How a directional particle gives rise to possessive semantics
A lexical semantic analysis of “zuwerfen” and other particle verbs of ballistic motion

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The dative argument is a recipient:

The semantic role of the dative NP is the intended goal:

(3) Oli warf dem Kind den Ball zu, *und/ aber sein Vater fing ihn.
Oli threw the child.DAT the ball.ACC to, *and / but his father caught it.

“Oli ‘to-threw’ the child the ball, and/ but his father caught it (instead)”

Zuwerfen has not lexicalized into a possessive verb:

Zuwerfen is still found in caused motion events only:

(6) Einer nach dem andern warf den Totenschädel auf das Ziel zu.
One after the other threw the skull.ACC onto the aim to-
‘One after the other threw the skull towards the aim.’

(http://www.sagen.at/doku/Andreas_Hofer/Wipptal_Volkskunde_1809.html)

“auf das Ziel” is an inanimate, local goal point only, not a recipient.

Zuwerfen has not lexicalized into a possessive verb:

Zuwerfen is still found in caused motion events only:

(7) Das bedeutet, dass der Rückkehrer - gerade auf das Ziel zugeworfen - in einem elliptischen Kreisflug um eben jenes herumfliege.
‘This means that the ‘returner’ – after it has been “to-thrown” straight towards the aim – would fly around this aim in an elliptic circle.’

(http://home.arcor.de/tobias-pinner/docs/kyleburnerang.html)
Zuwerfen has not lexicalized into a possessive verb:

Other directional particles create the same effect:

(8) Triff er ihn nicht, wirft man ihm den Ball zurück. Er muß sein Glück aufs neue versuchen.

"If he [the person who has the ball] doesn’t hit him [one of the other players], one throws him the ball back. He has to try his luck again [to throw the ball and try to hit other players]."

(www.jungschar-schaezte.de/Somerspiele.htm)

Zuwerfen has not lexicalized into a possessive verb:

Other ballistic motion verbs create the same effect:

(9) Sicherheitshalber wandte ich mich zu Menasche um und schmetterte ihm ein fröhliches »Gute Nacht« zu.

"As a precaution I turned around to Menasche and “to-dashed” him a happy “Good night”.

(www.sphraimkisson.de/Der_Erfolgsmesser.htm)

No semantic difference between the dative variant and the prepositional variant of werfen-type verbs:

(10) Sprechen Sie dann die erste Silbe und werfen gleichzeitig den Ball Ihrem Kind zu. Das Kind fängt den Ball. Ihr Kind spricht die zweite Silbe und wirft gleichzeitig den Ball zurück. Sie sprechen die dritte Silbe und werfen gleichzeitig wieder den Ball zu Ihrem Kind.

[...] throw simultaneously the ball, ACC your child, DAT to. [...] throw simultaneously again the ball, ACC [to your child],

"Then speak the first syllable and, simultaneously, throw your child the ball. The child catches the ball. Your child will speak the second syllable and, simultaneously, throws the ball back. You speak the third syllable and, simultaneously, throw the ball to your child again.

(http://www.abc-der-tiere.de/eltern/silbenmethode/voruebungen/)

Analysis of the semantics of werfen and zuwerfen

• Werfen-type verbs:
  entail the instantaneous imparting of force in some manner causing ballistic motion (Pinker (1991, 110))

• Particle zu (as preposition zu) denotes the direction toward a goal (point).

Conclusion 1: zuwerfen has compositional semantics

zuwerfen (Olsen (1997), in the framework LDG):

[WRF(x,y) & BECOME (LOC(y, AT*[z])]](s)

Conclusion 2: the ‘recipient effect’:

Ballistic motion verb+ directional particle + dative NP creates recipient reading.

➢ Why is the particle needed to make werfen-type verbs compatible with a caused possession event?

• A dative marked recipient argument in German is selected by a verb that entails caused possession.

• Werfen does not entail caused possession, so something else is needed to license caused possession.
Excursus: two datives:

McIntyre (2006):

Pylkkänen (2002): the high applicative and the low applicative

The semantics of dative arguments in German:

- a HAVE-relation is a ‘hold’-relation.
- Haben/have > IE *kap (grasp, catch, hold)
- Southern German:
  Heb mir mal bitte meine Tasche (‘Hold my bag, please’)
Summary

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The dative argument of *werfen*-type verbs

• *werfen* does not entail change of possession, nor any other have-relation.

• → dative argument cannot be a selected recipient dative.

* Oli warf Susi [den Ball] 
  * Oli threw Susi the ball

(11) Janina hat mir das Stöckchen geworfen.

  Janina has me.DAT the stick.ACC thrown.

  ‘Janina threw the stick for me.’

  (http://www.shelletic.de/t/M.acr.2010.htm)

The dative argument of *werfen*-type verbs

➢ dative argument is a non-selected event-related dative.

Interpretation of a dative argument with the base verb alone:

beneficiary:

(12) Baby, ich schieß dir einen Teddybär.

  Baby, I shoot you.DAT a teddybear.ACC

  ‘Baby, I will shoot a teddy bear for you.’

(from a German Schlager by Joerg Maria Berg)

➢ Dative arguments of *werfen*-type verbs alone are not recipients.

BUT:

➢ Dative arguments of *schicken*-type verbs ARE recipients:

(13) Oli schickte dem Kind einen Brief (*und/ aber es bekam ihn nicht.)

  Oli sent the child.DAT a letter.ACC (*and/ but he didn’t receive it.)

WHY?
Werfen-type verbs are non-directional:

They do not specify direction
They do not lexicalize a goal argument.

→ Difference to schicken (send)-type verbs!

(14) a. Er warf den Ball im Zimmer rum
He threw the ball.ACC in-the-room around
‘He threw the ball around in the room.’

b. Er schickte den Brief in Hamburg rum.
He sent the letter.ACC in Hamburg around
‘He sent the letter around Hamburg.’

1 particle that creates a duration/duration, often careless activity variant of the base verb.

How does the particle turn werfen into a possessive verb?

➢ The particle adds salient direction and makes werfen-
type verbs semantically similar to schicken-type verbs

➢ The particle adds an empty goal slot into the semantic
representation, which is now being filled with a free
dative.

➢ The unsaturated goal semantics binds the experiencer
interpretation to be a goal, not just a mere beneficiary.

➢ the interpretation of this dative argument is now a
beneficiary goal: a recipient.

The recipient interpretation of the dative argument of zuwerfen:

Zu (to) adds an empty goal slot into the semantic
representation:

(15) a. * Oli warf den Ball zu
Oli threw the ball.ACC to-
This position is now being filled with a free dative and its
interpretation gets bound to be a goal.

b. Oli warf dem Kind den Ball zu
Oli threw the child.DAT the ball.ACC to-

The free dative can still be isolated as the beneficiary
only:

(16) Oli warf dem Kind den Bumerang auf den Zielpunkt zu
Oli threw the child.DAT the boomerang.ACC onto the
goal point(PP) to-
‘Oli threw the boomerang towards the goal point
for the child’

Similar: The dative argument of schicken:

➢ the experiencer to be the receiving experiencer.

(17) a. * Oli schickte den Brief (WOHIN??)
Oli sent the letter.ACC (to where??)

b. Oli schickte dem Kind den Brief _WOHIN??
Oli sent the child.DAT the letter.ACC to-

(18) Oli schickte dem Kind den Brief nach New York
Oli sent the child.DAT the letter.ACC to New York (PP)
‘Oli sent the letter to New York for the child’

Similar: The dative argument of schicken:

Speculation: the dative argument of schicken is also a
non-selected experiencer dative

➢ schicken does NOT have two lexical entries, only a non-
possessive
The remaining question:

➢ Why is the person to which the ball is thrown realized as a non-selected dative argument and not as a default PP?

(19) Oli warf den Ball auf das Kind zu/ zum Kind zurück
Oli threw the ball onto the child/ back to the child

Speculation: Animacy effect

Kittilä (2008): choosing an animate goal participant in a transfer situation often triggers a differential marking of the argument (here the dative case)

➢ The person is realized as an experiencer because of his/her capability of experiencing and the high probability that the event affects the animate being in some way.

Summary

• The particle adds directional semantics to a non-directional base verb

• By choosing an animate goal, which automatically will also experience the event, the realization of the goal as a dative DP rather than a PP is triggered.

• The salient directional semantics binds the interpretation of this non-selected dative argument, which is actually only the experiencer of the event, to be the recipient.

• Thus the construction is compatible as a ditransitive construction realizing a caused possession event:’

...Throwing the ball back:

➢ Why does English allow simple throw-type verbs to form ditransitives?

➢ possible answers:
  1. different morphological resources
  2. English as a "low applicative language"

(Pylkkänen): it does not have a (pure) benefactive interpretation and does not need to disambiguate semantic roles of its ‘dative’ argument:

(20) ?? Baby, I’ll shoot you a teddy bear!

References:


McIntyre, Andrew (2006), “The Interpretation of German Datives and English have”, in D. Hole, A. Meinunger and W. Abraham (eds.), Datives and Other Cases, Amsterdam, Benjamins, 185-211.
