend is the kind of predicate that can be applied to others on the basis of your perception of their behavior", and, furthermore, "judgments of intent are often wrong, of course, because people do not have the same access to the intentions of others that they have to their own" (1976.108).[14]

As far as the situational/verbal context is concerned, the importance of setting the physical action into a broader frame of causes and effects, i.e. into the whole causative chain, may have already been noticed. To illustrate:

12. ... her nostrils quivered, she bit her lip, and her head shook with a little nervous spasm. – KM 215.34

In *She bit her lip* the +control verb *bite,* in spite of conveying the semantic feature /+effort/, need not decide in favour of the volitional interpretation of the impulse, because the cause may be, as is the case in this example, some internal mental (or physical) state uncontrollable by will.

One more example with a possible nonvolitional interpretation of the impulse will suffice: *He turned his head toward the door.* Apart from the volitional interpretation, the alternative nonvolitional explication cannot be rejected since the impulse may be, as mentioned earlier, purely reflexive. The semantic content of the verb (/+curve/, /+specified aim/) implicative of +control does not play

[14] However, the authors (1976.508) also admit of "people's inability to foresee the outcome of physical causes and effects transpiring in their own bodies", which is a fact of an interesting linguistic inference accounting for the impossibility of the accidental interpretation of such sentences as *I will cut my finger with a knife.*

a decisive role here. It is the character of the cause that does so. The reason lies in the fact that complicated as they may be, body part movements are not patterned on some elaborate plan. Let me cite Miller and Johnson–Laird (1976.107) again: "[. . .] years of experience make the appropriate action for achieving that goal automatic."

So much for the Obp constructions. Our attention will now be focused on Sbp constructions and their (non)volitional interpretation in connection with the role played by the semantic content of the verbs that are admitted into them.

Needless to say, Sbp constructions are implicative of the presence of a nonvolitional impulse inciting the action, and hence freely admit -control verbs. Let me explain what is meant under the term '-control verbs': -control verbs imply a rather low amount of effort that has to be exerted in the implementation of the physical action. This feature combines with some other features:
dangle, swing, sway, hang denote /+looseness/ of the movement, *relax, drop* imply a very low amount of effort, *shoot, dart, jump, flicker* express /+quick, sudden, unexpected movement/. To illustrate:

13. Philip looks searchingly at Boon, whose left eye jumps abruptly to port. – DL 51.09
14. All his facial muscles relaxed involuntarily. – KA 118.33
15. She swung her arm and . . . – KM 168.30
16. . . . lifting his eyebrows as he looked at her, his hands dangling between his knees. – DHL 184.34

As opposed to *dangle, hang* does not imply repeated movements from a fixed point. In Sbp constructions it denotes being in a certain position and in Obp constructions it expresses "causing" something to be in that position.

These verbs can naturally occur in Obp constructions, too, but the final decision on the (non)volitional interpretation must take into consideration the whole causative chain (i.e. the character of the cause underlying the impulse) and the speaker's/writer's point of view. What has just been said about the role played by the whole situation and the speaker's/writer's point of view does not contradict my previous assumption that Obp and Sbp constructions are implicative of a volitional impulse and a nonvolitional impulse, respectively. The formal organization of the sentence (the functional positions of its elements) exerts an influence upon the semantic properties of the verbs, in our case verbs denoting body part movements. Compare:

17. His dark, mysterious eyes ran round the walls, making leisured halts at each photograph . . . – KA 166.30
18. . . . he took up his stand at the lectern, ran his eye over his first sentence, and raised his head. – KA 222.23

In 17 the final localization of the goal of the body part movement is presented as unspecified and stress seems to be laid on the process (course) of the action, whereas in 18 the course of the action is backgrounded and the goal of the action comes to the fore.

The verb *shake* serves as a perfect example of such a shift in the categorial lexico-semantic content of the verb:

19. Still looking at him, she shook her head slowly, like a doctor indicating that there is no hope. – KA 155.38
20. . . . Dixon said, his lips beginning to shake . . . – KA 29.21

In 20 *shake* equals *tremble* (it is not subjected to the operation of will): the impulse inciting the action is purely nervous (compare also . . . *and some hidden nerve shook the scarlet of his lips and left them trembling* . . . – OW 20.27), i.e. nonvolitional. In 19 the impulse is clearly volitional, which is corroborated by the use of the adverb *slowly*. Actually, a closer look at this sentence reveals that the physical action is signal-oriented (effect-oriented) and hence intentional (cf. our earlier discussion concerning intention and its relation to effect-oriented body part movements).[15]

So far we have concentrated on verbs whose semantic features predispose them to be predominantly used either in Obp or Sbp constructions. An analysis of our material revealed, however, a distinct set of verbs whose semantic features do not play a decisive role in the choice of the type of syntactic construction: *open, part, shut, close, lower, retract, widen, narrow, dilate.*[16] Although *open, part, widen* and *dilate* may imply a considerably higher degree of effort (/+movement upward or sideways/) than *shut, close, lower, narrow, retract* (/+movement downward or backward/), they do not exhibit any strong tendency to be used in Obp or Sbp constructions. Here again, other factors than the semantic content of the verb come into play – the character of the cause underlying the impulse or the speaker's/writer's point of view (or, as will be shown later, stylistic considerations):

21. Stroud slumped back in his seat and closed his eyes in fatigue . . . – DL 221.32 (fatigue)
22. . . . Morris exclaimed, looking appealingly to Stroud, who coughed and lowered his eyes. – DL 207.39 (surprise)
23. 'Me' His eyes widened. – DHL 207.39 (surprise)

The reason for the absence of this tendency may be sought for in the semantics of the co-occurring body parts: *open, shut, close, widen, narrow* and *lower* combine mainly with *eyes* and *mouth*. The amount of effort that has to be exerted in moving is low irrespective of whether it is /+movement upward/ or /+movement downward/. Consider, however, the use of the Obp construction in . . . *she*

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[15] This shift in the semantic properties of the verbs is in keeping with Běličová's treatment of the relation between the proposition and its manifestation in the form of what she calls "internal sentence structure": "From the point of view of the language system it is this internal form that is decisive, because it structuralizes the semantico-lexical relations" (see Běličová 1982.32).

[16] *Narrow, widen, dilate* denote body part movements although the position of the body part remains unchanged. Cf. Chafe's (1971.121) explication of the lexeme *widen:* "the change is one in which the patient moves some distance along the continuum of wideness, from having a lesser degree of that quality to having a greater degree."

pouted, sighed, opened and shut her hands once . . . – KM 196.13. Or, one can *dilate one's nostrils,* but not one's *pupils.* These observations suggest that the verb plus body part configuration must be treated as an internally coherent unit, analyzable into single lexemes, but not explicable as a combination of functionally independent elements.

Apart from verbs admitted into both Obp and Sbp constructions, there certainly exist verbs that, on account of their semantic properties, can enter into only one of these constructions. A typical set of verbs employed solely in Sbp constructions is represented by –control verbs whose semantic content excludes a volitional interpretation:
tremble, shake (in its nonvolitional use as mentioned above), *quiver* denote body part movements caused by internal mental or physical states that are not subjected to the operation of will; *jerk, kick, convulse, flinch* (and onomatopoeic *chatter*) also imply causes uncontrollable by will; their co-occurring constitutive semantic feature /+quick, sudden movements/ has as its underlying cause a nervous spasm:[17]

24. He closed them [his hands – N. K.] firmly so they would take the pain now and would not flinch . . . – EH 92.26

25. She talked fast and fluently, moving about a lot on the chair-arm, her legs kicking straight as if hammered on the knee, her head jerking to restore invisible strands of hair . . . – KA 156.14

Tremble, shake and *quiver*[18] are process-oriented verbs; they foreground the course of the movement, not its outcome (implicative of the final position of the appropriate body part). This fact asserts itself in the impossibility of *Tears trembled his face* (*body*) as opposed to the possibility of

26. . . . and they [tears – N. K.] were pouring out and convulsed his body . . . – SB 125.16

As I see it, the explanation lies in the fact that *convulse* carries additional in-

[17] To come back to the semantic shift accompanying the change of the position of the body part in the surface sentence structure, let us mention at least the verb *twitch,* which implies a nervous spasm when used in the Sbp construction:

And as he gazed at his father the little finger of his right hand began to twitch and tremble; of that he was unconscious, too. – SB 33.22

Compare with

. . . and [they – N. K.] twitched, stamped and lifted their arms and snapped their fingers and clapped their hands. – DL 99.33

[18] The sentence *The rabbit quivered its nose* is perfectly acceptable. This suggests that there is a difference in the semantics of the body part movements of people and those of animals. I do not, however, have enough material to draw any conclusions on this point.

formation about the final outcome of the physical action, the course of the action being consequently backgrounded.[19]

The last set of verbs that do not occur in Obp constructions is represented by the verbs *sink, fall, droop, sag, slip,* which clearly carry explicit information about the presence of a nonvolitional impulse inciting the action. One illustrative example will suffice:

27. The shelf collapsed, and the VC's jaw sagged momentarily. – DL 221.10

So much for the verbs that occur in Sbp constructions only. Now let us turn our attention to verbs entering exclusively into Obp constructions. (I have already mentioned the verbs *throw up, hold up, crook, screw up, fold, knit, squeeze.*)

An interesting sub-set of verbs is implemented by the verbs *shrug* and *nod:*

28. He shrugged his shoulders and disappeared into the dark. – KM 191.24
29. . . . or nodding their heads . . . – DL 70.03

The fact that these verbs do not imply a change in the position of the co-occurring body part underlies Wierzbicka's (1980.23–4) explanation of the impossibility of *his head nodded, his shoulders shrugged.* One further remark is worth noting here. There exist verbs that do not imply a change in the position of the body part and still can be employed in Sbp constructions *(her hands waved).* It is our belief that the nonacceptability of *his head nodded* is not only a matter of the semantic content of the verb itself, but also a matter of the conventionalized semantic interpretation of these constructions, which predisposes them to function as signals of the person's mental states (processes). Their effect-oriented use (i. e. implying +intention) is a conventionalized manner of expressing one's mental states. And another factor corroborates this explanation: *shrug* and *nod* admit only of *shoulders* and *heads,* respectively. In other words, they function as autonomous semantic units.

Apart from the verbs *shrug* and *nod,* the verbs *wring* and *rub* are also admitted into Obp constructions only. To devise an explanation for the impossibility of these two verbs to occur in Sbp constructions based solely on their constitutive semantic features /+effort, +complicated course/ implying +control over the course of the movement would lead us into a blind alley since these semantic features are also present in the semantic content of the verbs entering into both constructions (*twist, cross,* etc.). A closer look at the constructions in which the verbs

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[19] Another set of verbs that are not admitted into Obp constructions is, naturally, represented by verbs denoting qualitative changes of the appropriate body parts:

. . . he pressed his lips together, and his tongue went soft. – SB 17.32

Compare with:

'Now what' s the good of crying: you'll only make your nose red.' – KM 129.33

The use of the Obp construction is possible only when mediated causation is to be expressed: the person is not directly responsible for the mutation, functioning as a mediating causer (note the use of the causative *make*).

wring and *rub* are used reveals that, like *shrug* and *nod,* they are clearly effect-oriented (signal-oriented) and function as a **conventionalized** manner of expressing one's mental states (processes):

30. She wrung her hands at him. – KM 203.25

Discussing the conventionalized character of the above constructions we find ourselves, as will have been observed, in the domain of effect-oriented constructions, their effect being implemented by intentional signalling one's mental (physical) states (processes):

31. The student hung his head. – DL 214.27 (to indicate embarrassment)

Here again we come close to the sphere of convention since the very nature of encoding (and, naturally, decoding) such signals must be, at least to a certain degree, conventionalized. If we rejected this idea, we would face considerable difficulties connected with decoding people's behaviour.

The effect-oriented character of certain constructions asserts itself in the possibility of employing the verb *give* (implying a recipient as a decoder of signals):

32. She gave a foreign little shrug . . .[20] – KM 140.02
33. She gave a furious downward wave of her hand. – KA 88.37

A signal may also be implemented by the person's wish to make somebody do something:

34. . . . and waggling her left hand to silence him . . . – KA 152.25

So far we have been concerned with the role played by the lexico-semantic content of the verb, the formal organization of the sentence (Obp, Sbp constructions), the whole context (causative chain) and the speaker's/writer's point of view. Yet another factor is in operation in the linguistic presentation of body part movements, namely the narrator's stylistic strategy. Consider the following examples:

35. Welch's head lifted slowly, like the muzzle of some obsolete howitzer. – KA 84.20
36. Eyes rolled, sweat glistened, breasts bounced, flesh smacked flesh; cries, shrill and ecstatic, pierced the smoke. – DL 99.37
37. As the body of a decapitated hen is said to go running about the farmyard, Dixon's legs continued to perform the requisite dance-steps. – KA 117.28
38. The little foreign hands trembled as they put the music together. – KM 162.15

Here the narrator intentionally abstracts from the person as a body part manipulator. Attention is directed to the body part(s) and their movement(s). Body parts are presented as objects independent of the person's will and capable of an action of their own accord (as in 37). The situation is rendered in the form of a scene whose elements are atomized and depicted as such. The apparent tension

[20] Cf. also *Morris shrugged his incomprehension . . .* – DL 223. 19.

between the linguistic presentation of the facts of reality and the proposition (as in 35) should be conceived as poetic licence aimed at bringing about a specific stylistic effect (the impulse instigating the movement of the head upwards is clearly volitional – note also the use of *slowly* – and yet the Obp construction is not resorted to).[21]

Stylistic factors also decide on the use of the Obp construction in cases where this construction would not be accepted (nonvolitional impulse, course of the body part movement uncontrollable by the person's will):

39. . . . while he laid his face on her bosom and sobbed, shaking and hulking his huge shoulders . . . – DHL 304.40

Here the body part movement is in fact a side-product of the person's action (sobbing), but it may also be a side-product of the person's mental process:[22]

40. But I could see he was following the play attentively, knitting his brows . . . – DL 136.02

So much for the stylistic factors operating in the linguistic presentation of body part movements.

By way of concluding our discussion about the degree of "intentionality" involved in body part movements (the question posed at the very beginning of this paper), let me state the following, borne out by our above observations: the decision on the (non)volitional character of the impulse instigating an action (and on the (un)intentionality of effect-oriented physical actions) is an outcome of these factors: (a) the semantic content of the verb and the body part, (b) the grammatical structure of the sentence, (c) the context (causative chain) and the speaker's/writer's point of view, and (d) specific stylistic strategy.

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[21] This sentence is a good example of the impossibility of considering the syntactic structure of the sentence without giving prior thought to its semantic status.

[22] Body part movements may also be a side-product of some action (or state of affairs, in a broader sense) in the outer world, uncontrollable by the person's will: *Her head wagged* (she is sitting in a waggon).

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K SÉMANTICE KONSTRUKCÍ VYJADŘUJÍCÍCH POHYBY ČÁSTÍ TĚLA

Článek se zabývá otázkou záměrnosti/nezáměrnosti pohybů částí těla. Vedle tradičního pojmu "± záměr" se zavádí pojem "± volní impuls" a "± vědomá kontrola průběhu děje". Volní/nevolní (v konstrukcích neimplikujících účel pohybu) a záměrná/nezáměrná (v konstrukcích implikujících účel pohybu) interpretace uvažovaných konstrukcí je výsledkem souhry těchto faktorů: (a) sémantická náplň slovesa (uplatňuje se komponentová analýza jeho sémantických rysů, nesoucích informaci o ± vědomé kontrole průběhu děje), (b) gramatická struktura věty, (c) kontext (zavádí se pojem "kauzativní řetězec", do jehož rámce je nutno konstrukci zasadit) a hledisko vypravěče/pisatele, (d) stylistická strategie vypravěče/pisatele.

Organický charakter pojmu "osoba" vylučuje posesívnost vztahu "osoba – její části těla". Lingvisticky relevantní definice částí těla musí brát v úvahu jejich anatomickou pozici a možné funkce.