

Verb Patterns, Noun Collocations, and Grammatical Metaphors

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Theme of the talk

- What is meaning? How does it work?
- *“Many, if not most meanings, require the presence of more than one word for their normal realization.”*
“Patterns of co-selection among words, which are much stronger than any description has yet allowed for, have a direct connection with meaning.”
—J. M. Sinclair 1998, ‘The Lexical Item’ in E. Weigand (ed.) *Contrastive Lexical Semantics*. Benjamins.

Discovering Phraseological Norms

- Trying to account for all possible uses (and meanings) of a word is impossible.
- But accounting for the normal phraseology of a word (and building from there) is quite possible.
 - Basic norms (patterns) can be collected, creating a corpus-driven dictionary of phraseology and collocations.
 - such a dictionary does not yet exist.
 - In Wolverhampton, we are building one (www.pdev.org)
- Language learners and computer programs alike need to learn these basic patterns (“norms”)
 - But they also need to know how norms can be exploited creatively.
- This can be done by means of corpus pattern analysis (CPA)

Verbs

- CPA starts with verbs.
- The verb is **the pivot of the clause**.
- To understand the meaning of any clause, it is necessary to analyse the arguments in the co-text around its verb.
 - Compare any particular occurrence of a verb in text (*parole*) with phraseological patterns for that verb in the language at large (*langue*)
 - The *Pattern Dictionary of English Verbs* (PDEV; in progress) aims to provide an inventory of such patterns.
 - The next 7 slides show the patterns for the verb *shower*.

shower, v., pattern 1

Pattern: [[Human]] showers [NO OBJ]

Implicature: [[Human]] washes his or her whole body under a shower ([[Device]] that emits water)

Examples from BNC:

- *For the second time in ten minutes the man showered.*
- *She was advised to bathe or shower daily.*

(17% of sample)

shower, v., pattern 2

Pattern: [[Physical_Object {PLURAL} | Stuff]] showers [NO OBJ] {down | [Adv[Dir]]}

Implicature: [[Physical_Object {PLURAL} | Stuff]] falls or is thrown {down | [Adv[Dir]]}

Example from BNC:

- *Confetti showered down on us and congratulations were shouted from all directions.*

(13% of sample)

shower, v., pattern 3

Pattern: [[Event | Human 1 | Device]] showers
[[Physical_Object 1 (PLURAL) | Stuff]] [Adv[Dir]]

Implicature: [[Event | Human 1 | Device]] causes
[[Physical_Object 1 (PLURAL) | Stuff]] to move or fall
[Adv[Dir]]

Examples from BNC:

- *His comrades, meanwhile, get to work with power drills and grinders, showering sparks into the front row.*
- *He began punching the paper, sending flurries of cheap newsprint showering to the ground.*

(10% of sample)

shower, v., pattern 4

Pattern: [[Event | Human 1 | Device]] shower [[Human 2 | Location | Physical_Object 2]] {with [[Physical Object 1 = PLURAL]] | [[Stuff]]}

Implicature: [[Event | Human 1 | Device]] causes [[Physical_Object 1 = PLURAL | Stuff]] to fall or be thrown {[[Adv[Direction]]] {on [[Human 2 | Location | Physical Object 2]]}}

Examples from BNC:

- *The enemy bowmen showered them with arrows, to break up any semblance of order...*
- *As the inebriated insect totters up, it has to wriggle beneath an overhanging rod which showers it with pollen.*

(25% of sample)

shower, v., pattern 5

Pattern: [[Human 1 | Institution 1]] showers [[Entity]]
(up)on [[Human 2 | Institution 2]]

Implicature: [[Human 1 | Institution 1]] sends or gives
[[Entity = PLURAL | MASS]] in large amounts to [[Human 2]]

Examples from BNC:

- *The tributes showered upon him since his death have come too late.*
- *You long to shower gifts on everyone*

(22% of sample)

shower, v., pattern 6

Pattern: [[Human 1]] shower [[Human 2]]
{with [[Speech_Act = Praise | Abuse]]}

Implicature: [[Human 1]] utters a lot of [[Speech_Act = Praise | Abuse]] in favour of or against [[Human 2]]

Examples from BNC:

- *You long to shower gifts on everyone*
- *The tributes showered upon him since his death have come too late.*

(12% of sample)

shower, v., pattern 7

Pattern: [[Human 1]] showers [[Speech_Act]] on [[Human 2 | Attribute]]

Implicature: [[Human 1]] utters a lot of [[Speech_Act]] with respect to ([[Attribute]] of) [[Human 2]]

Example from BNC:

Last night, senior officers of the Merseyside force showered praise on the unbeatable courage of their young policewoman.

(1% of sample)

Nouns

- We now move on, briefly, from verb patterns to noun patterns and collocations.
- **Nouns** need a different kind of analytic mechanism:
 - And a different way of presenting collocations.
- Noun + verb collocations are syntagmatically fixed.
- But nouns (noun-y nouns) have other statistically significant collocates, with which they are not in a stable syntagmatic relation.
 - “**Noun-y nouns**” are words like *tree*, *car*, *money*, *idea*, and *shower* [next 3 slides]
 - As opposed to nominalizations of verbs, e.g. *distribution*.

Phraseology of *shower*, n. (1)

1. A **shower** is a **weather event**: a short downpour of *rain*.
 - MWEs are: *snow showers*, *wintry showers*, *showers of hail and sleet*; a *heavy shower*, a *light shower*; *April showers*; *scattered showers*; *occasional showers*, *the odd shower*.
 - Showers *sweep over* or *across* locations.
 - After a short time, a shower *dies away* or *dies out*, at which time the shower is said to be *clearing*.
 - People get *caught in* a shower.
 - Metaphors in science: *showers of particles* (nuclear physics); *showers of meteorites* or *meteors* (astronomy)
- 1.1 **What a shower!** (U.K. slang, derogatory) = what a group of useless, unattractive human beings!

Phraseology of *shower*, n. (2 & 3)

2. A **shower** is an **artefact** for pouring a continuous flow of water in droplets, simulating rainfall, over a person

- Typically, a shower is *provided* by an architect or house designer and *installed* by a builder, either in a *cabinet* in the *bathroom* of a house, or above the *bath*, or in a separate *shower-room*.
- An *en suite shower* is one that is installed in a room adjacent to a *bedroom*.
- When installed correctly, a shower **works**.
- Types of shower: *electric shower*, *power shower*, *gravity-fed shower* [and various trade names]
- People *switch* (or *turn*) a shower *on* in order to *use* it and *switch* (or *turn*) it *off* after use.

3. A shower is also a **location** with such an artefact fixed high up in it, so that it can pour water in a steady flow of droplets over a person, such that the person *stands* in the shower in order to *wash* his or her *hair* and/or *body*.

Phraseology of *shower*, n. (4)

4. A **shower** also denotes a **human activity**, in which a person uses a shower (2):

- A person *takes* a shower or *has* a shower.
- A shower may be *hot*, *cool*, or *cold*.
- Taking a shower is *refreshing*.

Once a student has mastered all the phraseology on the slides in this talk, he/she will be as well qualified as any native speaker to talk idiomatically in English about showers and showering.

Grammatical metaphor

- Is the verb *shower* a grammatical metaphor?
 - Based on the **Weather Event** sense of the noun, perhaps?
- There is no corresponding **Weather Event** sense of the verb.
 - We say ‘It was raining’, but not ‘It was showering’.
 - Why not?

Semantic Types (1)

- To do CPA successfully for verbs, it is necessary to group nouns (lexical items) together into contrasting lexical sets.
- This can be done by creating an ‘**ontology**’ of the semantic types that govern each noun.
- The CPA / PDEV project has created such an ontology.
- Different lexical sets of nouns select different meanings of a verb.
 - For example, ‘*executing a **person***’ activates a different meaning from that of ‘*executing an **instruction***’.

Semantic Types (2)

An example from R. Moon:

The idiom meaning ‘to be frightened’ is lexicalized in several different ways, for example:

- *shivering in her shoes /
quaking in his boots /
shaking in their sandals*

- Lexical sets are grouped according to semantic type.
–In the above example, the semantic type governing the can be called **[[Footwear]]**

The CPA Ontology

A hierarchical inventory of 253 semantic types. Top types:

- [[Entity]]
 - [[Physical Object]]
 - [[Human]]
 - [[Animal]]
 - [[Artefact]]
 - [[Abstract Entity]]
 - etc.
- [[Eventuality]]
 - [[Event]]
 - [[State of Affairs]]
 - etc.

The semantic types of nouns disambiguate the verbs with which they are used.

Some implications of all this

- *Nouns* (typically) are referring expressions.
 - They represent concepts (and the world).
 - They ‘plug into’ verbs.
- *Verbs* are ‘**power sockets**’:
 - Plug a noun (or 2, or 3 nouns) into a verb, and you can make a meaning, i.e.
 - construct a proposition
 - ask a question
 - interact socially.