Telicity, Result, and Durative Adverbs in Chinese

This work makes several inquiries about the Chinese durative adverbs. J.-W. Lin (2003) makes a distinction between process-related (P-related) and result state-related (RS-related) interpretations of the durative adverbs. Several questions remain, however. Semantically, there are two questions. First, it is well-known that English telic expressions are marginally compatible with the durative adverbs, as in (1a), but they can be modified by terminative adverbs, as in (1b) (cf. Verkuyl 1993, Krifka 1998, and Kratzer 2003). On the other hand, Chinese durative adverbs seem to trespass this telicity constraint, unless a completive marker is present. See (2). This is the issue of telicity:

(1) a. ??John built a house for three days.  
   b. John built a house in three days.

(2) a. Zhangsan gai-le fangzi san-tian.  

‘ZS built the house for three days.’

Second, According to Piñón (1999), the result state (RS-related) durative adverbs can only occur with the event which denotes an explicit result state. See (3). However, Chinese durative adverbs seem more unrestricted with respect to the result state. See (4). This is the issue of resultativity:

(3) a. John opened the window for three hours. (RS-related)  
   b. John built the house for three hours. (*RS-related)

(4) a. ZS dakai chuanghu henjiu.  
   b. ZS gai-le fangzi san-tai le.

‘ZS opened the window for long.’ (RS)  
‘ZS built the house for three days.’ (RS)

Under close scrutiny, the presence of le’s (verb-le and sentence-le) is likely to impose different interpretations. The ‘un-telicity’ is allowed by the verb-le, while the free result state by sentence-le. How should this be? I argue that the answer lies in the nature of the two le’s. Following X.-N. Liu (1985), verb-le actually denotes a ‘realization’ aspect, which marks the SI (initial point of the situation), but rather a perfective marker as argued by Smith (1991). Therefore, the P-related interpretation is ensured by the presence of verb-le. On the other hand, I argue that sentence-le provides a reference point (R) in the Reichanbachian framework. Therefore, it provides an R for the measurement of the duration. Therefore, I argue that a fine-grained categorization of Chinese durative adverbs should include P-relate, RS-related, and RT-related. In terms of Klein’s theory (Klein 1994 and Klein et al. 2000), I argue that the P-related adverbs modify the only state (or source state) in 1-phase lexical content (or 2-phase content), RS-related modify the target state in the sense of Parson (1990), or a explicit result state in Piñón (1999), and RT-related modify the resultant state (Parson 1990) or the other two states (source state or target state) with respect to a reference point. The last points can be made clear by the examples in (4). (4a) presents an event which occurred in the past and the [window become open] state is temporally bounded per se, and the reference point, if any, does not change the modifying relation. On the other hand, (4b) shows that ‘for this time being (or until the reference time), the event has been completed for three days.’ The resultant state never ceases, but may be measured with an explicit reference time. Therefore, (4b) is the case of RT-related interpretation.

This analysis also solves the telicity problem. In virtue of the realization aspect denoted by verb-le, the event is not necessarily a closed one; the SF (final point of the situation) appears only by implicature, which is cancelable. This analysis also directly accounts for the homogeneity condition for the durative adverbs (Moltman 1991, Lin 2003). Note that the
three states modified are homogeneous (process, target state, resultant state). Therefore, the homogeneity requirement is naturally born out without any stipulations.

Another issue is related to the PART operator in these kinds of constructions. The crucial examples are the ‘atelic’ use of telic expressions in English:

(5)  a. ?John ate a hamburger for three days.     b. John mended the wall for years.

These examples cause problems for the telicity theory in English. It seems that a PART operator is working here to ‘atelicize’ the telic expressions (Kratzer 2003 and J.-W. Lin 2003). However, the ontology of the PART operator is not clear in their accounts. I argue, on the other hand, the intuitive sense of the PART operator comes from the Universal Part-of Notion (UPON) holding between the arbitrary final point $S_{F(A)}$ and the natural final point $S_{F(N)}$ ($S_{F(A)} \leq S_{F(N)}$). The ontology of UPON, simply speaking, is that one can cease doing a thing when it has not been finished yet; on the contrary, when one task naturally comes to an end, one cannot but cease doing it. The $S_{F(A)}$ in Chinese is introduced morphologically by the verb-\textit{le}, while in English it is introduced by other means. When a clear arbitraryness (of speaker or of actor) is involved, the sentences allow the ‘atelic’ counterpart perfectly:

(6)  a. John made Bill eat the hamburger for three hours.
    b. John deliberately mended the wall for years.

One important prospect of the durative adverbs is the syntactic representation. I argue that the adjunct hypothesis works better than the complement hypothesis. Mapping from their semantic properties, the durative adverbs are adjuncts licensed by different heads. P- and RS-related durative adverbs, being related to the argument structure, are treated as predicate-internal durative adverbs, while RT-related predicate-external. Under the framework of the light verb syntax in Jonah Lin (2001), P-related durative adverbs are licensed by verb-\textit{le}. RS-related durative are licensed by the result-denoting projection (that is, root verbs in Hale and Keyser 1993, 1997, and 2002):

(7)  a. [xie-le zhe-feng xin sa-tian]     a. [da-kai chuanghu wu-fenzhong]

    ‘write this letter for three days’     ‘open the window for five minutes’

As for the RT-related durative adverbs, it is licensed by sentence-\textit{le}, which heads the AspP that immediately dominates the subject vP. I argue, following the idea of Jonah Lin (2004) with the evidence from CED, that Asp is a raising category, which triggers a comp-to-spec movement (Kayne 1994). Therefore, the main predicate precedes the durative adverbs after the raising occurs. The results show a good match in the syntax-semantics interface.