CHAPTER THREE

ON EMBEDDED ACTIONS:
ACCOMPLISHMENTS AND PROJECTS

INTRODUCTION

In chapter 1 I distinguished between elementary episodes and more composite episodes, viz. causative and agentive episodes. In the present chapter I shall introduce a different kind of complexity and show some mechanisms for creating such complexity.

We sometimes say that a complex episode $E$ contains another episode $E_1$ or that $E_1$ is embedded in $E$. A very common linguistic strategy for expressing this relation is to use the preposition “by”, as in the following locutions: object $o$ causes an episode $E$ by causing another episode $E_1$, or, the agent $A$ performed action $F$ by the performance of $F_1$. Let us call the former episode the main episode and the latter the collateral episode. The main episode can have several collateral episodes.

Examples:

The wind made the house uninhabitable by blowing off the roof.
John started the machine by pressing the button.

THE CONCEPTS OF BASIC ACTION AND ACTION GENERATION

For the purposes of this book I shall in the following exclusively consider the agentive case and thereby introduce a further set of concepts. The first concepts to be introduced are basic action and action generation. In order to understand these notions let us consider some examples of action embedment. $A$ travels to New York by taking a boat. $A$ greets a friend by waving her hand. Consider now how the relation can be extended:

The driver started her car

by turning the key
by twisting her hand.

The teacher prevented a quarrel in her classroom

by warning the pupils
by reminding them of the rules of the school
by talking in English
by using her speech-organs.

11 I owe the idea of action generation to A. Goldman [33]. The general phenomenon has of course been observed by many action theorists. Cf. E. D’Arcy [23] and D.S. Shwayder [94]. D. Davidson [22], pp. 53-55, uses the term “the accordion effect” for the phenomenon of action-generation.
The question can now be put: is this series of embedments indefinite? Can one always go on finding further actions by which one performs other actions?12 The answer to this is no. There is always some action which initiates the chain; this is the so-called basic action. A basic action is an action which is not performed by the performance of some other action. In the standard case the basic action involves just the (intentional) movement of a part of the body. (Under special circumstances the basic action can also be constituted by omitting to move a part of one’s body.)

Why can’t we say that there are actions behind the basic action? Are there not causes of basic actions in their turn? The answer is: there are certainly causes of basic actions, for instance neurophysiological ones. But these causes are not actions; they are not events which are intended by the agents. The subject does not intend that certain neurophysiological events shall take place. Hence the basic actions are the first intended episodes in the chain connected by the by-doing relation.

The chains of actions indicated above may be said to be generated by the basic action. The basic action of twisting one’s hand generates the action of turning the key, which in turn generates the action of starting the car. At the same time there is an important sense in which the basic action is identical with the generated actions. The agent does not first twist her hand and then turn the key. The fact is rather that she twists her hand and, given the circumstances, this action is at the same time the action of turning the key, as well as the action of starting the car.

Is there, then, a last member of such a chain of generated actions at the other end of the chain? Now, this question cannot be answered a priori. It seems one cannot draw a limit for conceptual reasons. It depends in the single case on how much is included in the agent’s intention. If, in the second example, preventing the quarrel actually was the final purpose of the teacher (which may be a plausible hypothesis), then this is the last element of the generated chain of actions in question.

What, then, is the nature of the process of generation itself? What does the expression “by doing” signify? This has been debated and quite thoroughly analysed in recent action theory. One of the most influential discussions is in Goldman [33]. He distinguishes between four kinds of “level generation”, as he calls it: (a) causal, (b) conventional, (c) simple, and (d) augmentative.13

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12 In this chapter I use the locution “performing one action by performing another action”. It seems, then, that I take a stand in the controversy concerning whether there is one or an indefinite number of actions involved in an action chain. Is “twisting one’s hand” the same actions as “starting the car” or are they different actions? My way of expressing myself does not, however, mirror any particular ontological commitment. In fact I avoid addressing that problem here. My inclination on this issue is towards the position advanced by D. Davidson [22], entailing that we are dealing with different descriptions of the same action rather than different actions.

13 The theory of activity presented by the Russian psychologist Aleksei Leontiev, for instance in [47], has features which resemble the theory proposed here. However, there are also important differences: Leontiev distinguishes between the notions of activity, action and operation. The relation between these categories is similar to the relation of embedding analysed here. An activity in a sense consists of a series of actions and an action is performed by the execution of a set of operations. However, the three categories are ontologically separate in Leontiev’s structure. The concept of activity is the most general concept. An activity is necessarily motivated. There can be no activity without a motive. Actions are the basic components of an activity and actions have conscious goals. Apart from its intentional aspect an