# The Meanings of Swedish *dra* 'pull': A Case Study of Lexical Polysemy

#### Abstract

A brief sketch is given of the general structure of the motion verb field in Swedish. Of central interest is the pattern of polysemy exemplified by the Swedish verb dra 'pull, draw'. A prototypical meaning representation is postulated and non-prototypical cases are derived by general mechanisms of meaning extension such as focusing, resultative strengthening and metaphor.<sup>1</sup>

#### **1. Introduction**

The following study has been carried out within a larger research project concerning the lexical organisation of verbs in Swedish seen from a crosslinguistic perspective (Viberg 1994a, 1996). From a semantic point of view, verbs can broadly be divided into the macrofields Concrete (Physical Action) verbs. Mental verbs and Grammatical verbs. Among the Concrete verbs, the verbs of motion hold a central position. Verbs of motion can be divided into subjective verbs of motion such as walk and run, which describe the displacement of the subject, and objective verbs of motion, such as throw and put, which describe the displacement of the object. Directional verbs such as *falla* 'fall' and *stiga* 'rise', have meaning components which more or less exclusively belong to the spatial domain. Many motion verbs such as *springa* 'run' or *kasta* 'throw' in addition to the displacement of the subject or object also describe a characteristic bodily activity, which in certain uses may be the focused part of the meaning, for example kasta med huvudet 'toss one's head' or sparka med benen 'kick one's legs'. Even if such bodily activities involve stationary motion, they do not describe displacement (or change of place). A more thorough treatment of the motion verb field in Swedish is given in Viberg (1992).

The most mind-boggling part of lexical semantics is polysemy. In an earlier study (Viberg 1996), the polysemy of one of the most basic verbs of subjective motion, ga 'go; walk' was studied. In this paper, I will concentrate on one of the most basic objective motion verbs. As shown in Viberg (1992), the most basic verbs of this type in Swedish are *bära* 'carry', *kasta* 'throw', the antonymous pair *dra* 'pull' and *skjuta* 'push',

the contrastive series *sätta-ställa-lägga* 'put' and *köra* '(drive), transport'.

# 2. The Swedish verbs dra 'pull' and skjuta 'push; shoot'

### 2.1 The prototypical meaning

The two basic motion verbs *pull* and *push* form an antonymous pair in English. Their closest equivalents in Swedish are *dra* 'pull', 'draw' and *skjuta* 'push', which is also the primary equivalent of *shoot* in English. The second meaning will, however, not be taken into consideration in this paper. In examples of the following type, the verbs *dra* 'pull' and *skjuta* 'push' appear with their prototypical meaning:

(1)	Peter drog ut byrålådan.	Peter (A) pulled the drawer (B) out.
(2)	Peter sköt in byrålådan.	Peter (A) pushed the drawer (B) in.

The focused event is the motion of the drawer, but this is only the last in a chain of events. To pull out the drawer, for example, Peter contracts the muscles in his arm. This produces a force, which is applied to the drawer and directed towards the source of the force. Schematically, three classes of events can be distinguished as in *Table 1*:

	'pull'	'push'
(i) <i>Bodily activity</i>	A contracts his arm while holding B with his hand	A stretches his arm while holding B with his hand
(ii) <i>Force dynamics</i>	a force directed towards A is applied to B	a force directed from A is applied to B
(iii) Spatial: Motion	B moves	B moves

Table 1. Major components of the prototypical meanings of 'pull' and 'push'

For certain purposes, it will be more illuminating to use a formalism based on Miller & Johnson-Laird (1976) to represent the meanings, even if no attempt will be made to give a completely explicit account of the semantic representations discussed in this paper. Roughly, the proto-typical meanings can be represented as in **Table 2**:

dra 'pull'

- (i) ACT(z,S)&CAUSE(S, CONTRACT(w))
- (ii) CAUSE((i),(TOWARD(FORCE))(x,z,d<sub>1</sub>)) CAUSE((i),(FROM(FORCE))(x,z,d<sub>1</sub>))
- (iii) CAUSE( (ii), (TOWARD(TRAVEL))(x, z))
   CAUSE( (ii), (FROM(TRAVEL))(x, z))
   Default: ARM(w); HOLD(z, x)
   Default: ARM(w); HOLD(z, x)

skjuta 'push'

ACT(z,S) & CAUSE(S, STRETCH(w)) CAUSE((i),(FROM(FORCE))(x,z,d<sub>1</sub>)) CAUSE( (ii), (FROM(TRAVEL))(x, z)) Default: ARM(w); HOLD(z, x)

Table 2. A formalization of the prototypical meanings of 'pull' and 'push'

The components CONTRACT and STRETCH are meant to refer to basic motoric/ proprioceptive bodily events.

# 2.2 Semantic extension: Focusing and strengthening

In the prototypical case, all three aspects are clearly manifested even if the objective motion is focused. Secondary meanings arise through various mechanisms of meaning extension. Three of the major ones will be accounted for here. The first one is *focusing*, which centers the attention on some part of the prototypical meaning and the second one is *strengthening*, which adds one or more meaning components. Both of these changes are gradual in nature, in contrast to the third mechanism, *metaphor*, which is nongradual and involves a mapping between two domains of (potentially, at least) equal complexity. Viberg (1994b) shows how mechanisms of this type apply to Swedish verbs of Physical contact to produce patterns of polysemy.

Focusing involves attention being drawn to some part of the prototypical meaning representation, while the rest is backgrounded or totally suppressed. In a way, one aspect of the meaning is also focused in the prototypical case, i.e. the motion of the object. The term focusing, however, will be used when only part of the prototypical meaning is relevant. Focusing is preferred to other alternatives such as bleaching, since focusing does not necessarily mean that the rest of the representation disappears completely; on this point, there is a continuum. Focusing is rather like a moving spotlight which shines on part of a structure leaving the rest intact but only faintly perceivable. Each of the three basic meaning components (i)–(iii) may be focused. In the following examples, the force is focused<sup>2</sup>:

(3)	Peter drog i byrålådan	Peter pulled at the drawer
	utan att kunna rubba den.	without being able to budge it.
(4)	Då var det någon bakom henne som drog henne i håret. [Lindgren]	Then someone behind her gave her hair a tug.
(5)	Vakna! sade han och drog i hennes utstickande fot. [Jersild]	"Wake up!" he said, tugging at her protruding foot.

In the last two examples, motion of the object is not excluded, but in any case, it is not an essential part of the meaning. The intended result is that the person towards whom the action is directed should feel the bodily contact. The force component is also highly salient in examples describing an attraction at an abstract, psychological level:

(6)	The Mirisch brothers had a	Bröderna Mirisch hade ett
	production company that drew	produktionsbolag som drog alla
	all of the best talent to it at	de största begåvningarna till
	United Artists. [Shirley	United Artists.
	McLane]	

The bodily activity can also be focused in descriptions of movements of various body parts as in the following examples:

(7) Hastigt drog han tillbaka handen. Quickly, he withdrew his hand.

(8) Han sköt ut hakan. He stuck ('pushed') out his chin.

In the prototypical case, both *dra* and *skjuta* are objective motion verbs, which means that the motion of the object is the most essential part of the meaning, even if the motion of the subject is often implied when these two verbs are used as in: *Peter pulled/pushed the cart into the shed*. When the motion of the subject is focused and there is no other object which is moved, the verbs turn into subjective motion verbs:

(9) Horder av människor drog förbi. Hordes of people passed by.

(10) Han sköt iväg som en pil. He darted away.

The most common type of strengthening is *Resultative strengthening*, which means that a result produced by the action of the verb is lexicalized.

(11) Hon drog ett streck på papperet. She drew a line on the paper.

(12) Peter sköt 2-0. Peter scored 2-0 (in soccer).

Resultative strengthening actually turns the basic meaning of the verb into a kind of manner component. Example (11) could be paraphrased: *She caused a line to exist* (Result) *by drawing a pencil along the paper* (Manner=Prototypical Objective motion verb meaning). In the English verb *draw*, the resultative meaning is even more prominent (cause a drawing to exist by drawing a pencil along a surface). As is often the case with resultative strengthening, the instrument is understood. This applies to (12) as well, which could be paraphrased: *Peter scored 2-0 by kicking* (*'shooting') the ball into the goal*.

#### 3. The polysemy of dra 'pull', 'draw'

In *Figure 1*, the most prominent meanings derived by focusing and strengthening are shown. (See the next page).

The non-prototypical meanings shown in figure 1 only represent the first links in a number of rather long chains of semantic extensions. Those based on focusing are shown in *Figure 2*. (See page 299).

Space only permits commenting on a few representative examples. The focusing of physical Force in examples like *Peter pulled at the drawer* serves as the source of metaphorical extensions based on a metaphorical principle such as 'Psychological reactions are forces affecting the ego'. Talmy (1988) refers to this type of metaphor as "divided self". The psyche is seen as an arena where various conflicting desires and emotions act as forces on the the ego trying to pull it in different directions:

(13)

-- hans förnuft förbjöd honom att säga nej medan prestigen ändå drog åt att vilja betala. [Novels 81] Lit. His common sense forbade him to say no while the prestige still pulled (him) towards wanting to pay

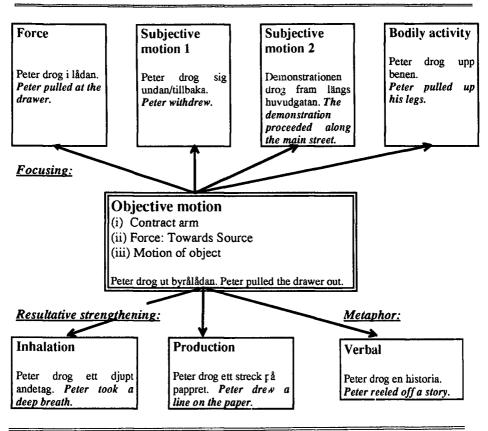


Figure 1. The major types of polysemic extensions of dra 'pull', 'draw'

The divided-self metaphor is even more prominent with some of the hyponyms of *dra* such as *rycka* 'tug, snatch' and *slita* 'pull, tear'. These verbs could both be paraphrased 'pull in a violent way':

- (14) Ja, han lät sig ryckas med av sin egen förtjusning ända därhän att han påstod att hon var en förtrollad prinsessa.
  Yes, he let himself be carried (lit. tugged) away by his own enthusiasm /.../
- (15) Ann slets mellan lust att skratta Ann was torn between a desire och en löjlig harm. [Novels 81] to laugh and an absurd annoyance.

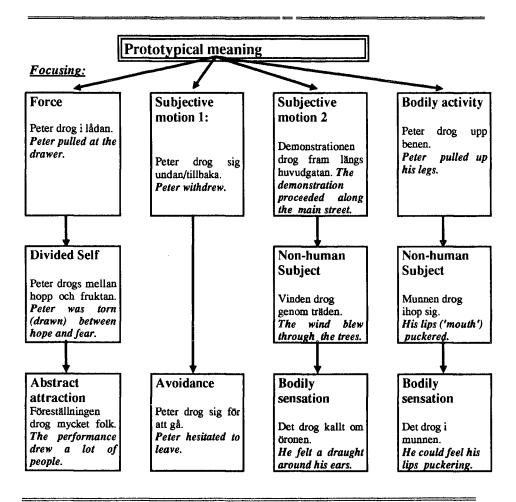


Figure 2. Further extensions based on the meanings formed by focusing

The psychological forces can even be treated as external in examples such as *Föreställningen drog mycket folk* 'The performance drew a lot of people'.

In spite of the fact that *dra* is basically an objective motion verb, it rather often describes subjective motion. From a formal point of view, there are two types: reflexive and non-reflexive. In fact, there are a few examples where the reflexive form simply signals that the subject moves itself by pulling. In this case, *dra* is still an objective motion verb: (16) Millimeter för millimeter drog jag mig ur soporna för att inte skrapa brännsåren på benen.
[Jönsson]
Millimetre by millimetre, I pulled myself up from the rubbish so as not to touch the burns on my legs.

In most cases, however, the notion of pulling is completely lost in the reflexive form of dra. Usually (but not necessarily) it refers to walking with a human subject:

(17) Folk dr	og sig ner mot	Pee	ople were heading for the
förenin	gshuset. [Ekman]	coi	nmunity centre.

Frequently, *dra* in the subjective motion use is combined with the particles *tillbaka* 'back' or *undan* 'away, out of sight'. A common English translation is *retreat* or *withdraw*:

- (18) Och så hade han resignerat, And so he had given up, dragit sig undan i fängelse- shrunk back into his prison cellen och till och med försökt cell, and even tried to commit ta livet av sig. [Guillou] suicide.
- (19) Nästa morgon *drog* jag *mig* in i barnkammarens rymliga garderob, ställde
  kinematografen på en sockerlåda, tände
  fotogenlampan och riktade
  ljuskällan mot den vitstrukna väggen. [Ingmar Bergman]
  The next morning I retreated into the spacious wardrobe in the nursery, placed the cinematograph on a sugar crate, lit the paraffin lamp and directed the beam of light on to the whitewashed wall.

Often, it is possible to find some reflection of the metaphorical principle 'Psychological reactions are forces' in examples of this kind; it is as if a psychological force within the individual were directed towards ego, which implies non-action. (A direction from ego naturally implies action directed towards the external world.) This meaning appears in more or less pure form in examples where *dra sig* is followed by *för att* + Infinitive:

(20) Hur bar man sig egentligen åt? Svaret var givet, man fick inte *dra sig för* att fråga.
 What did you do, really? The answer was obvious; don't *hesitate* to ask. [Jersild]

The uses of the non-reflexive form of *dra* as a subjective motion verb can be interpreted with reference to the Source-Path-Goal schema (cf. Johnson 1987, Lakoff 1987). Motion is understood with reference to a Source, a Goal and a Path, i.e. a connection between Source and Goal: *Peter ran from the station* (Source) *through the park* (Path) *to the church* (Goal). Typically, *dra* as an intransitive verb focuses the Path. Frequently, it appears with prepositions such as *längs* 'along', *genom* 'through' and *över* 'over':

(21)	Längs vägkanten under de	Along the roadside under the
	gamla knotiga pilarna drog	old knotty willows pilgrims
	pilgrimer på väg till klostret.	passed ('drew') on their way to
		the monastery.

The typical subject is plural or collective. Very often the verb in this use conveys the continuous motion of people viewed somewhere along their way. This is a characteristic that is often found in *dra* even when it is used in its basic sense as an objective motion verb. Unlike other basic objective motion concepts such as 'throwing' and 'putting', 'pulling' tends to involve a continuous supply of energy, duration of the motion and an extended Path. This is probably the reason why *dra* can also be used with subjects referring to meteorological phenomena such as 'wind', 'storm', 'rain' and 'snow'. In such examples, the focus is directed towards the effect the weather has on the Path (i.e. the areas it passes):

(22) Då snöstormen *drar fram över* Upsalaslätten svänger lyktan; [Bergman] When snowstorms *swept across* the Upsala plain, the lamp swung, /---/

In Swedish, impersonal *det* 'it' is used as subject with a wide range of verbs to describe perceptual phenomena such as light and sound emission and bodily perceptions such as itching and hurting. With *dra*, impersonal *det* can be used to describe the motion of cold air. In such examples, the motion of the air as a potential source of perception is focused:

(23) Det drog kallt genom	A cold draught was coming
brädfodret, [Pleijel]	through the skirting-board,

The duration of the event (in contrast with Swedish *fara* 'travel') is stressed even when the subject of *dra* refers to perceptual and other mental phenomena or emotions (cf the subject cline in Viberg 1994b):

(24)	Genom honom drog ett minne	Through him a memory passed
	som han nätt och jämnt stod ut	('drew') that he could hardly
	med. [Novels 81]	stand.

(25) Rädslan att förlora henne drog igenom mig. [Novels 81]The fear of losing her passed ('drew') through me.

In some constructions, however, *dra* can also be used as an intransitive motion verb focusing the Source rather than the Path, in particular, in combination with the particle *ut* 'out':

(26) Det var studenterna som drog ut It was the students who went i det stora frihetskriget. [Novels off ('drew out') to the great war 81]
 off independence.

In a number of examples, bodily activity is focused, for example *Peter* drog in magen 'Peter pulled in his stomach', *Peter drog på munnen* 'Peter grinned' (lit. 'drew on his mouth'). As in the last example, a feeling or emotion is strongly implied. This applies even more to examples where the body part serves as subject: *Munnen drog ihop sig* 'His lips puckered'. Impersonal det 'it' can be used as subject to highlight the bodily perception, as in *Det drog i munnen* 'He could feel his lips ('mouth') tightening'.

The extensions based on resultative strengthening as well as some types of metaphor are shown in *Figure 3*. (See the next page).

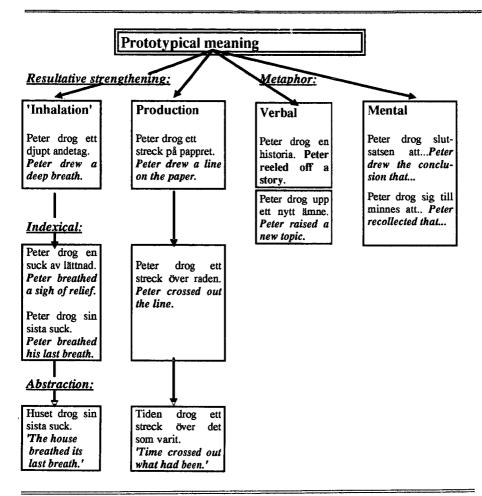


Figure 3. Further extensions based on the meanings formed by strengthening

The verb dra is often used with objects referring to inhaled air as in (27) below or to other substances that can be inhaled as in (28):

- (27) Peter drog ett djupt andetag. Peter drew a deep breath.
- (28) Hon drog några djupa bloss på She drew a few deep puffs on cigarren och satte sig the cigar and sat down [Pettersson]

The formal representation presented in table 2 can be modified along the lines shown in *Table 3* to accomodate this class of meanings:

- (i)  $((WITH_i)ACT)(z, S, LUNGS)$
- (ii) CAUSE(S,(TOWARDS(FORCE))(AIR,LUNGS,d<sub>1</sub>))
- (iii) CAUSE((ii),(TOWARDS(TRAVEL))(AIR, LUNGS))

Table 3. Formal representation of dra

Bodily activities such as (27) may often have a superposed indexical meaning, indicating the attitude or emotional state of the human agent. Certain objects signal this explicitly as in (29) and (30):

(29) Peter drog en suck av lättnad. Peter breathed a sigh of relief.

(30) Peter drog sin sista suck. Peter breathed his last breath.

In (29), there is still a link to the prototypical meaning of the verb, since the physical act of inhaling air may be realized simultaneously with the indexical act of showing relief. (30) is one step further from the prototypical meaning, since the implied indexical meaning is strongly conventionalized: 'cease to exist'. In (31), which is a simplified version of an actual example, the conventionalized implication has been completely lexicalized, since it represents the only meaning component that is left:

(31) Huset drog sin sista suck. The house 'breathed its last' i.e. ceased to exist.

When a certain meaning arises in the chain of meaning extensions, it acquires as it were an existence of its own and forms the point of departure for further extensions. In this way, it is often possible to arrive at meanings which on the face of it are completely unrelated to the prototypical meaning.

A similar chain of meaning extensions also appears when *dra* is used as a verb of production as in the example *Peter drog ett streck på papperet* 'Peter drew a line on the paper', which can be paraphrased: Peter caused a line to exist by drawing a pen along a piece of paper. Lines on a paper usually have a symbolic meaning. If a line is drawn across something that has been written, it means it is not valid as in *Peter*  drog ett streck över raden 'Peter crossed out the line'. Only this symbolic meaning is left with an abstract subject like 'time' in the following example, which is a simplified version of an attested example: *Tiden drog ett streck över det som varit* lit. 'Time drew a line across what had been'. A related case is represented by expressions such as *draw up a plan*, which is usually used abstractly but can also refer to a situation where concrete lines are actually produced on paper:

(32)	En sådan plan skulle ingen	No one in his right mind,
	vettig människa, särskilt inte	especially not the Old Man,
	DG, ha dragit upp. [Guillou]	would draw up a plan like that;

An expression like *dra en gräns* lit. 'draw a boundary' can also refer to the production of a physical line on a map, whereas, in general, it refers only abstractly to the establishment of a border:

(33)	Under dennes [Torgils	Under Knutsson's energetic
	Knutssons] kraftfulla ledning	leadership large parts of
	erövrades stora områden i	Finland were conquered, its
	Finland, där gränsen mot	frontier with Russia was
	Ryssland drogs vid Neva och	established on the Neva, and
	staden Viborg grundades.	the town of Viborg was
	[Weibull]	founded.

The verb *dra* is also used in completely abstract expressions like *dra en* gräns mellan gott och ont 'draw a line (lit. boundary) between good and bad'.

The abstract meanings treated above are based on metonymy rather than metaphor. The verb *dra* also appears in a number of metaphorical expressions, which involve mapping from one conceptual domain to another (Lakoff 1993). To pick just one example, the expression *dra sig till minnes*, literally 'draw oneself to memory', means 'remember, recollect' and is based on the metaphor that thoughts can be conceived of as things, which can be manipulated. In this expression, *dra* retains a number of its manner components implying that the process has had a certain duration and required some effort. (34) I *remembered* just a few weeks ago being in an elevator where five guys with pinkie rings were smoking fat stogies, and it fem karlar med lillfingerringar hadn't bothered me one jota. /McLaine /

Jag drog mig till minnes hur jag bara några veckor tidigare hade befunnit mig i en hiss där stod och rökte feta cigarrer, och det hade inte besvärat mig ett dyft.

The verb dra is involved in several other types of metaphors some of which are exemplified in figure 3. I will not, however, try to analyze these expressions here since metaphors characteristically apply across the board and are not bound to specific words. Suffice it to say here that dra tends to retain some of its prototypical characteristics such as duration even in such expressions.

# 4. Conclusion

The verb dra represents a common pattern of polysemy for concrete, physical action verbs. Similar to slå 'strike', 'hit', 'beat' analyzed in Viberg (1994b), the prototypical meaning of *dra* can be modified both by focusing (cf. 'bleaching' in Viberg 1994b) on some of the major components and by resultative strengthening, which adds meaning components. There are two major alternatives to the view presented here that specialized meanings can be derived from a prototype by mechanisms such as focusing and strengthening. The first alternative view holds that various combinations of verb and other elements such as particles should be treated as individual lexical items which cannot be further motivated (the idiom approach). This would miss the obvious semantic relationships between the various uses of dra discussed in this article. It may be necessary to regard some combinations not treated here as idioms in this sense, but they in any case represent only a small proportion of the data and this seems to hold even for other words. The second alternative view holds that the various specialized meanings distinguished here are not part of the meaning of dra but completely reside in the context. Dra just has one general meaning, whereas the specialized meanings arise through an interaction between this invariable meaning and the various contexts (the Gesamtbedeutung approach). The strongest argument against this view is the fact that focusing can be applied to various parts of the prototypical meaning. No component is shared by all instantiations of the verb. However, it may be the case that the general meaning analysis applies to other parts of the lexicon such as some of the grammatical verbs. The view of the lexicon emerging in much recent work is that it is highly organized semantically but not according to any single overarching principle.

#### Notes

- 1 This work has been carried out within the project Crosslinguistic Lexicology (Swed. Tvärspråklig lexikologi) financially supported by the Swedish Research Council for the Humanities and Social Sciences, which is gratefully acknowledged.
- 2 The analysis was originally based on the complete concordance of *dra* in The Bank of Swedish corpus Novels 1980–81 containing close to 2600 occurrences. Examples from this databank are marked [Novels 81]. However, many of the examples presented in this paper are taken from bilingual texts consisting of samples of originals in English or Swedish with their translations into the other language. Such examples are marked with the name of the author within square brackets. Many of these texts were collected within the project "Text-based contrastive studies in English" led by Karin Aijmer and Bengt Altenberg at the Department of English Lund University but I have also used some examples from texts I have compiled myself.

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