



**HAL**  
open science

# The expression of caused motion by French learners of Chinese L2: semantic encoding and syntactic structures

Arnaud Arslangul, Henriëtte Hendriks, Maya Hickmann, Annie-Claude Demagny

► **To cite this version:**

Arnaud Arslangul, Henriëtte Hendriks, Maya Hickmann, Annie-Claude Demagny. The expression of caused motion by French learners of Chinese L2: semantic encoding and syntactic structures. International Workshop on Neglected Aspects of Motion Events Description, May 2017, Paris, France. hal-01534179

**HAL Id: hal-01534179**

**<https://hal.science/hal-01534179v1>**

Submitted on 7 Jun 2017

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

# The expression of caused motion by French learners of Chinese L2: semantic encoding and syntactic structures

---

**Arnaud Arslangul<sup>1</sup>, Henriëtte Hendriks<sup>2</sup>, Maya Hickmann<sup>3</sup>, Annie-Claude Demagny<sup>3</sup>**

<sup>1</sup> Centre de recherches linguistiques sur l'Asie orientale UMR 8563, INALCO

<sup>2</sup> Department of Theoretical and Applied Linguistics, University of Cambridge

<sup>3</sup> Laboratoire Structures Formelles du Langage UMR 7023, CNRS & Université Paris 8

arnaud.arslangul@inalco.fr ; hpjmh2@cam.ac.uk ; maya.hickmann@cnsr.fr ; annie-claude.demagny@cnsr.fr

Space is an important domain of our cognitive system, which develops in children from an early age on and is often considered to be universal. However, languages vary greatly in the way they encode static and dynamic space. Much research conducted within the framework proposed by Talmy (1985, 2000) analyzed the expression of Path in voluntary motion. However, few studies have examined caused motion, especially in languages that are sometimes considered to be “equipollent” such as Chinese (Slobin 2004). Typological differences between languages also raise questions about the process of second language acquisition: do the typological properties of the source language influence motion expression in the target language? What developments can we expect in this area during the acquisition of a foreign language?

To answer these questions, the present study examines how French learners of Chinese L2 at two proficiency levels (24 intermediate, 12 advanced) encode caused motion events in comparison to native speakers of Chinese (Ji 2009; Ji *et al.* 2011a, 2011b) and of French (Hickmann & Hendriks 2010; Harr 2012; Demagny 2015). It is based on an oral corpus consisting of descriptions of 32 animated clips showing an agent moving objects in various ways and according to four different Paths. Responses were analyzed according to the linguistic means used by speakers when encoding motion components, particularly Cause and Path, as well as the syntactic structures in which they occurred (simple, complex, distributed).

Several hypotheses were tested: (a) French and Chinese native speakers should show different response patterns given the typological properties of their languages; (b) intermediate learners should have difficulties encoding Cause and Path components in a single clause because of the necessary grammatical devices (directional verb resultative, *bǎ* construction, *zhe* durative construction); (c) responses should show greater syntactic complexity and a more typical Chinese lexicalization pattern in the expression of caused motion among advanced learners than among intermediate learners.

The results show first that (a) French native speakers mainly use complex syntactic structures in which they encode either Path or Cause in the main verb and use subordinate clauses with a gerund to express the simultaneity of Sub-events (ex 1-2). In addition, this variability depends on the type of Path described (Demagny 2015). (b) Second, Chinese native speakers use a simple syntactic structure with Cause in the verb and Path in the satellite (the “directional verb resultative”, ex 3), but also unexpected complex syntactic structures with Cause outside of the verb in a subordinate clause (ex 4). (c) Intermediate learners have difficulties selecting linguistic means of encoding Cause and Path. They produce mainly simple structures, but also complex structures as well as an idiosyncratic structure (ex 5) that is similar to a serial verbal construction, involving two verbs used in concatenation ( $V_C + NP_{Fig} + V_P + NP_{Gr}$ ).<sup>1</sup> This atypical structure has already been observed in English learners of Chinese L2 (Ji & Hohenstein 2014). (d) Advanced learners mainly use complex structures (ex 4), even more frequently than Chinese native speakers.

---

<sup>1</sup> Abbreviations: V: main verb, O: other devices, D: directional verb resultative, NP: nominal phrase, PFV: perfective aspect, CL: classifiers, C: Cause, P: Path, M: Manner, Fig: Figure, Gr: Ground.

- 1) Il traverse [V<sub>P</sub>] la rue en tirant [O<sub>C+M</sub>] un cheval de bois.  
 3SG cross the street pulling a wooden horse  
 ‘He crosses the street pulling a wooden horse.’
- 2) Il pousse [V<sub>C+M</sub>] une bouée en montant [O<sub>P</sub>] la colline.  
 3SG push a buoy climbing the hill  
 ‘He pushes a buoy climbing the hill.’
- 3) 他 把 轮子 推过 [V<sub>C</sub>D<sub>P</sub>] 马路。  
 tā bǎ lúnzi tuī-guo mǎlù  
 3SG BA wheel push-across road  
 ‘He pushes the wheel across the street.’
- 4) 他 推 [O<sub>C</sub>] 着 一 个 箱子 上 [V<sub>P</sub>] 了 房顶。  
 tā tuī zhe yī ge xiāngzi shàng le fángdǐng  
 3SG push ZHE one CL luggage climb PFV roof  
 ‘He climbed the roof pushing a luggage.’
- 5) \*他 拉 [V<sub>C</sub>] 一 个 箱子 下 [V<sub>P</sub>] 山。  
 tā lā yī ge xiāngzi xià shān  
 3SG pull one CL luggage descend mountain  
 ‘He pulls a luggage goes down the mountain.’

In conclusion, even at a high level of proficiency, learners encode Path in verbs rather than in directional verb resultatives. This lexicalization pattern invites them to choose a complex syntactic structure that is closer to their L1 and allows them to avoid the use of a satellite to encode Path. It would be interesting to carry out future research to test the cognitive implications of these results on speakers’ representations of motion events.

#### References:

- Demagny, A.-C. (2015). Interrelationships between Time and Space in English and French discourse: Implications for second language acquisition. *LIA*, 6 (2), pp. 202–236.
- Harr, A.-K. (2012). *Language-Specific Factors in First Language Acquisition* (p. 402). Berlin: de Gruyter Mouton.
- Hendriks, H. & Hickmann, M. (2015). Finding one’s path into another language: on the expression of boundary crossing by English learners of French. In: *Modern Language Journal*, 99, pp. 14-31.
- Hendriks, H., Hickmann, M. & Demagny, A.-C. (2008). How English learners express caused motion in French. *AILE*, 27, 15–41.
- Hickmann, M., & Hendriks, H. (2010). Typological constraints on the acquisition of spatial language in French and English. *Cognitive Linguistics*, 21(2), 189–215.
- Ji, Y. (2009). *The expression of voluntary and caused motion events in Chinese and in English: Typological and developmental perspectives*. Ph.D, University of Cambridge.
- Ji, Y., Hendriks, H. & Hickmann, M. (2011a). The expression of caused motion events in Chinese and in English: Some typological issues. *Linguistics*, 49(5), 1041–1077.
- Ji, Y., Hendriks, H. & Hickmann, M. (2011b). How children express caused motion events in Chinese and English: Universal and language-specific influences. *Lingua*, 121, 1796–1819.
- Ji, Y. & Hohenstein, J. (2014). The syntactic packaging of caused motion components in a second language: English learners of Chinese. *Lingua*, 140, 100–116.
- Slobin, D. I. (2004). The many ways to search for a frog : Linguistic typology and the expression of motion events. In S. Strömquist & L. Verhoeven (Eds.), *Relating events in narrative : Vol. 2. Typological and contextual perspectives*, pp. 219–257. Mahwah, New Jersey: Lawrence Erlbaum.
- Talmy, L. (1985). Lexicalisation patterns: semantic structure in lexical form. In T. Shopen (Ed.), *Language typology and semantic description, vol. 3 Grammatical categories and the lexicon*, pp. 57–149. Cambridge: Cambridge University Press.
- Talmy, L. (2000). *Toward a cognitive semantics. Vol. 1. Concept structuring systems*. Cambridge MA: MIT Press.