

Frame-semantic analysis of motion scenarios in English, German, Spanish, and Japanese

Michael Ellsworth, Kyoko Ohara,
Carlos Subirats, Thomas Schmidt

How do we compare languages?

Languages differ a lot!

- "He may find his way in, but never out," she cried.
- — Tal vez haya conseguido entrar, pero no saldrá — exclamó — .
- 「いいえ、ゆくのはゆけましょう。でも帰れなくできます。
- "Er mag den Weg hinein finden, aber niemals wieder heraus", rief sie.

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Motion predicates compared

- (find) way + in; (find) way + out
- *Entrar* ‘enter’; *salir* ‘leave’
- 行く and 帰る- ‘go’; 帰れ- ‘return’
- (*Weg*) *hinein* ‘a path in from here’; (*Weg*) *heraus* ‘a path out to here’

Outline

- Pre-existing motion typologies/generalizations
- Frame Semantics
- Examples of translation shift
- German differences overall
- Japanese/Spanish differences overall
 - Incorporation of path
 - Interpolations
 - Reconceptualization as state-change
- Quantitative wrap-up

Talmy's typology

- Verb-frame (V-frame)
 - Image schemas included in verbs of motion
- Satellite-frame (S-frame)
 - Image schemas indicated separately from verbs
- Not clear what it has to say about less central motion-related words, e.g. posture-change...

Other cross-linguistic comparisons relevant to motion

- Ikegami
 - Japanese preference for descriptions of entire scenes rather than individual participants
 - Motion translation-shifted to state change
- Slobin
 - Points out many differences based on frog-story
 - Interpolation of motion in V-frame languages

Frame Semantics

- Organizes words according to their shared backgrounds
 - Self_motion: walk, run...
 - Departing: leave, depart...
- All different levels of semantic granularity are potentially included as frames
- Frame-to-frame relations allow us to specify the relations between the frames
 - Inheritance, Subframe, Inchoative_of, Causative_of, Perspective_on
 - Frame Elements (FEs),

Methodology

- Aligned the texts of three translations with the original numbered “Paragraph.Sentence”
- Annotated motion and location-related verbs in Chapter 14 of *The Hound of the Baskervilles* according to frames
- Annotation was discussed among the authors
- (Many frames that were necessary do not exist in the current FrameNet database; these are marked with *.)

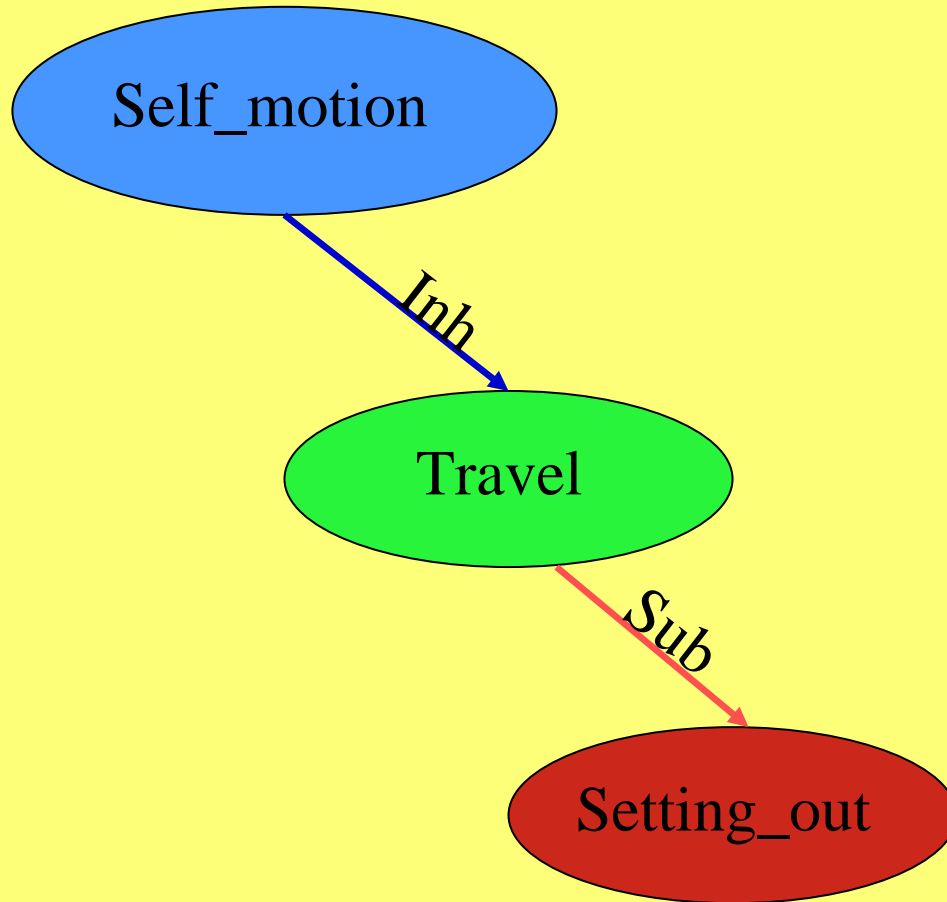
Motion incorporated into Indirect Causation (2.4)

- The wagonette was paid off and ordered to **return**^{*Return} **to**_{Goal} Coombe Tracey forthwith, while we started to walk to Merripit House.
- Despedimos a la tartana y ordenamos al cochero que **regresara**^{*Return} **a**_{Goal} Coombe Tracey de inmediato , al mismo tiempo que nos poníamos en camino hacia la casa Merripit .
- 御者には十分な賃銀をあたえたうえ、まっすぐにクーム・トレーシーへ帰る^{*Return} [return] ように命じて、そろそろとステープルトンの家をさして進んだ。
- Der Wagen wurde bezahlt und **nach**_{Goal} Coombe Tracey **zurückgeschickt**^{Sending}, bevor wir uns zu Fuß in Richtung auf Merripit House aufmachten.

Subpart of motion expressed (2.4)

- The wagonette was paid off and ordered to return to Coombe Tracey forthwith, while we started to **walk**_{Self_motion} **to**_{Goal} Merripit House.
- Despedimos a la tartana y ordenamos al cochero que regresara a Coombe Tracey de inmediato , al mismo tiempo que nos **poníamos en camino**_{Setting_out} **hacia**_{Direction} la casa Merripit .
- 御者には十分な賃銀をあたえたうえ、まっすぐにクーム・トレーシーへ帰る ように命じて、そろそろとステープルトンの家をさし^{*}_{Approach} [head] て**進ん**_{Motion_directional} [proceed] だ。
- Der Wagen wurde bezahlt und nach Coombe Tracey zurückgeschickt, bevor wir uns **zu Fuß**_{*Means_of_motion} **in Richtung**_{Direction} auf Merripit House **aufmachten**_{Setting_out}.

Self-motion translated with Subframe of its subtype



Motion Interpolation in Japanese

(18.3)

- **Creep**_{Self_motion} **forward**_{Direction} quietly and see what they are doing--but for heaven's sake don't let them know that they are watched!"
- **Deslícese**_{Motion_manner} con el mayor sigilo y vea lo que hacen , pero , por el amor del cielo , ¡ que no descubran que los estamos vigilando !
- そっと這い_{Self_motion} よつ_{Motion_directional} [crawl up] て何をしているか見てきた_{Motion} [come] まえ。決して気どられちゃいけないよ」
- **Schleich**_{Self_motion} dich lautlos **nach vorne**_{Direction} und sieh nach, was drinnen geschieht, aber sie dürfen um Himmels Willen nicht merken, dass sie beobachtet werden!"

Simultaneous Posture and Self_motion (19.1)

- I **tiptoed**_{Self_motion} **down**_{*Path} the path and **stooped**_{Change_posture} **behind**_{Locative_relation} the low wall which surrounded the stunted orchard.
- **Avancé**_{Motion_directional} **de puntillas**_{Posture} **por**_{*Path} el sendero y **me agaché**_{Change_posture} **detrás d**_{Locative_relation} el muro de poca altura que rodeaba el huerto de árboles achaparrados .
- 私はひそかに**忍び**_{*Hiding} **よつ**_{*Approach} [sneak up] て、貧弱な果樹を植えた庭にめぐら [surround] した低い塀を小だてに、
- **Auf Zehenspitzen**_{Posture} **schlich**_{Self_motion} ich den Pfad **entlang**_{*Path} und **duckte**_{Change_posture} mich **hinter**_{Locative_relation} der niedrigen Mauer, die den vernachlässigten Obstgarten umgab.

Implicit Body_movement with Perception_active ‘look’ (21.4)

- Looking **over**_{Locative_relation}, I saw the naturalist pause at the door of an out-house in the corner of the orchard.
- **Alzando**_{Body_movement} un poco **la cabeza**_{Body_movement} vi que el naturalista se detenía ante la puerta de una de las dependencias de la casa , situada en la esquina del huerto .
- **伸び**_{Body_movement} [stretch] **あがっ**_{Motion_directional} [ascend] て見ると、ステープルトンが果樹園のすみの物置の前に立って何かしている姿がみえた
- Ich schaute **über**_{Locative_relation} die Mauer und sah den Naturforscher an der Tür eines Häuschens in einer Ecke des Gartens stehen .

Shift to holistic perspective (27.1)

- "It's **moving**_{Motion} **towards**_{Direction} us, Watson."
- — **Viene**_{Motion} **hacia**_{Direction} nosotros , Watson .
- 「あの霧はこっちへ**拡が**_{Dispersal} [spread] てくるね、ワトスン君」
- "Sie **kommt**_{Arriving} **auf**_{Locative_relation} uns **zu**_{Arriving}, Watson."

Motion reconceptualized as Appearing (37.3)

- The steps grew louder, and **through***Path the fog, as **through***Path a curtain, there **stepped**Self_motion the man whom we were awaiting.
- El ruido de las pisadas se intensificó y , **a través de***Path la niebla , como si se tratara de una cortina , **surgió**Motion_directional el hombre al que esperábamos .
- 足音はしだいに大きくなって、やがて銀の幕をたれたような濃霧の中から、待ちわびた人が姿をあらわしCome_to_be [appear] た。
- Die Schritte wurden lauter, und **durch***Path den Nebel, wie **durch***Path einen Vorhang, **tauchte**Motion_directional der Mann **auf**Motion_directional, den wir erwartet hatten.

The example given above...

- "He may find his **way**_{Self_motion} **in**_{Goal}, but never **out**_{Source}," she cried.
- — Tal vez haya conseguido **entrar**_{Arriving}, pero no **saldrá**_{Departing} — exclamó — .
- 「いいえ、ゆく_{Motion} のはゆけ_{Motion} ましょう。でも帰れ_{*Return} なくできます。」
- "Er mag den Weg **hinein**_{Goal} finden, aber niemals wieder **heraus**_{Source}", rief sie.

Types of translation shift

German vs. English

- Verb particles adding deixis and semi-incorporating image-schemas into verb
- But *remarkably* close:
 - I am reckoned fleet of foot, but he **outpaced**^{*Surpass_speed} me as much as I **outpaced**^{*Surpass_speed} the little professional.
 - Ich bin sicherlich gut zu Fuß, aber er **hängte**^{*Surpass_speed} mich ebenso sehr **ab**^{*Surpass_speed}, wie ich den kleinen Lestrade **abhängte**^{*Surpass_speed}.

Spanish and Japanese vs. English

- Incorporation of image-schema
- Interpolations of implicit motion

Japanese only

- Serial verbs
- Emphasis on appearing/disappearing
- Contextualizing motion as *Return*

Conclusions

- Prior results of Slobin, Talmy, Ikegami, Ohara can be verified even within such a small sample
- Interestingly, Spanish often follows the pattern noticed for Japanese in reconceptualizing motion as state-change when possible, but does not shift to holistic descriptions

Conclusions (2)

- There are other regularities of translation shift to be found at every level
- The prior results and the newer can both be described with frame-to-frame relations
- The full explanation of language specific expression preferences lies in “Thinking for speaking”, but at a much more detailed level

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Speculations

- The variety of depictions in different languages reveals the hidden richness of the semantic pole
- The reader derives a virtually identical overall scene, even when the language used varies between motion-, state-, and change-of-state-framing.
- Speakers choose from among a set of mutually-activating descriptions; hearers reconstruct something like the set from the utterance