Non-culmination and the structure of activities

In the growing body of literature on non-culmination (Koenig & Muansuwan 2000, Bar-el et al. 2005, Tatevosov & Ivanov 2009, Martin & Schäfer 2012, Althüler 2013, 2014, Martin 2015, a.o.) one question seems to have attracted less attention than it may deserve: why do some but not all accomplishment predicates allow for non-culminating interpretations? Famously, under the episodic non-iterative construal, availability of a non-culminating reading is constrained by the agentivity of the external argument:

\[(1) \quad \text{wind} \quad \text{Alim} \quad \text{minute} \quad \text{door-ACC} \quad \text{open-PST}
\]

‘The wind || Alim spent two minutes opening the door’

Agentivity is not the only factor, however. Non-culminating accomplishments are also restricted contextually, (2), lexically, (3), and by the properties of the internal argument, (4).

\[(2) \quad \text{Scenario 1. The lock in the door is broken. The agent tries to open the door with the key, then applies a picklock, then uses a crowbar, then tries to disassemble the lock, etc. At some point, he gives up.}
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\[(3) \quad \text{Scenario 2. The door is opened by typing a code that consists of a sequence of numbers, e.g., 1-2-3-5-5-6-7-8. After typing “5”, the agent stops.}
\]

\[(4) \quad \text{Kerim spent two minutes opening the door}’
\]

The goal of this paper is to explore whether it is possible to account for the patterns in (1)-(4) relying on the following working hypothesis:

\[(5) \quad \text{At the point where “a non-culminating accomplishment” combines with aspectual operators, it denotes a predicate of activities.}
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According to (5), perfective non-culminating accomplishments in (1)-(4) are nothing more than perfective activities, just like ‘John walked for two hours’. To produce a non-culminating reading, an accomplishment eventuality description has to be converted (by whatever available means) into an activity description. Restrictions that manifest themselves in (1)-(4) are thus restrictions on this conversion. Infelicity/ungrammaticality we observe in (3), for example, results from the failure of ‘read a symbol’ and similar predicates to present themselves as an activity.

We can benefit from studying the above restrictions in two ways. First, we can find out what aspects of the internal structure of accomplishments favor their reinterpretation as activities and how exactly. Secondly, we can better understand what it means for an eventuality description to be a predicate of activities.

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1 All examples are from Mishar Tatar, spoken in the Volga region of Central Russia.
I will explore one specific aspect of the meaning of accomplishment predicates, hoping that restrictions revealed by (1)–(4) may prove to be (at least partly) reducible to it. Assuming, with the literature on predicate decomposition starting from Dowty 1979, that accomplishments minimally consist of a process and change of state components, I will focus on the temporal structure of the former. I will observe that if contextually relevant parts of this component are arranged by the temporal precedence relation in a unique way, a non-culminating reading is unavailable. For ‘open the door’ on the Scenario 2, contextually salient subevents making up the process component do show such a unique temporal arrangement. On the Scenario 1, this is not the case. In (3), a similar unique arrangement seems to be lexically specified for ‘put on’. In (4), acceptability decreases with the “size” of the internal argument. This can be naturally attributed to the fact that the smaller the size of what one reads is, the more difficult it is to come with a partition of an eventuality into subparts that can be arranged in a non-unique way (see Rothstein 2004: 111–112 for related observations). The same mechanism may lie behind the unacceptability of NCAs with natural forces like (1) and other entities incapable of goal-oriented behavior, since workings of natural forces are not, under normal circumstances, temporally arrangeable in a non-unique way.

Absence of strict temporal organization thus seems to be a necessary property of activities. A larger question I will address in this paper, even thought in a rather speculative way, is whether this also is a sufficient property. Having discussed some evidence pointing towards the negative answer to this latter question, I will conclude by outlining a possible modal extension of a temporal analysis.