



The Lexical Semantics of Motion Verbs 奔, 走, and 跑 in Shanghainese: Implications for Theories of Verbal Meaning

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Roadmap

- **Introduction**
- **Interpretive Properties of the Three Motion Verbs in Shanghainese**
- **Comparing with Mandarin 奔, 走, and 跑**
- **Theoretical Implications**



Introduction

- Examine the verbs of motion 奔, 走, and 跑 and their distributions in motion and resultative constructions in Shanghainese
- Specifically examine entailments of **manner versus result**, which have been argued to be **complementary lexical semantic entailments** (RHL 1998, 2010, *inter alia*).
 - (1) **Manner/Result Complementarity**: Manner and result meaning components are in complementary distribution. A verb lexicalizes only one.



Introduction

- Compare the translational equivalents of these verbs in Mandarin, demonstrating that the equivalents of these verbs exhibit **different distributions and interpretations from Shanghainese**
- Underscore the importance of **considering lexical differences across languages** in the expression of motion and resultativity and for building theories of verbal meaning in general



Manner versus Result

- **Manner**: “any change that **cannot be characterized in terms of an ordered set of values of a single attribute**”, typically involving **combinations of multiple changes that involve multiple attributes**
- **Result**: **scalar change**, and verbs lexicalizing scalar change “lexically specify a scale, where **a scale is a set of degrees—points or intervals indicating measurement values on a particular dimension (e.g., height, temperature, cost), with an associated ordering relation**”

(Rappaport Hovav & Levin 2010)

Interpretive Properties of the Three Motion Verbs in Shanghainese

- 奔: manner of motion (i.e., “running”)
- 走: i) manner of motion; ii) change-of-location (i.e., “be gone/leave”)
- 跑: i) manner of motion; ii) change-of-location; iii) pure motion with manner unspecified (i.e., “come/go”) esp. when followed by a directional/goal phrase

(2) 张三辣海 奔 / 走 / ?跑。

“ZS is running/walking/running.”

[manner of motion]

(3) 侬 跑 / 走 / *奔 啦？

“You left?”

[change-of-location]



Interpretive Properties of the Three Motion Verbs in Shanghainese

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(4) a. 侬 跑 / 走 过来个辰光帮我眼镜带过来。 [pure motion with manner unspecified]

“Bring me the glasses when you come/walk here.”

b. 伊从上海一路 跑 / #走 到纽约。

“He came/went all the way to New York from Shanghai.”

Interpretive Properties of the Three Motion Verbs in Shanghainese

(5) 依**走**过来个辰光帮我眼镜带过来。

“Bring me the glasses when you walk here.”

(6) 依**奔**过来！

“You run to me!”

(7) 依**勁奔**，慢慢叫 **跑 / 走**。

“Don’t run, walk slowly.”



图12-13：上海公共租界工部局警务处预备队警备车上的警告旗帜：

(Picture credit: Sheng Yimin)

奔/跑/走 Specifying Manner or Result?

Diagnostics #1: Denial of manner/result

Manner verbs: * **denial of any manner of movement** (e.g., *did not move a muscle*)

Result verbs: * **denial of a result state** (e.g., *nothing is different about it*) that could plausibly be encoded by the verb (Levin 1993; BKG 2020)

(8) a. Jim **ran** / **jogged** / **blinked**, **# but didn't move a muscle**.

b. Bob just **ran** quickly, **but nothing is different about him**.

(9) a. Shane just **broke** the vase, **# but nothing is different about it**.

b. Kim **broke** my DVD player, **but didn't move a muscle** - rather, when I let her borrow it a disc was spinning in it, and she just let it run until the rotor gave out!

(BKG 2020: 167-175)

奔/跑/走 Specifying Manner or Result?

- Building on the diagnostics in Mandarin from Liu (2022), **奔, 走 and 跑 have uses that pattern like a manner verb**, whereas **the interpretation of 走 and 跑 as “be gone” patterns like a result verb**.

- (10) 张三**奔/跑/走**了半天, **但是还辣原地** / # **但是伊其实啥事体也没做 (人家抬了伊一路)**。
“ZS sprinted / ran / walked for half a day but in fact he did not move from where he was / # he did not do anything (because someone carried him out).”
- (11) 张三**跑/走**了半天了, # **但是还辣原地** / **但是伊其实啥事体也没做 (人家抬了伊一路)**。
“ZS has been gone for half a day # but he did not move from where he was / but he did not do anything (because someone carried him out).”

奔/跑/走 Specifying Manner or Result?

Diagnostic #2: selectional restrictions on the subject argument

Manner verbs require a specific action that is usually performed by certain kinds of individuals (BKG 2020: 174)

(12) a. 张三 跑 / 走 / 奔 来老快个。

“ZS runs/walks/runs very fast.”

b. 掰台机器 跑 / 走 / *奔 来老快个。

“This machine runs (operates) very fast.”

- (12b) receives a reading whereby the machine’s normal operation is described as fast (not necessary that something moves for a machine to work)
- 走 and 跑 **do not have the regular interpretations specifying manner of motion** when their subjects are inanimate

奔/跑/走 Specifying Manner or Result?

Diagnostic #3: Duration of action

Both manner of action and a result state **can be measured temporally** (Liu 2022, see also Dowty 1979 on *for*-phrases in English)

(13) 跑 / 走了交规辰光

[ambiguous, measuring manner of motion or result]

a. “ran/walk for some time”

b. “gone for some time”

(14) 奔了交规辰光

[unambiguous measuring manner of motion]

“run for some time”

奔/跑/走 Specifying Manner or Result?

Diagnostic #4: compatibility with the telic suffix 脱 *-tak* in Shanghainese

The suffix is analyzed as a maximality operator, operating on verbs that can project a scale (Zhu 2022), i.e., only result verbs that lexicalize scalar change

- When followed by the telic suffix *-tak*, 走 and 跑 **can only be interpreted as “be gone”**
- 奔 **can never co-occur with the suffix**, further indicating that it is a pure manner verb

(15) 跑脱 / 走脱 / *奔脱
“be gone” #“**running, walking**”

奔/跑/走 Specifying Manner or Result?

Diagnostic #5: ability to occupy the V1 and V2 slot in resultative constructions in the language

Shanghainese has a V-来-V-了 construction (counterpart to resultative V-得-V-了 construction in Mandarin) where V1 typically is reserved for manner verbs and V2 for result verbs. Resultative VV compound (RVC) formation as in Mandarin is much less productive.

- All three verbs **can appear in V1 position** and they pattern like manner verbs when used as V1

(16) 鞋子 跑 / 走 / 奔 坏 脱了
“the shoes broke from running/walking/running”

(17) 张三 跑 / 走 / 奔 来吃力了, # 但是其实伊啥事体也没做。
“Zhangsan got tired from running/walking/running, but in fact he didn't do anything.”

奔/跑/走 Specifying Manner or Result?

- In its result use, 跑 can appear as V2, patterning as a result verb, while 走 (also 奔) resists appearing as V2 even on its result interpretation

(18) 一阵风拿花吹来 *奔 / *走 / 跑了, # 但是花还辣原地。

“A gust of wind blew the flower away, but it did not move from where it was.”

(19) Scenario: Lisi fainted and got carried away by others.

李四被抬来 *奔 / *走 / 跑了。

“Lisi was carried away.”



奔/跑/走 Specifying Manner or Result?

- **跑** has a pure motion usage with manner unspecified (i.e., “come/go”) especially when followed by a directional/goal phrase

(20) 伊从上海一路跑到纽约。

“He came/went all the way to New York from Shanghai (by flying / by ship / etc.).”

奔/跑/走 Specifying Manner or Result?

- While there seems to be no intuitive manner specified, **this usage of 跑 nonetheless disallows denial of an action by the subject and allows denial of a result**, and therefore still **patterns like a manner verb**

(21) Scenario #1: John had a car accident and was paralyzed. He wanted to get better medical treatment in NY and so his family decided to fly him to NY...

伊全身瘫痪一块肌肉也勿好动, 还一路跑到纽约去看毛病。

“Despite the fact that he was paralyzed and could not move a muscle, he went all the way to NY to get treatment.”

(22) 伊往埃只方向跑了半天, 但是还辣原地。

“He went in that direction for a while, but he is still where he was.”



A Cross-linguistic Consideration

Do translational equivalents of individual verbs across languages have the same set of lexical semantic entailments and do these entailments lead to the same grammatical effects?



Comparing with Mandarin 奔, 走, and 跑

- Mandarin 奔, 走, and 跑 are **orthographically identical** to their Shanghainese counterparts
- Nonetheless, these three motion verbs **do not have completely identical distributions and manner/result interpretations**



Interpretive Properties of Mandarin 奔, 走, and 跑

- **奔**: manner of motion but highly restricted to lexicalized verbal compounds such as 狂奔 or 奔跑, which describe a manner of running
- **走**: i) manner of motion ii) change-of-location (“be gone/leave”)
- **跑**: i) manner of motion; ii) mixed manner-result (“run away”)

(23) 张三正在 奔跑 / 走 / 跑, # 但是他什么也没做 / 但他根本没移动是在原地奔跑 / 走 / 跑。
[manner of motion]

“ZS is running / walking / running # but he actually didn’t do anything / but his location didn’t change because he was running / walking on the spot.”



Mandarin 走

- 走 has a **change-of-location usage**, also appearing as **V2 in an RVC**

(24) 老师走了, # 但是还在原地 / 是被医护人员抬出去的。 [change-of-location]

“The teacher is gone # but she’s actually still where she was / she was carried out by the medical staff.”

(25) 一阵风把那朵花吹走了, # 但是花还在原地。 [V2 change-of-location]

“A gust of wind blew that flower away # but the flower was still where it was.”



Mandarin 跑

- 跑 in Mandarin, however, **cannot mean “leave” or “be gone”** and is **only interpreted as “running away”** in its simple intransitive use

(26) a. 那个被打昏的犯人跑了, # 但他其实还在监狱 / 他是被同伙抬出去的。

“The prisoner who was beaten unconscious ran away # but he was actually still in prison / he was carried away by his accomplice.”

b. 你准备明天跑吗？

*“Are you leaving tomorrow?”

?“Are you running away tomorrow?”

“Are you running (the marathon) tomorrow?”



Mandarin 跑: Mixed Manner-Result

- This use seems to **pattern like a result verb**, appearing in **V2 position in an RVC** and **disallowing denial of result**

(27) 张三打**跑**了李四, # **但李四还在原地**。

“Zhangsan hit Lisi till Lisi ran away # but Lisi actually is still where he was.”

Mandarin 跑: Mixed Manner-Result

- However, **this same use as “run away” also seems to retain entailments of “running”**; a context whereby the subject did not actually run is infelicitous

(28) Scenario: Zhangsan was scared by Lisi so he slowly walked to the door and hid behind.

他被吓跑了。

“He was so scared that he ran away.”

- It also **disallows denial of action**, indicating that this use also **patterns like a manner verb** (compare SH)

(29) 张三打跑了李四, # 但李四什么也没做。

“Zhangsan hit Lisi till Lisi ran away # but Lisi actually didn’t do anything (because someone else carried his unconscious body away).”

- It imposes animacy restriction on the subject, indicating that this use **involves manner** (compare SH)

(30) *花被风吹跑了。

“The flower was blown away by the wind.”

Interim Summary

	Manner of motion	Change-of-location	Motion without manner	Mixed manner-result (run away)
PAO	✓	✓	✓	✗
ZOU	✓	✓	✗	✗
BEN	✓	✗	✗	✗

Table 1: Shanghainese motion verbs

	Manner of motion	Change-of-location	Motion without manner	Mixed manner-result (run away)
PAO	✓	✓	✗	✓
ZOU	✓	✓	✗	✗
BEN	✓ (restricted)	✗	✗	✗

Table 2: Mandarin motion verbs



Theoretical Implications: On Manner versus Result

- **Manner/Result Complementarity** has been argued to be a **cross-linguistic constraint on possible verb meanings**
- The findings here demonstrate that **it can only be a tendency** rather than a cross-linguistic grammatical principle
- Shanghainese exemplifies this tendency: the motion verbs 奔, 走, and 跑 each **entail either manner only, or are ambiguous between manner and result uses**
- Importantly, 走 and 跑 are ambiguous between manner and result, but can **never entail both at the same time**



Theoretical Implications: On Manner versus Result

- (10) 张三奔/跑/走了半天, 但是还辣原地 / # 但是伊其实啥事体也没做 (人家抬了伊一路)。
“ZS **sprinted** / **ran** / **walked** for half a day but in fact he did not move from where he was / # he did not do anything (because someone carried him out).”
- (11) 张三跑/走了半天, # 但是还辣原地 / 但是伊其实啥事体也没做 (人家抬了伊一路)。
“ZS has **been gone** for half a day, # but he did not move from where he was / but he did not do anything (because someone carried him out).”



Theoretical Implications: On Manner versus Result

- Mandarin, specifically Mandarin 跑, shows that **manner and result are not always complementary**
- In its use as “run away”, **Mandarin 跑 demonstrates mixed manner-result properties**, despite it appearing as V2 (result position)

(27) 张三打跑了李四, # 但李四还在原地。

“Zhangsan hit Lisi till Lisi ran away, # but Lisi actually is still where he was.”

(29) 张三打跑了李四, # 但李四什么也没做。

“Zhangsan hit Lisi till Lisi ran away, # but Lisi actually didn’t do anything (because someone else carried his unconscious body away).”



Theoretical Implications: Structure of Manner and Result

- Manner and result have been argued further to **constrain the kinds of event structures individual verbs have**
- Modern theories of argument structure and lexical semantics **decompose a verb** into:
 - **an event template** constructed out of a limited number of **primitive predicates that indicate event types** (e.g., BECOME, CAUSE, ACT, etc.)
 - **idiosyncratic elements called roots** that **describe a verb's idiosyncratic semantic content**

(Jackendoff 1976, 1990; Marantz 1997; Van Valin & LaPolla 1997; Rappaport Hovav & Levin 1988, 2010; Levin & Rappaport Hovav 1998; Harley 2003; Borer 2005; Ramchand 2008; Alexiadou *et al.* 2015; Beavers & Koontz-Garboden 2021, *inter alia*)



Theoretical Implications: Structure of Manner and Result

- RHL (2010): **root plays a role in determining event structure**, manner entailing roots take are in different position from result entailing roots in an event structure

(31) a. MANNER → [x ACT_{<MANNER>}]

[Modifier of predicate]

e.g., [x ACT_{<RUNNING / WALKING>}]

b. RESULT → ...[x BECOME <RESULT-STATE>]

[Complement of predicate]

e.g., [x BECOME <BE GONE>]

- Event structure **commonly translated directly into syntactic structure** in frameworks like Distributed Morphology, where **manner roots are modifiers of little v heads** and **result roots form small clause complements of v** (e.g., Harley 2003; Folli and Harley 2005; BKG 2020, *inter alia*)



Theoretical Implications: Structure of Manner and Result

- Alternate position: **roots have no grammatically relevant content and simply provide real-world information**
- Roots can always be in either modifier or complement position and apparent **incompatibility is regulated by real-world knowledge about possible events** described by that event structure (Borer 2003, 2005; Mateu and Acedo-Matellán 2012, *a.o.*)
- **Resultative constructions are instructive in this debate**, as they are often analyzed as having **bi-eventive event structure with an eventive predicate (e.g., little *v*) and a result state complement (e.g., small clause)**, but with the **eventive predicate modified by a separate manner root from the result small clause forming root** (in particular Sybesma 1997; Huang 2006 for Mandarin)



Theoretical Implications: Structure of Manner and Result

Are roots constrained by their lexical semantic entailments or are they completely free in terms of how they are integrated into an event structure?



Theoretical Implications: Structure of Manner and Result

- The findings from the cross-linguistic comparison here suggests **neither position is exactly right**
- Shanghainese 走 has a **result use “be gone”** in its **simple intransitive form**

(11) 张三跑/走了半天, # 但是还辣原地 / 但是伊其实啥事体也没做 (人家抬了伊一路)。
“ZS has been gone for half a day # but he did not move from where he was / but he did not do anything (because someone carried him out).”



Theoretical Implications: Structure of Manner and Result

- Yet this result use **resists V2 position**, usually reserved for result verbs

(17) 一阵风拿花吹来 *奔 / *走 / 跑了, # 但是花还辣原地。

“A gust of wind blew the flower away, but it did not move from where it was.”

- Assuming V1 and V2 in Shanghainese V-来-V-了 constructions map to modifier and complement positions (see Huang 2006 for such an analysis of the V-得-V-了 construction in Mandarin), this indicates that **result entailments do not always map to complement position**



Theoretical Implications: Structure of Manner and Result

- Likewise, having **manner entailments** do not necessarily map to **modifier (V1) position** as illustrated by Mandarin 跑, which **productively** appears as **V2** even though it exhibits **mixed manner-result properties**

(27) 张三打跑了李四, # 但李四什么也没做。

“Zhangsan hit Lisi till Lisi ran away # but Lisi actually didn’t do anything (because someone else carried his unconscious body away).”

(29) 张三打跑了李四, # 但李四还在原地。

“Zhangsan hit Lisi till Lisi ran away # but Lisi actually is still where he was.”



Theoretical Implications: Structure of Manner and Result

- It is also clear that **roots cannot be completely free either**, with world knowledge ruling out combinations of roots and event structures
- Again, Shanghainese 走 argues against such a position since it is clearly restricted in its ability to appear as V2
- Both **Shanghainese and Mandarin 奔 also argue against such a view**, since they **resist V2 position and are solely manner-entailing**, indicating that manner entailments do play a role in root distribution



Theoretical Implications: Structure of Manner and Result

(18) 一阵风拿花吹来 *奔 / *走 / 跑了, # 但是花还辣原地。

“A gust of wind blew the flower away, but it did not move from where it was.”

(32) 一阵风把那朵花吹*奔了。

“A gust of wind blew that flower away.”



Theoretical Takeaways

- Manner and result entailments are **not necessarily complementary** and individual verbs can entail both
- Manner and result entailments only **correspond partially to modifier and complement positions** in an event structure and therefore only **partially constrain root distribution**
- To account for the empirical observations, we need to permit **some amount of lexical idiosyncrasy**; **individual roots seem to encode grammatical information** like interpretive properties and what kinds of event structures they appear in (see e.g., Harley 2014 for a similar view)



Conclusion

- **Empirical contribution:** Detailed examination of Shanghainese motion verbs and their respective lexical semantic entailments, comparing their interpretive properties and distribution to Mandarin Chinese counterparts
- **Theoretical contribution:** Underscore the importance of considering translational equivalents of verbs across languages in theoretical investigations, illustrate that theories of verbal meaning built on Manner/Result Complementarity and how it constrains root distribution is not empirically adequate for Shanghainese and Mandarin



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Selected References

- Ausensi, Josep, Jianrong Yu and Ryan Walter Smith. 2021. Agent entailments and the division of labor between functional structure and roots. *Glossa: a journal of general linguistics* 6(1): 53. 1–25.
- Beavers, John, and Andrew Koontz-Garboden. 2012. Manner and result in the roots of verbal meaning. *Linguistic Inquiry* 43(3). 331–369.
- Beavers, John, and Andrew Koontz-Garboden. 2020. *The roots of verbal meaning*. Oxford: Oxford University Press.
- Borer, Hagit. 2003. Exo-skeletal vs. endo-skeletal explanations: Syntactic projections and the lexicon. In *Explanation in linguistic theory*, eds. John Moore and Maria Polinsky, 31–67. Stanford: CSLI.
- Borer, Hagit. 2005. Structuring sense: The normal course of events, Vol. 2. Oxford: Oxford University Press.
- Folli, Raffaella, and Heidi Harley. 2020. A head movement approach to Talmy's typology. *Linguistic Inquiry* 51(3): 425-570.
- Huang, C.-T. James. 2006. Resultatives and unaccusatives: A parametric view. *Bulletin of the Chinese Linguistic Society of Japan* 253: 1-43.
- Levin, Beth. 1993. *English verb classes and alternations: A preliminary investigation*. Chicago: The University of Chicago Press.
- Liu, Feng-hsi. 2022. Manner and result verbs in Mandarin Chinese. *Oxford Research Encyclopedia of Linguistics*.
- Liu, Feng-Hsi, and Jialei Zhu. 2022. Why do we say 拉开 but not 拉关? Keynote talk at the 28th Annual Conference of the International Association of Chinese Linguistics (IACL-28), Chinese University of Hongkong, Hongkong (online conference), May 20-22, 2022.
- Mateu, Jaume, and Victor Acedo-Matellán. 2012. The manner/result complementarity revisited: A syntactic approach. In *The end of argument structure*, ed. by María Cristina Cuervo and Yves Roberge, 209–228. Bingley, UK: Emerald Books.
- Rappaport Hovav, Malka, and Beth Levin. 2010. Reflections on manner/result complementarity. In *Syntax, lexical semantics, and event structure*, eds. Malka Rappaport Hovav, Edit Doron, and Ivy Sichel, pp. 21–38. Oxford: Oxford University Press.
- Sybesma, Rint. 1999. *The Mandarin VP*. Springer Science and Business Media.
- Zhu, Jialei. 2022. The syntax and semantics of the inner aspect marker *-tak* in Shanghainese. *Contemporary Linguistics* 24(5): 730-749.



Appendix: An Apparent Counterexample

- **When compounded with a psych verb V1, Shanghainese 跑 in the V2 slot retains (unspecified) manner of motion entailments**, as illustrated by (i), where It is infelicitous to use 吓来跑 to describe the context where the teacher did not move a muscle.

(i) Scenario: The students dressed themselves up as ghosts and monsters. As a result, the teacher got so scared that he fainted, and the doctor had to carry him to the emergency room.

学生子拿老师吓来跑了。

“The students scared the teacher away.”



Appendix: An Apparent Counterexample

- Mandarin 走 exhibits **the same contrast between a psych verb and non-psych verb V1 as with Shanghainese 跑**
- When combined with a V1 that is a psych verb like 吓, 走 **seems to retain its manner entailment and cannot be interpreted simply as “be gone”**

(ii) Scenario: The students dressed themselves up as ghosts and monsters. As a result, the teacher got so scared that he fainted, and the doctor had to carry him to the emergency room.

学生把老师吓走了。

“The students scared the teacher away.”



Appendix: An Apparent Counterexample

- It seems to be **a property of psych verbs in resultative constructions** which lead to these observations
- For example, the English counterpart, i.e., a resultative with a nonverbal complement encoding directional result like “**scare away**”, as indicated by the glosses in (i) and (ii), is **also infelicitous in such contexts**, despite the fact “away” is non-verbal and cannot be said to entail manner
- This suggests that **the manner reading in the Shanghainese example (i) might not be contributed by 跑**, as is the example in (ii) involving Mandarin 走; We leave the question of why resultatives with a psych verb tend to require a manner reading for future investigation