Kudrnáčová, Naděžda

Intentionality of action in body part movements

Brno studies in English. 1998, vol. 24, iss. 1, pp. [79]-86

ISBN 80-210-2013-X
ISSN 1211-1791

SBORNÍK PRACÍ FILOZOFICKÉ FAKULTY BRNĚNSKÉ UNIVERZITY
STUDIA MINORA FACULTATIS PHILOSOPHICAE UNIVERSITATIS BRUNENSIS
S 4, 1998 — BRNO STUDIES IN ENGLISH 24

NADĚŽDA KUDRNÁČOVÁ

INTENTIONALITY OF ACTION IN BODY PART MOVEMENTS

Discussions on the character of actions have traditionally hinged on the features of intentionality (volitionality, deliberateness, purposefulness) of the action.

Chung and Timberlake (1985.215) mention a commonly invoked specification of the agent: a conscious, wilful, responsible instigator. The feature 'wilful' naturally points to 'wanting'. Wierzbicka (1980.179) states: "One can bite one's tongue unintentionally, but even then some voluntary movement of the jaw must be involved." She holds that "even in the case of unintentional actions something — at least some movements of the doer's body — seem to be either wanted or at least allowed" (1980.178). Boguslawski (1974.48), in his reaction to Wierzbicka's observation that doing something involves wanting something, points out that "/.../ animals and sleeping people do not want anything, in the proper sense, and even in the state of awareness there is a difference between *He moved his hand* and *There was a change in the position of his hand because he wanted it* /.../".[1]

It is well known that 'doing' does not have to combine with the presence of will. According to Cruse (1973), the feature 'agentive' (agents use their own energy in carrying out the action) does not have to be accompanied by the feature 'volitive'. Hopper and Thompson (1980) and Andrews (1985.68) adopt the same position: they take volitionality and agency as not necessarily co–occurring features.

Deliberateness of the action is sometimes specified as displaying the feature 'control' (and nonvolitionality as devoid of this feature). Klaiman (1991.57) defines 'control' as "the capacity and potential of a participant to both engage in and withdraw from engaging in a verbally denoted action" and the agent as a participant to whom control is ascribed (ibid., p.111). He also observes that "bodily reflexes are not, properly speaking, involuntary (although they may be

1 Wierzbicka (1980.179) argues that we do attribute to sleepers some degree of awareness: "One can kick off a blanket in one's sleep because one is feeling hot and wants not to feel so hot (without of course thinking about it in any clear terms, or perhaps even thinking about it at all)."

non–controlled)" (ibid., p.113) and that spontaneous actions "occur, as it were, of their own accord, without the control or instigation of an Agent" (ibid., p.30–1).[2]

Dixon (1979.80) holds that some verbs *(run, jump)* almost always have controlling agents, whereas some others may, but do not have to, display a measure of control over the activity (*sleep, cough*).

* * *

The discussion presented here will deal with the 'intentionality of action' in body part movements. Attention will be focused on those movements that do not denote physical contact with any other object in the outer world. I will take into consideration only those syntactic constructions (*i*) in which the position of the subject is taken up by the person and the position of the object by his/her body part(s) *(He moved his hand)*, and those (*ii*) in which the subject position is taken up by the body part(s) *(His hand moved)*.

Let us first have a closer look at the notion 'volition'. Before doing so, a terminological remark is required. Volition designates "merely the act of making a choice or decision" (Webster 1978.874), whereas intention means "what one proposes to accomplish or to attain by doing or making something" (Webster 1978.458). These two terms are very often used undiscriminatingly. I will adopt the same position: I will not distinguish between volition and intention since this distinction is not relevant for the present discussion.

Kenny (1963.237) gives the following definition of volition: "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*." And adds (ibid., p.237–8): "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*."[3] Kaufman's (1963.550) conception of volition also involves a definite, fully envisaged goal that is to be achieved by the action. A similar position is adopted by Miller and Johnson–Laird (1976.104): "Intend would be interpreted to mean that the person intended to perform the action because he believed that the action would help to bring about his objective."

The above specifications of volitional actions imply an act of decision, i.e. choice (cf. Kenny's wording "it is in A's power not to bring it about that *p*"). It follows, too, that an act of will naturally points toward the future (cf. Fleming 1964.310). In other words, "once an intention is adopted /.../ a decision is made to institute a particular plan of action" (Miller and Johnson–Laird 1976.508).

It is apparent that the analysis of the intentionality of body part movements must take into account the conditions under which the movement is carried out.

---

2 Quirk et al. (1985.744) suggest that the sentence *Suddenly he jumped* may denote an involuntary action (e.g. after being stung by a wasp), or a deliberate one.

3 Fleming (1964.315) also states that "intending is itself awareness of intending".

That is, body part movements must be set in a causative chain, i.e. a broad frame of possible causes and objectives (goals, aims). The causative chain will be seen as an axis with its starting point taken up by a cause of the body part movement, its intermediary position by the body part movement itself, and its final position by the intended objective (goal, effect).

Let us now consider the situation in which the person puts out his hand because he wants to reach for the receiver in order to make a telephone call. Putting out one's hand fulfils the criteria for a volitional action as specified by the above authors: it implies an act of decision and is intended to achieve a definite, envisaged objective.

Another instance of such a movement may be a movement whose objective is not manipulation of other objects in the outer world (as was the case with reaching for the receiver), but, let us say, signalling or expressing something: I may raise my hand in order to stop the coming car or to express my gratitude etc. It is natural that such a movement is, due to its conventional character, associated with a certain set of objectives and decoded accordingly.

Movements carried out in order to achieve a certain objective are undoubtedly volitional. On the causative chain they are oriented towards an intended goal. They also have their causes, but they clearly point 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" (Kenny 1963.91–4).[4]

Let us now consider a movement which is, to a certain degree, conditioned by its cause. For example, I can raise my hand in order to protect my eyes from the sunshine. Here the character of the cause (sunshine) determines its close connection with the movement. An act of decision (or choice, as a feature of volitional or intentional actions) is then backgrounded (although it is still present: I can protect my eyes by bending my head, too). Such a movement may certainly be labelled as goal–oriented (and hence volitional, protecting one's eyes being the goal of the movement), but due to a close link of the movement with its cause it occupies, roughly speaking, an intermediary position within the causative chain.

The question now arises whether movements that may be labelled as spontaneous are volitional or not. Fleming (1964.310) holds that "/.../ we can act intentionally and at the same time spontaneously, without any forethought at all". He distinguishes "intentions that antedate the actions" and "intentions that we have only as we perform the actions intended". Consider the following examples: */.../ oh, the strangest, most tremendous excitement filling her slowly, slowly, until she wanted to fling out her arms, to laugh /.../* (the example is taken from Mansfield 1977.208), *His hand flew to his mouth in the darkness to stifle his laughter* (taken from Amis 1975.134). The movements are certainly carried out 'without any forethought at all', and still cannot be labelled as 'fully' non-

4 Kenny's observation is, in fact, his explication of the difference between motives and intentions.

volitional. The reason lies in the presence of a controlling mechanism which might prevent the movement from occurring (note the prototypically volitional predicate *want* in *She wanted to fling out her arms*) and which may build the final position of the body part in the motoric plan of the movement – note the definite, pre-determined localization *to his eye* in *His hand flew to his mouth in the darkness to stifle his laughter* or *to her ears* in *The glass came apart like water splashing, and the nurse threw her hands to her ears* (taken from Kesey 1978.155). Klaiman's view (1991.30–1) that spontaneity is accompanied by an absence of will is thus debatable. Closing one's eyes in fatigue or as part of the process of falling asleep (situations characterized by the person's gradual loss of conscious control over the initiation of the movement and its course), is, again, not 'fully' volitional.

The felicity of the formulation 'not fully volitional' is highly questionable since the action-specifying attribute 'volitional' ('intentional') allows only of its opposite ('nonvolitional/unintentional'), and we have seen that the mere bipolarity does not cover body part movements adequately.

It is thus increasingly apparent that the semantic feature 'volition' is not a bipolar concept, allowing only of its extreme positions. Kimble and Perlmuter (1970.362) say: "Another reason for the unpopularity of the topic of volition is that the concept of voluntary (conscious, intentional) behavior, however treated, implies an opposite category, involuntary (unconscious, accidental) behavior; and we know that dichotomies are scientific rarities."

I propose, then, to work with the concept of an impulse mentally processed to varying degrees (naturally, the impulse does not have to be processed at all). By impulse I understand the initiation of a movement by giving a nervous (i.e. in neurophysiological terms) command.[5] The attribute 'mentally processed to a varying degree' is broad enough to cover the subtler distinctions within the intentionality of action as specified by Rescher (1966.218): voluntarily — involuntarily, deliberately — inadvertently (or accidentally), intentionally — unintentionally (or by mistake), consciously — out of habit, knowingly — unwittingly, willingly — unwillingly.

Let us now come back to the position of the body part movement within the causative chain in the light of the concept of an impulse mentally processed to varying degrees. We have seen that in goal-directed movements the degree of the mental processing of the impulse (MPI) is definitely high. We have also observed that the degree of MPI may be determined by the character of the relation between the cause underlying the action and the movement: the connection may be very tight (in cases when a movement is, to a large degree, conditioned by its cause). This fact weakens the orientation of the movement toward its intended objective (aim). It shows, then, that the degree of MPI is also influenced by the character of the relation between the movement and its cause. The causes underlying body part movements may be external or internal (physical or mental).

---

5 The concept of a mentally processed impulse does not, naturally, explain neurophysiological genesis of body part movements.

We have observed that spontaneous movements display a certain (however low) degree of MPI. Kenny (1963.8) says: "Anger may make the hand rise in order to strike; the will can ordinarily hold it back from striking." Consider, for example, the use of the controlling verb *check* in a context with a spontaneous movement expressed in the verb *jerk*: *Everybody's head jerks toward her — mine too, but I check myself and pass the motion off like I'm trying* (taken from Kesey 1978.122). As to their position within the causative chain, spontaneous movements are cause–oriented. If the final position of the body part *(to his mouth* in *His hand flew to his mouth)* is pre–determined, the MPI is relatively higher; the movement may then be specified as occupying an intermediate position within the causative chain. For example, in *He turned his head toward the door* the movement is oriented toward its cause (noise) as well as toward its aim (the desire to see what is happening). The relation between the cause and the movement is not so close as to prevent controlling mechanisms from their operation.

Let us now have a closer look at movements with an underlying mental cause. Kenny (1963.12) states that "emotion is merely contingently connected with its manifestation in behaviour". In other words, a certain type of movement as an expression of the person's state of mind is connected with a certain set of mental causes, and, conversely, a certain state of mind manifests itself as a certain set of movements. This implies a mutual relationship (relative conditioning), but leaves room for a certain degree (although low, depending on the character of the impulse) of MPI. For example, in sentences *His lips came together with the pressure of disgust, His feet moved angrily under the table* the close connection between the cause (disgust, anger) and the movement is explicitly stated. Such movements are cause–oriented, the degree of MPI is low.

As opposed to movements that are merely contingently associated with mental causes, conventional expressions of the person's mental state are carried out in order to "let others know how I feel" (Gordon 1969.39). Such movements are clearly goal–oriented: their link with the cause is loosened due to the conventional (i.e. not necessarily natural or intrinsic) character of the relation 'movement — its cause'. The degree of MPI is therefore high: *He shrugged his shoulders, He nodded his head.*

However, conventional expressions of mental states are not so straightforward as it might seem at first sight. In the sentence *The student hung his head (in shame)* the cause is, by virtue of its nature, closely connected with the movement. It is symptomatic that shame, i.e. a non–desirable mental state, is expressed by means of movement downward (and not, let us say, upward). The reason lies in the fact that movement downward is often associated with something negative. (Let us recall here the well known fact that verbs *fall, stagger, stumble, trip, tumble* are intrinsically nonvolitional. This is a natural outcome of the fact that the verbs represent, under standard conditions, undesirable states of affairs and that they denote movements downwards. Movement downward is, by its nature, readily accompanied by a decrease in dynamic energy released by the person and thus easily combines with loss of control. When used in an inten-

tional context, the verbs are often accompanied by an action–specifying adverbial *on purpose*: *He fell on purpose.*)

In comparison with clearly goal–oriented conventional expressions of emotion, the movement as expressed in *The student hung his head in shame*, although carried out in a situation presupposing the presence of the decoder (under standard circumstances, one does not hang one's head in shame when alone), displays a lower degree of MPI. This fact is due to the natural, intrinsic association of a certain cause with a certain movement.

However, even conventional, goal–oriented movements (i.e. movements functioning as signals of the person's mental states) may sporadically occur in situations in which the decoder of the message is absent. Consider this context: *The letter from Joe Higgins? A transparent piece of horseplay. Dixon nodded to himself and /.../* (taken from Amis 1975.230). Here the movement functions as a symptom of one's mental state. It is thus cause–oriented and displays a low degree of MPI. Paradoxically, a lower degree of MPI is brought about by the conventional character of the movement: conventionality may form grounds for the automatization (habituation) of the movement.[6] Consider *I found myself nodding* in the following context: */.../ he pantomimed to us both the very highest salutations and greetings, and I found myself grinning and nodding immoderately in return* (taken from Salinger 1982.50).

Naturally, we have to distinguish between spontaneous movements (jumping out of joy, raising one's hands in the appraisal of God, closing one's eyes in fatigue) and reflex movements (jerking one's hand when touching a hot oven or when seeing a face at the window, jumping at a noise). Teichman (1961.31) observes that if the person jumps at a noise, "he does not decide to jump or have views on the suitability of jumping, nor can he decide at the last minute not to jump at all". The distinction between spontaneous and reflex movements lies in the character of the cause. In reflex movements, the cause (an unexpected, sharp noise, sudden, violent fright, the heat of an oven) is linked with the movement to such a degree that it totally conditions the movement. That is, reflex movements are cause–oriented and imply a zero degree of MPI. Spontaneous movements are cause–oriented too, but the cause is of such a nature as to allow room for a certain, however low, degree of MPI.

Apart from the position of the movement within the causative chain, the degree of MPI may also be determined by the semantic content of the verb. For example, folding one's hands, crossing one's legs, rubbing/wringing one's hands, waving one's hands are, as to their physical parameters, complicated, structured movements with a relatively long course. Their realization presupposes conscious effort on the part of the person carrying out the movement.

---

6 Gordon (1969.37) states that expressing emotion in a conventional manner does not necessarily mean that the person is aware of the conventional character of the respective movement.

These movements cannot, therefore, display a zero degree of MPI. (The degree of MPI will then depend on the character of the causative chain).

In this connection it is worth noting that the above mentioned discussions on the feature 'wanting' (Wierzbicka 1980 and Boguslawski 1974) centred around the verb *move*, a prototypical verb of motion. This is not surprising since the verb is not suggestive of any type of context (causative chain) in which the movement may occur. The reason lies in the semantic content of the verb: *move* is devoid of any concrete specifications of the physical parameters of body part movement (speed, direction, heterogeneity or homogeneity of the course of movement).[7]

Let us now consider non–controllable movements in the following examples: *The little finger of his right hand began to twitch, His limbs trembled, His lips were quivering.* Here the degree of MPI is determined solely by the semantic content of the verbs. They exclude mental processing of the impulse due to the nervous (in neurophysiological terms) nature of the cause.

* * *

The discussion has shown that the dichotomy 'voluntary movement' versus 'involuntary movement' does not cover body parts adequately since the attribute 'voluntary', however treated, allows only of its opposite, i.e. 'involuntary'. Instead, I have proposed to work with the concept of a mentally processed impulse. The degree of mental processing of the impulse instigating the movement is determined by the conditions under which the movement is carried out (i.e. by the character of the causative chain) and, in certain cases, by the semantic content of the verb. The degree of MPI is, then, an outcome of a certain constellation of features that together make up what has traditionally been termed 'intentionality of action'.

REFERENCES

Amis, K. (1975). *Lucky Jim* (Harmondsworth: Penguin Books)

Andrews, A. (1985). The major functions of the noun phrase, *Language, typology and syntactic description*, vol. I (*Clause structure*) 62–154, ed. by T. Shopen (Cambridge: Cambridge University Press)

Boguslawski, A. (1974). Preliminaries for semantic–syntactic description of basic predicative expressions with special reference to Polish verbs, *O predykacji* 39–57, ed. by A. Orzechowska and R. Laskowski (Wroclaw: Ossolineum)

7 Here also lies the reason why verbs *run, jump* or *walk*, etc., expressing complicated movements, are, under normal conditions, used without an appropriate action–specifying adverbial.

Chung, S. and Timberlake, A. (1985). Tense, aspect and mood, *Language typology and syntactic description,* vol. III *(Grammatical categories and the lexicon)* 202–58, ed. by T. Shopen (Cambridge: Cambridge University Press)
Dixon, R.M.W. (1979). Ergativity, *Language* 55.59–138
Cruse, D.A. (1973). Some thoughts on agentivity, *Journal of linguistics* 9.11–23
Fleming, B.C. (1964). On intention, *Philosophical review* 73.301–20
Gordon, L.M. (1969). Conventional expressions of emotion, *Mind* 78.35–44
Hopper, P.J. and Thompson, S.A. (1980). Transitivity in grammar and discourse, *Language* 56.251–99
Kaufman, A.S. (1963). Ability, *Journal of philosophy* 60.544–51
Kenny, A. (1963). *Action, emotion and will* (London: Routledge & Kegan Paul)
Kesey, K. (1978). *One flew over the cockoo's nest* (London: Picador)
Kimble, G.A. and Perlmuter, L.C. (1970). The problem of volition, *Psychological review* 77.361–84
Klaiman, M.H. (1991). *Grammatical voice* (Cambridge: Cambridge University Press)
Mansfield, K. (1977). *Bliss and other stories* (Harmondsworth: Penguin Books)
Miller, G.A. and Johnson–Laird, P.N. (1976). *Language and perception* (Cambridge, Mass.: Harvard University Press)
Quirk, R. et al. (1985). *A comprehensive grammar of the English language* (London, New York: Longman)
Rescher, N. (1966). Aspects of action, *The logic of decision and action* 215–9, ed. by N. Rescher (Pittsburgh: University of Pittsburgh Press)
Teichman, J. (1961). Mental cause and effect, *Mind* 70.36–52
Salinger, J.D. (1982). *Raise high the roof beam, carpenters. Seymour: An introduction* (Harmondsworth: Penguin Books)
Webster's new dictionary of synonyms (1978). (Springfield, Mass.: G.& C. Merriam Company)
Wierzbicka, A. (1980). *Lingua mentalis* (Sydney: Academic Press)