

Come and go and German *hin-* and *her-*. Meaning and Justification of Direction and Change of Direction in Perceptual Space

Antje Roßdeutscher

Universität Stuttgart
Institut für maschinelle Sprachverarbeitung
– Logik und Sprachphilosophie –
Azenbergstr. 12
D 70174 Stuttgart
antje@ims.uni-stuttgart.de

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Introduction

Context dependent verbs and particles in German:

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- *kommen* (to come)
herrennen ('run hither')
Speaker in the front of the motion
Warum rennt der Hund her?

gehen (to go)
hinrennen ('run thither')
Speaker in the rear
Wo rennt der Hund hin?

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'why is the dog running back and forth'
Salient reading: iteration of changing direction.
Implication: running without a goal.

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- Why is it that the particles lose their power of referring to the utterance-location?

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hin- und herrennen

running in a direction and its counter-direction

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roughly the same meaning, but only roughly.

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- Which are the principles of composition in particle and double-particle constructions?
- *Kommen* (come) and *gehen* (go) are context dependent.
hin and *her* are context dependent.
- Can the semantics of combining the former with the latter be analysed as composed from their parts, e.g. *herkommen* (come here)?.

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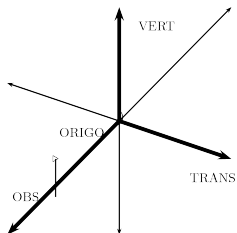
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- 5. Loose ends

Background Assumption

Space as seen through the eyes of natural language has a simple geometry.



PRIMARY PERCEPTUAL SPACE: VERTICAL \perp HORIZONTAL

3 directions VERT, TRANSversal, OBServer axis; 6 orientations; Origo

Primacy of Orthogonality in Spatial Conceptualisation

Spatial orientations are perceived as much as possible in such a way that all relevant directions are parallel to one of the axes of PRIMARY PERCEPTUAL SPACE

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- *hin-* and *her-* require justification of directions
- *um-* requires justification of change of direction around a center or change in the opposite direction.
- changes of more than 90 degrees are decisive for what counts as 'changes into the opposite direction'

motion verbs describe rectilinear motion

Example:

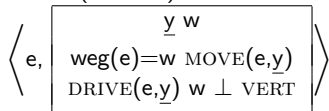
The verbs you use for describing an air-craft going diagonally into the sky and for smoke or a balloon going straight into the sky are the same.

to rise, to ascend; Germ. steigen, aufsteigen;

We assume that the path $w(e)$ of a movement e is conceived as a continuous 1-dimensional rectilinear region, and that the target y which moves along it is conceived as a point.

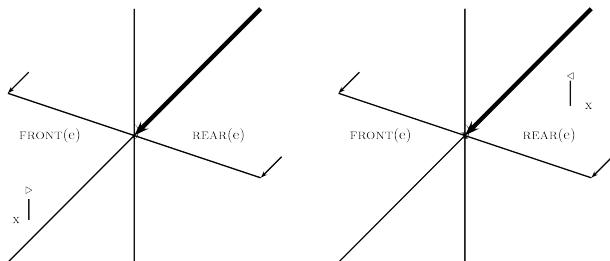
Motion in the HORIZONTAL:

fahren (to drive) \rightsquigarrow



FRONT and REAR of a motion, *hin-* und *her-*

The target of a motion determines for each time t two half-planes of HOR. $\text{FRONT}(e,t)$ and $\text{REAR}(e,t)$.



$$\begin{array}{|c|} \hline e \quad t \\ \hline \text{MOVE}(e,t) \\ \hline \end{array} \Rightarrow \begin{array}{|c|} \hline \text{HOR} = \text{FRONT}(e,t) \cup \text{REAR}(e,t) \\ \text{FRONT}(e,t) \cap \text{REAR}(e,t) = \emptyset \\ \hline \end{array}$$

For each t an observer of the motion can estimate whether the target is approaching or whether it is disappearing.

her- α and hin- α

(1) The speaker sees a dog running in the field.

self-location in the front of e

self-location in the rear of e

Warum rennt der Hund her?
Why runs the dog [her]

Wo rennt der Hund hin?
'Where does the dog run
[hin]?'

"Du rennst nicht her!"
'Don't run [her]!

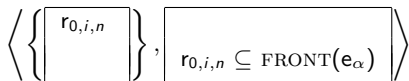
"Du rennst nirgendwo hin!"
'You are running nowhere
[hin]''!

Da muss ein Kaninchenloch sein.
Warum rennt der Hund sonst hin?
There must be a rabbit-hole.
Why else does the dog run
[hin]?

her- α and *hin- α*

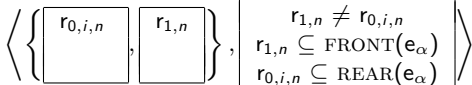
(2)

a. *her-* is indexical



$r_{0,i,n}$ is the self-location of the speaker-observer at utterance time

b. *hin-* is anti-indexical



$r_{1,n}$ is a point different from $r_{0,i,n}$

both, $r_{0,i,n}$ and $r_{1,n}$, must be justified in context

her- vs. hin- and kommen

(1')

The speaker sees a dog running in the field.

self-location in the front of e

self-location in the rear of e

Warum kommt der Hund her?

Why comes the dog [her]

Da muss ein Kaninchenloch sein.

There must a rabbit-hole be.

#Warum kommt der Hund sonst

Why comes the dog else

hin?

there?

Warum kommt der Hund?

Why comes the dog

- Are *herrennen*, *herkommen*, and *kommen* alike?
- Are *hin-* and *kommen* incompatible?

sample of data to be accounted for

Speaker in Stuttgart:

- (3) a. "*Morgen gibt es in Tübingen eine Party.* ... Tomorrow there's a party in T.
b. ...*Kommst du auch?*" Are you coming too?
c. ... **#Kommst** *du auch* **her?** "

d. ...*Kommst/fährst/gehst du auch hin?*"
e. ... *Kommst/fährst/gehst du auch hin und kommst/fährst dann wieder her?*"
f. ...*Kommst/fährst/gehst du auch hin und* ***gehst** *dann wieder* **her?**"

two notions of indexicality

Assumption: *kommen* (come) is indexical.

Then *kommst du auch?* is a challenge both for (Fillmore:1971) and (Kaplan:1977)

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 - (B) For COME it is assumed
 - (i) that the Sender is at the Goal at coding time or
 - (ii) that the Sender is at the Goal at arrival time or
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- (Kaplan:1977)

'direct reference' at the goal of the motion. No shift of the reference point from the utterance place

Reminder:

It is possible that in Pakistan', in five years time, only those who are actually here now, will be envied.

here ≠ Pakistan.

two notions of indexicality

The solution of the puzzle:

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- *kommen* (come) requires an attitude bearer in the front of the motion, a person.
No attitude bearers at rabbit holes in *≠ Warum kommt der Hund sonst hin?*
Attitude bearers at party venues in *Kommst du (auch)?*

My favourite examples, (Rossdeutscher:2000):

He wondered whether he should $\left\{ \begin{array}{l} \text{go} \\ \text{come} \end{array} \right\}$ *to her graduation.*

Agent to the artist backstage

"Kommen Sie nicht zu früh auf die Bühne."

Lit. 'Don't come (on)to stage too early'.

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- *her-* is indexical and interpreted w.r.t. the utterance place.
Kommst/fährst du auch her: no shift of perspective point
Selecting *kommen* in preference to *fahren*, *rennen* means making a choice
The choice of **herfahren** or **herkommen** (as opposed to **hinfahren** or **hinkommen**) is determined by what is actually the case at the speech point.

her- contributes an indexical presupposition, *kommen* (come) is attitudinal

(4) a. "Wenn ich in Reutlingen wäre, würdest du auch kommen."
'If I were in Reutlingen, you would come too''

(4) b. "Wenn ich in Reutlingen wäre, würdest du auch herkommen."
'If I were in Reutlingen, you would [her]come, too''

Reutlingen
speech place

Justification of *her-* and of *kommen* may be different in one and the same complex predicate *herkommen*

Justification of *hin-* and of *kommen* in *hinkommen* is always independent.

- To come: construction algorithm.

Gehen (Go)

Recall:

her- is 'indexical', *hin* is anti-indexical

kommen presupposes an attitude bearer at the goal.

no indexical nor attitudinal requirement with *fahren* (drive).

What is the impact of selecting *gehen* in

Kommst/fährst/gehst du auch hin? ? (6.c, d)?

Why is **gehst du her?* or **Geh her!* (= **Go here*) ungrammatical?

Is *gehen* (go) indexical? If so, 'fixed by utterance context' or 'attitudinal'?

fixed by utterance context
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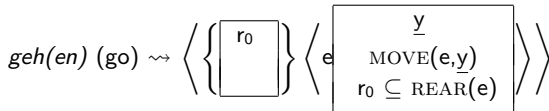
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fixed by utterance context

'attitudinal'

- My answer: *Gehen* is initial-oriented, *her* is final-oriented in the sense of (Fillmore:1971).



Sidestep: (Fillmore:1971) on *Gehen* (Go)

(A) For GO, it is assumed that the speaker is not at the goal at coding time.

Provided evidence: ✓ *Go away!*
**Go here!*

(*Geh weg!*)
(**Geh her!*)

Does *Go! Go! Go!* imply that the speaker is not in the front of the motion?
According to my analysis *Go! Go! Go!* may mean only *MOVE! MOVE! MOVE!*.
Scenario: a group of soccer fans sitting behind the opponent's goal.

**hergehen vs. hin-und hergehen*

**Geh her (*Go here!)*

**hergehen vs. hin-und hergehen*

**Geh her (*Go here!)*

- *her-* requires $r_{0,i,n} \subseteq \text{FRONT}(e)$
gehen requires $r_0 \subseteq \text{REAR}(e)$
**hergehen* is an impossible word.

details to come in construction algorithm

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- *Der Mann ging hin- und her*

$$e = e_1 \oplus e_2$$

'the man went to and fro'

hin requires (arbitrary) r_{01} in the rear of e_1 , i.e. the rear of e

her requires (arbitrary) r_{02} in the front of e_2 , i.e. the front of e

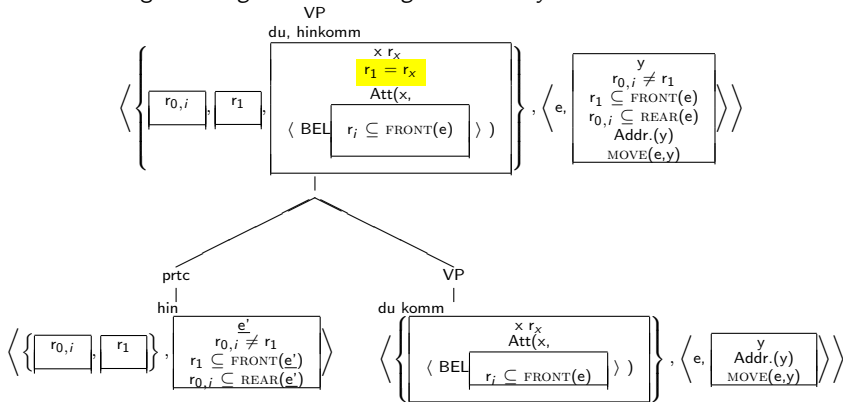
gehen requires r_0 in the rear of e ; resolve: $r_0 = r_{01}$

The requirement of *gehen* is justified.

- *hin- und hergehen* is a well-formed verbal construction according to the constructions rules to be formulated.

kommen vs. her-α

Speaker in Stuttgart: *Morgen ist in Tübingen eine Party. Kommst Du auch hin?* **Kommst Du auch hin?**



Justify the presupposition of the particle in the context of the verbal head

Resolution: $r_1 = r_x$; resolve $e' = e$

Justify the presupposition of the sentence in utterance context:

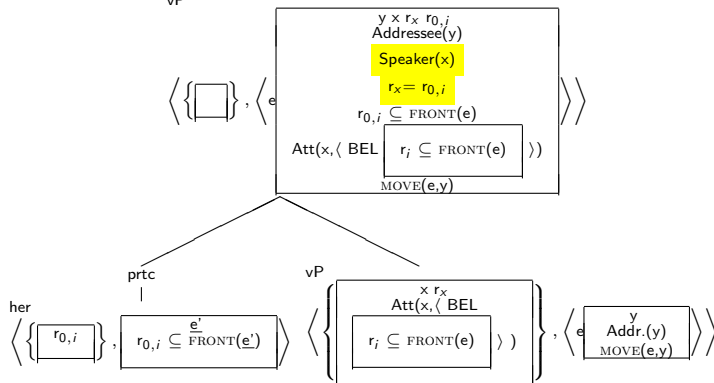
Resolution: $r_1 =$ party venue at Tübingen; $r_{0,i} =$ utterance place

Accommodation: attitude bearer x at the party venue.

possible $x =$ speaker

kommen vs. her- α

(3.c) In Stuttgart: "In Tübingen ist morgen eine Party. #Kommst du auch her?"
 vP

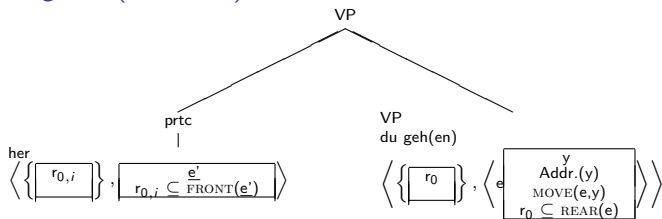


Justify the presupposition of the particle in context of the verbal head:

Resolution: $r_{0,i} = r_x$ (speaker's self location = self-location of attitude bearer x, x = speaker); resolve $e' = e$

Coherence failure in discourse.

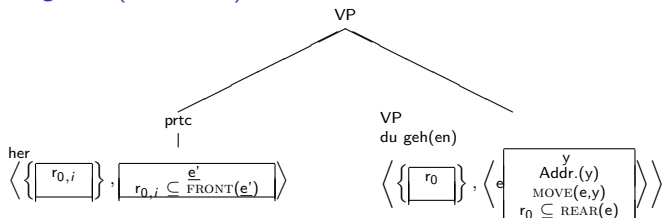
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The construction fails:

- (i) Resolution: $r_{0,i} = r_0$ Obligatory!
 - (ii) e' , the event the direction of which *her-* specifies, cannot be resolved as the referential argument e of the verb, yielding $r_0 \subseteq \text{FRONT}(e)$ & $r_0 \subseteq \text{REAR}(e)$
 - (iii) e' cannot be accommodated such that $e'' = e' \oplus e$ where e' approaching the speaker; e going away from the speaker, because $r_0 \subseteq \text{REAR}(e'')$ would not obtain. For $r_0 \subseteq \text{REAR}(e')$ would not. (The complex e'' wouldn't qualify as a *gehen*.)
- *hergehen* is filtered out by the rule "Obey head constraints!".

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hin- und her-rennen (Does not fit in (2))

- (5) *Warum rennt der Hund hin- und her?* direction and counter-direction
'why does the dog run back and forth/ to and fro'
The puzzle: Arbitrary Rpts. No reference to utterance location.

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- For a start: similar indexically interpreted example.
Scenario: The man watched the dog running away from him and then approaching him. He tells what happened.

(6) *Der Hund rannte hin und rannte her.*

'The dog ran there (e_1) and ran here (e_2)'

anti-indexical reference point $r_{11,n1}$ is the 'place reached within the story' made of e_1 and e_2 . That point has a specific interpretation.

hin-($e_1-\alpha$), (2.b) $\rightsquigarrow r_{11,n1} \neq r_{01,i,n1}$

$r_{11,n1} \subseteq \text{FRONT}(e_1)$ & $r_{01,i,n1} \subseteq \text{REAR}(e_1)$.

indexical reference point of the second description is the goal of e_2 '

her-($e_2-\alpha$), (2.a) \rightsquigarrow

$r_{02,i,n2} \subseteq \text{FRONT}(e_2)$

The spatial perspective point, i.e. the speech point is stable: $r_{01,i,n1} = r_{02,i,n2}$.

There are two self-locations, one for the first sentence, one for the second.

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- So far reconstructed: descriptions of e_1 with *hin-* and e_2 with *her-* as describing a sequence of motions in some direction and its counter-direction.

Primacy of Orthogonality

What qualifies as a change to counter-direction?

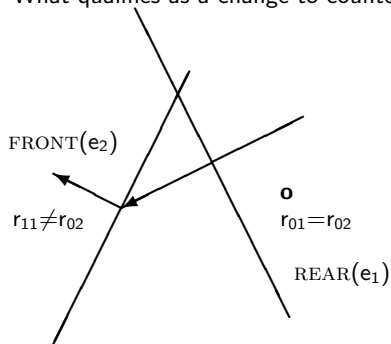


Figure 1.a No model for *hin-* und *her*(α).

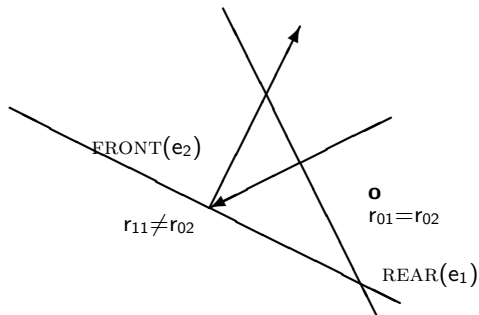


Figure 1.b Model for *hin-* und *her*(α).

hin- und her-rennen. Solution

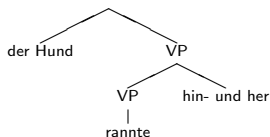
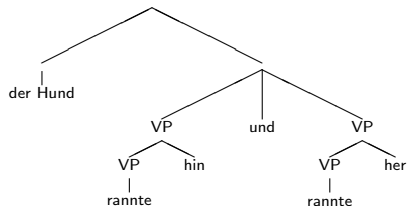
- (6) *Der Hund rannte hin und rannte her.*
'The dog ran there (e_1) and ran here (e_2)'
counter-direction
indexical rpts; direction;
What accounts for the possibility that what was until now a stable indexically determined reference point now gets a variable and to some extent arbitrary interpretation?
- (5) *Der Hund rannte hin- und her.*
'The dog ran to and fro (back and forth)'
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arbitrary rpts; direction,

hin- und her-rennen. Solution

- (6) *Der Hund rannte hin und rannte her.*
'The dog ran there (e_1) and ran here (e_2)' indexical rpts; direction;
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What accounts for the possibility that what was until now a stable indexically determined reference point now gets a variable and to some extent arbitrary interpretation?
(5) *Der Hund rannte hin- und her.*
'The dog ran to and fro (back and forth)' arbitrary rpts; direction,
counter-direction
- (6) two tensed verbs, denoting $e_1 \prec e_2$, two utterance times
(5) one tensed verb, denoting $e = e_1 \oplus e_2$, one utterance time
Assume one utterance time n of $\alpha(e)$, two self-locations $r_{01,i,n} = r_{02,i,n}$.
Then:
(i) $r_{01,i,n} \subseteq \text{REAR}(e)$, because $r_{01,i,n} \subseteq \text{REAR}(e_1)$
(ii) $r_{02,i,n} \subseteq \text{FRONT}(e)$, because $r_{02,i,n} \subseteq \text{FRONT}(e_2)$.

Principle of Unique Perspective: *In a single perspectival description of an event, there is at most one point of view.*

Double-particle constructions



Consequence: If a single utterance describes a sequence of motions involving direction and counter-direction the indexicals *hin-* and *her-* cannot be interpreted with respect to the speaker's self-location.

hin-und herrennen; umherrennen; herumrennen

herumrennen and umherrennen

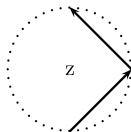
*um*₁

Er rannte um den Baum herum.

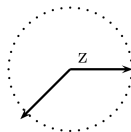
'he ran around the tree'

**er blickte herum*

he looked [herum]



Minimal model for *um*₁



Minimal model for *um*₂

*um*₂

er blickte umher

Er rannte umher

**Er rannte um den Baum umher*

to look about him /around

to run about /around

he ran around the tree [umher]

herum- α

- a. *Der Mann fuhr um den Baum.*
'the man drove around the tree'
Der Mann umfuhr den Baum
'the man avoided the tree'

- b. *Der Mann fuhr um den Baum herum*
'the man drove around the tree'

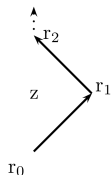


Figure 2
Minimal model for
um den Baum fahren
den Baum umfahren

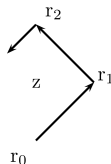
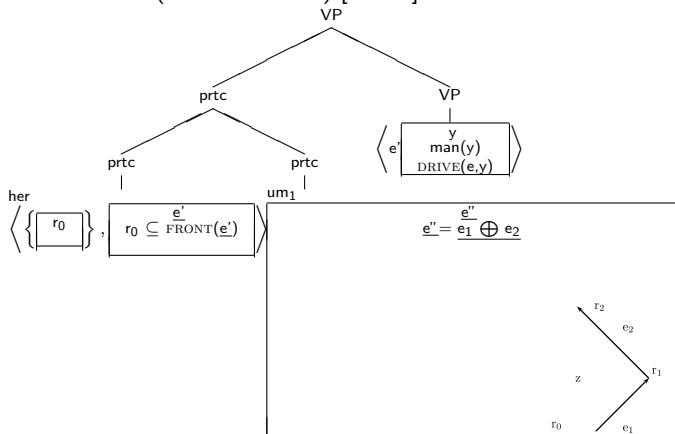


Figure 3
Minimal model for
um den Baum herumfahren

herum- α

Der Mann fuhr (um den Baum) herum

'the man drove (around the tree) [herum]'



(i) e' cannot be resolved as e_1 or e_2 , because r_0 is neither in the front of e_1 nor in the front of e_2 .

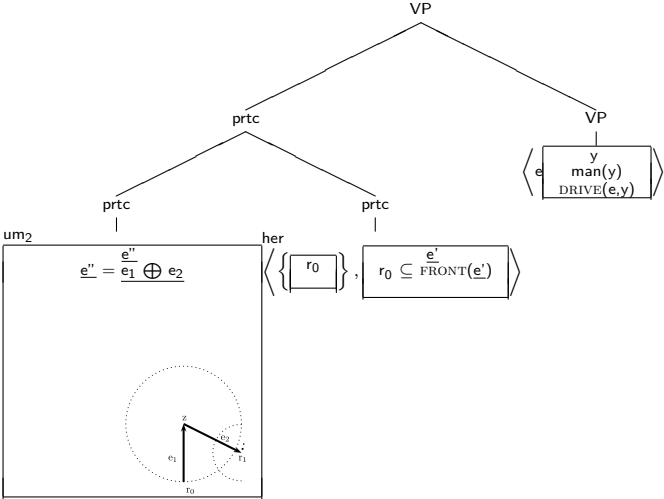
(ii) accommodate e' in the counter-direction of e_1 yielding $e_1 \oplus e_2 \oplus e'$

um-her- α

der Mann fuhr umher

'the man drove about'

Note: I am only concerned here with construction one complex event, undergoing iteration.



- (i) DRIVE requires a continuous path; e_1 or e_2 must follow a spoke contra-wise; say e_1 ; r_0 in the rear of e_1
- (ii) for um_2 's $\underline{e''}$ to be resolved with *her*'s $\underline{e'}$, um_2 's $\underline{e_2}$ must be in the counter-direction of um_2 's $\underline{e_1}$. Only then r_0 is in the front of $\underline{e''}$ and in the rear of $\underline{e''}$

Stühle standen um den Tisch herum

'Chairs were standing around the table [herum]'

**Stühle standen umher.*

'Chairs were standing [umher]'

Er ist viel herumgekommen

** Er ist viel umhergekommen*

** Er ist hin-und-hergekommen*

Assumption *kommen* in its theme's perspective interpretation.

Loose ends

Surprise: *hierhin-fahren*

Ich bin sofort ins Auto gesprungen, bin hierhin gefahren und habe sie [meine Tochter] völlig aufgelöst vorgefunden.

' I immediately got into the car, drove here [hin] and found her [my daughter] in a hysterical state.'

(Bühler:1934) on *hierhin*:

The [expression] *hierhin* besides *hierher* involves a clear prompt for a shift; my fictive viewpoint as a speaker does not coincide with my actual view point:

Reconstruct Bühler: Bühler's 'actual viewpoint' = utterance location

'fictive viewpoint' = 'ascribed self-location in an attitudinal state at the source of the motion'

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- The architecture: Dynamic Semantics from sublexical roots up to words and phrases, sentences, texts.

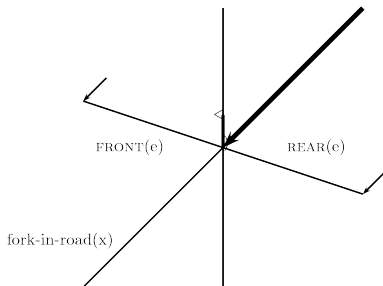
interlude: non-deictic perspectival motion-description

(Rosdeutscher:2000): Theme's perspective.

du kommst dann an eine Kreuzung you are coming to a fork in the road)






er kommt abends immer in eine leere Wohnung in the evening he always comes
into an empty flat

er ist nicht rechtzeitig weggekommen he didn't get away in time



attitude bearer: the person at ORIGO.

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