Idiom creativity in FDG: tendencies and constraints

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Introduction

- Idiomatic expressions
  - have unpredictable, conventional meaning
  - but are not (syntactically / lexically) inflexible

- Flexibility: unconstrained or constraints on / tendencies in idiom adaptation?

- If the latter:
  - What patterns can we discern: which adaptations occur in which types of idioms?
  - How can we capture these constraints / tendencies in linguistic theory?

Structure of the talk

1. Idioms & linguistic analysis
2. Idiom variation / creativity
3. Variation and systematicity
4. Modification: types and constraints
5. FDG analysis of three main types of idiom

- Restricted to idioms of the form "V + NP/PP" (*to kick the bucket, to grasp the nettle, to go around in circles*).
- Examples: BNC, COCA, NOW, Internet

1. Idioms and linguistic analysis

Idioms and non-compositionality

- Idioms are traditionally defined in terms of their non-compositional nature:

1. "The essential feature of an idiom is that its full meaning [...] is **not a compositional function of the meanings of the idiom's elementary parts**" (Katz & Postal 1963: 275; emphases added)

2. "... I shall regard an idiom as a constituent or series of constituents for which the semantic interpretation is **not a compositional function** of the formatives of which it is composed" (Fraser 1970: 103; emphases added)

3. "What sets idioms apart from most other fixed expressions is their 'non-logical' nature, that is, the **absence of any discernable relation between their linguistic meaning and their idiomatic meaning**" (Glucksberg 2001: 68; emphases added)

4. An idiom is a complex expression which is ***wholly* non-compositional in meaning *and wholly non-productive in form*** (Wood 1986: 2; emphases added) - **discarded**

Idioms and linguistic analysis

- Meaning-form mismatch:
  - Multi-word expressions which in terms of meaning seem to form unified wholes, but which syntactically do not, in many ways, behave as single words/lexemes

- In between lexicon ("List") and grammar ("Rule")

- Two basic approaches suggested - the lexicon approach and the grammar approach – are both problematic

The lexicon approach

1. Lexicon approach (e.g. Weinreich 1969; Mel'čuk 1995)

   - Idioms listed as single lexemes in the (mental) lexicon, with conventional meaning + idiosyncratic (syntactic) features (e.g. Weinreich's 1969)

   - Psycholinguistics: Sprenger, Levelt & Kemper (2006) model of idiom production (superlemmas)

The lexicon approach

- Problem: morphosyntactically idioms do not behave as single lexemes; they still have internal structure
  - He *kicked the bucket* (*he *kick the bucketed*)
  - The *beans were spilled* by John (passivization)
  - *The strings that Pat pulled* got Chris the job (relativization)

- Evidence from psycholinguistics: normal syntactic processes take place, even in interpreting opaque idioms (Gibbs & Colston 2012: 164):
  - Idiom completion tasks with lexical priming indicate that some degree of compositionality is present, even in such idioms as *kick the bucket*
  - Experiments eliciting blends (*kick the maker*) also show that idioms have some degree of compositionality

The grammar approach

2. Grammar approach (e.g. Chomsky 1980; Everaert 2010; Fellbaum 2019):

- Idioms have conventional, unpredictable meaning, but can undergo normal syntactic processes, such as passivization, relativization, nominalization, etc. (see previous examples)

- Psycholinguistics: Cutting & Bock's (1997) model of idiom production

The grammar approach

- Problems:
  - Many idioms do not have a regular syntactic form: *trip the light fantastic, kingdom come, every which way, easy does it, believe you me, make believe,* etc.
  - Quite a number of idioms can only appear in one syntactic form (no syntactic flexibility): *the race is run, the die is cast, made for each other, play hard to get, hard to take,* etc. (Nunberg et al. 1994: 515)

- Evidence from psycholinguistics & neurolinguistics: idioms are understood by special processes
  - Idioms are represented and processed like other memorized strings, such as songs lyrics, titles, or riddles (Cacciari and Tabossi, 1988; Cacciari & Glucksberg 1991)
  - Idiomatic and conventional language understanding suffers significantly when a person experiences damage to the right hemisphere (while compositional processes typically take place in the left hemisphere) (see Gibbs & Colston 2012: 163)

2. Idiom variation / creativity

Idiomatic creativity

- Idiomatic creativity / adaptation is well-attested and by now generally accepted: idioms are not "wholly non-productive in form" (Wood 1986: 2)

  – e.g. Fraser 1970; Nunberg 1978; Ernst 1981; Moon 1988; Nunberg et al. 1994; Abeillé 1995; Schenk 1995; Barkema 1996; Moon 1998; Langlotz 2006; Zwicky 2007; Everaert 2010; McClure 2011; Keizer 2016, 2018; Fellbaum 2019)

Idiom adaptation

- Morphosyntactic adaptations:
  - modification: *to grasp the economic nettle*
  - passivization/relativization: *the nettle that was grasped*
  - nominalization: *the grasping of the nettle*
  - determination/quantification: *the government grasped many nettles*
  - pronominalization: *he wanted to grasp the nettle, but it turned out to be too thorny*

- Lexical adaptations:
  - substitution: *to hit the roof/ceiling*; *to hit/push/press the panic button*

- Not possible (except in combination with modification):
  - topicalization/clefting: **The NETtle they grasped*; **It was the NETtle that they grasped*

3. Variation and systematicity

Systematicity

- List of possible adaptations easily gives the impression that anything goes in idioms – that they do, indeed, behave in much the same way as fully compositional expressions (e.g. Abeillé 1995; Fellbaum 2019)

- However: this may be too easy

- Tendencies and constraints may still be identified when we consider a number of factors:
  - systematic variation vs. "wordplay"
  - type of idiom
  - type of adaptation

Wordplay

- Mel'čuk (1995), Langlotz (2006: 197; see also 201): some kinds of highly creative adaptation are always possible, especially when meant to create a conspicuous, often humorous, effect (e.g. through punning)

- Such highly creative, non-systematic processes are regarded as wordplay, and are not necessarily seen as evidence of regular syntactic form

- This, of course, requires some definition of what counts as wordplay

Wordplay

- Three criteria to measure idiomatic wordplay (Langlotz 2006: 202)
    a. Stylistic markedness/conspicuousness: idiom adapted in a striking or stunning way, often creating a series of weakly implicated contextual effects
    b. Ambiguity: both the literal meaning and the idiomatic meaning are strongly activated to refer to the context (e.g. punning)
    c. Context dependency: retrieval of speaker intention only possible in a particular context

- Example:

(1) Everybody wants *to bring home the bacon*. The difference is **this bacon** can blow up the world. (NOW, Huffington Post, US) (this bacon = US nuclear arsenal, as a point of contention)

Type of idiom

- Other, systematic, forms of idiom adaptation are, however, perfectly acceptable

- Still, not all idioms display the same degree of fixedness/do not allow for the same types of variation

- These differences, it has been claimed, are not arbitrary, but may depend on the type of idiom in question

- Three main groups of idioms have been distinguished, on the basis of two parameters:

  1. Decomposability (isomorphism)

  2. Transparency (motivation)

Decomposability/isomorphism

- Traditional position: idioms are semantically non-compositional; their meaning is conventional

- However, conventionality does not presuppose semantic non-compositionality (decomposability); all idioms are conventional, but many are still decomposable (Nunberg et al. 1994: 499)

- Decomposability: "the degree to which the phrasal meaning, once known, can be analyzed in terms of the idiom parts" (Nunberg et al. 1994: 498)
  - *to grasp the nettle* is decomposable: the figurative meanings of the component parts make up the meaning of the overall idiom (grasp = tackle; the nettle = the difficulty) .
  - once familiar with the meaning of the idiom, speakers will be able to recognize the contribution made by its separate parts (see also Croft 2001: 183).

- Psycholinguistics: Gibbs & Nayak (1989): "Idiom Decomposition Hypothesis"

Decomposability/isomorphism

- On this approach, the conventional (metaphorical) meaning of a decomposable idiom is a feature of its component parts: the idiom itself "will be given a compositional, albeit idiosyncratic, analysis" (Nunberg et al. 1994: 496)

- Two types of phrasal idioms (Nunberg et al. 1994: 496-497):

  1. Idiomatically combining expressions: idioms whose parts carry identifiable parts of their idiomatic meanings (*grasp the nettle, touch a nerve, spill the beans*) = decomposable

  2. Idiomatic phrases: idioms whose interpretations cannot be distributed over their parts (*saw logs, shoot the breeze, kick the bucket*) = non-decomposable

Transparency/motivation

- Idioms also differ in degree of transparency, i.e. the ease with which the motivation (or some plausible motivation) for the use of an idiom can be recovered (≠ predictability) (e.g. Nunberg et al. 1994: 498; see also Nunberg 1978, Langlotz 2006, Vega Moreno 2007)

- Compare:
  - *to stab someone in the back, to grasp the nettle* (transparent)
  - *to kick the bucket, to shoot the breeze* (non-transparent/opaque)

- Transparency is not the same as decomposability, as some idioms are transparent without being decomposable; e.g. *to saw logs* 'to snore/sleep' (Nunberg et al. 1994: 496-497)

Variation

- Both decomposability and transparency are subject to individual variation

- Transparency: comes in different degrees ("the ease with which"); may vary from person to person (finding "a plausible motivation")
  - e.g. *raise the roof, to go out on a limb*

- Decomposability: semantic re-analysis (Keizer 2018, Fellbaum 2019)
  - Process whereby an originally non-decomposable idiom is re-analysed as decomposable
  - e.g. *to bite the bullet* ➔ *to dodge the bullet* (the bullet ➔ difficult/unpleasant decision)

- Nevertheless, there seems to be a considerable degree of consensus on these points.

Three groups of idioms

- Two parameters, three groups:

    1. [−decomposable, −transparent], e.g. *to kick the bucket*

    2. [−decomposable, +transparent], e.g. *to stab someone in the back*

    3. [+decomposable, +transparent], e.g. *to grasp the nettle*

- No fourth group [+decomposable, -transparent]:

    - decomposability presupposes transparency: in order to see that the figurative meaning of a component contributes to the figurative meaning of the idiom as a whole, the figurative meaning of the component parts must have a degree of transparency (as defined above)

4. Modification: types and constraints

Modification: types

- Different types of internal idiom modification have been distinguished (e.g. Ernst 1981; Langlotz 2006; Zwicky 2007; McClure 2011; Keizer 2016)

- Four oppositions (Keizer 2016)

  1. Linguistic vs. meta-linguistic

  2. Idiom-related vs. non-idiom-related

  3. Congruous vs. incongruous

  4. Incongruous modification (idiom-related): two scopes
     - idiom-level
     - constituent-level

Modification: types

1. Linguistic vs. meta-linguistic modification:

- Metalinguistic modification:
  - Meta-comments: *to kick the* *proverbial* *bucket, to smoke the* *same old* *peace pipe*;
  - Expletives: *to spill the* *bloody* *beans, to kick the* *damned* *bucket*.

2. Idiom-related vs. non-idiom-related modification:

- idiom-related modifiers are related to the meaning of the idiom as a whole
  - e.g. *she has spilled the* *political* *beans, Spain Voluntarily Swallows The Bitter* *Economic* *Pill!* (Internet; Keizer 2016)

- non-idiom-related modifiers are not related to the meaning of the idiom, but serve to describe an aspect of the external situation
  - *pulling his* *cross-gartered* *leg* (Ernst 1981: 52); *Ian gritted his* *bigoted* *teeth* (Internet; Keizer 2016)

Modification: types

3. Congruous vs. incongruous modification

- Congruous modifiers are compatible with the literal meaning of an idiom component (e.g. *to spill the* refried *beans, to touch a* raw *nerve, to grit his* yellow *teeth*) – always constituent level

- Incongruous modification results in a semantic anomaly on a literal reading of the idiom.
  - Constituent-level incongruous modifiers: modify the noun on its metaphorical meaning (idiom-related; e.g. *to spill the* gossipy *beans*, or refer to an aspect of the context (non-idiom-related; e.g. *Ian gritted his* bigoted *teeth* (Internet; Keizer 2016)
  - Idiom-level incongruous modifiers: modify the idiom as a whole; e.g. *spill the* political *beans, rock the* local *boat* (Internet; Keizer 2016)

Modification: overview
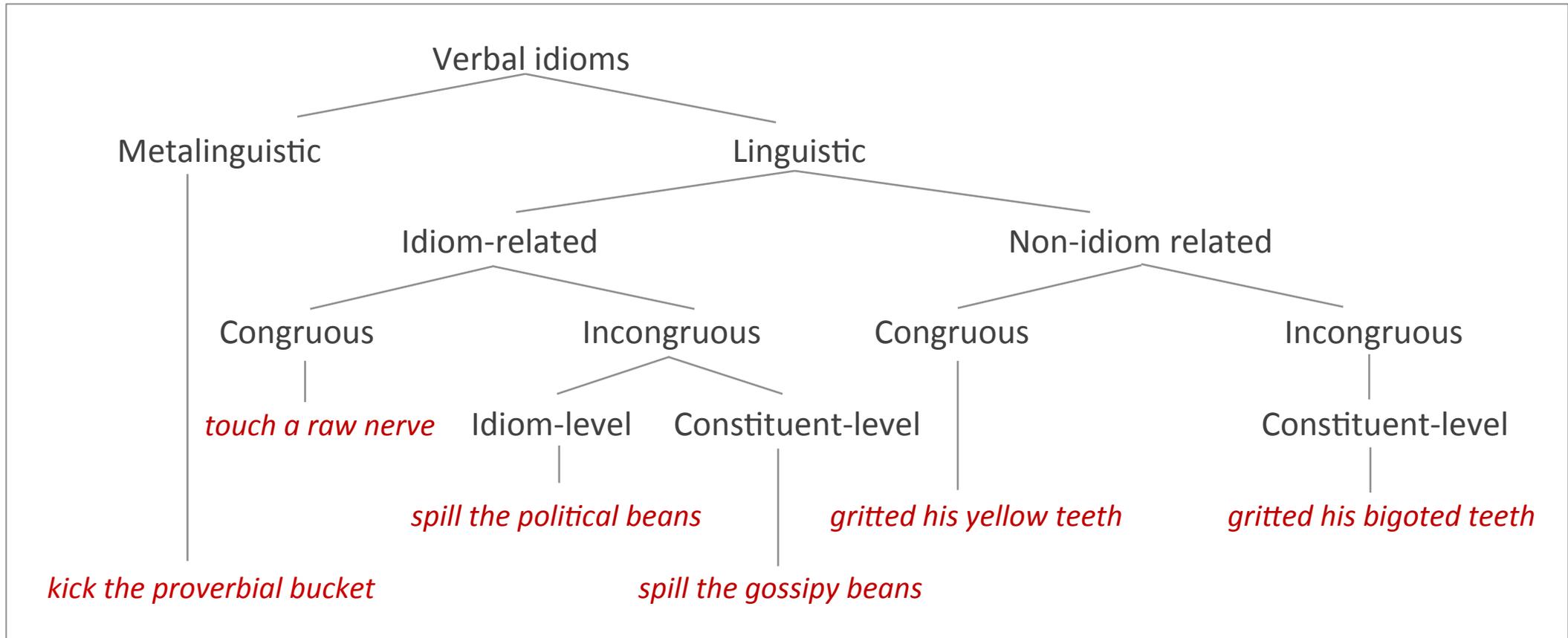
Modification: constraints

- Meta-linguistic modification: always possible

(2) a. Hauling oil to Valdez – a remote town that still supplies a big portion of the West Coast's oil – is *carrying the proverbial coal to Newcastle*. (COCA)

    b. … I wasn't happy with where I was. I *hit the proverbial ceiling* (COCA)

    c. Who *spilled the bloody beans*? (Internet)

Modification: constraints

- Non-idiom-related modification (congruous or incongruous): always possible, but especially found with non-decomposable idioms

- Non-decomposable, opaque:

(3) a. ... last of the Opole dukes, Jan II Dobry (John II the Good), who *popped his ducal clogs* here in 1532. (Internet) (congruous)

b. The character most likely *to kick the medieval bucket*, meanwhile, is everyone's favorite sellsword: Ser Bronn of the Blackwater, ... (NOW-US) (incongruous)

- Non-decomposable, transparent:

  - *pulling his cross-gartered leg* (Ernst 1981: 52)   (congruous)

  - *Ian gritted his bigoted teeth*. (BNC)   (incongruous)

Modification: constraints

- Idiom-related, incongruous, idiom-level: almost always possible

- Decomposable:
  - *to rock the cultural boat* (NOW-US)
  - *Spain Voluntarily Swallows The Bitter Economic Pill!* (Internet)

- Non-decomposable, transparent:
  - *to bite the financial dust* (Internet)
  - *to push the national panic button* (COCA)

- Non-decomposable, opaque:
  - ?*to kick the financial bucket* (NOW-IE)
  - *to shoot the political breeze* (NOW-GB)

Modification: constraints

- Idiom-related, congruous: transparent idioms only

- Decomposable:
  - *to touch a raw nerve* (BNC)
  - *to grasp the thorny nettle* (NOW-IE)

- Non-decomposable, transparent:
  - less likely, but possible; e.g. *to go around in ever-decreasing circles* (Internet)

- Non-decomposable, opaque:
  - unlikely, since the NP does not contribute to the meaning of the idiom
  - i.e. *?*to shoot the strong/brisk/lemon-scented breeze*, *?*to kick the blue/old/empty bucket*: if acceptable, only on a non-idiom-related use

Modification: constraints

- Idiom-related, incongruous, constituent-level: decomposable idioms only:
  - *spill the official/gossipy beans* (Internet)
  - *to grasp the sensitive nettle* (NOW-IE)

- Non-decomposable, transparent:
  - unlikely, since the NP does not carry an identifiable part of the idiomatic meaning
  - *[*?]to saw uncomfortable/restless/dreamy logs*

- Non-decomposable, opaque:
  - unlikely, since the NP does not contribute to the meaning of the idiom
  - *[??]to shoot the gossipy breeze*, *[??]to kick his unfulfilled/violent bucket*: only acceptable after semantic re-analysis

Tendencies and constraints

Adaptation	Group 1 -decomp; -trans	Group 2 -decomp; +trans	Group 3 +decomp; +trans
Modification:			
• metalinguistic modification	+	+	+
• non-idiom-related modification	+	+	±
• idiom-related modification:			
– incongruous, idiom-level	±	+	+
– congruous	--	±	+
– incongruous, constituent-level	--	--	+
passivization, relativization, nominalization, quantification	--	--	+
pronominalization	--	--	+
clefting, topicalization, *wh*-questioning	--	--	--

5. FDG analysis

Idioms in FDG

- Functional Discourse Grammar: four levels of analysis
  - Meaning/function: Interpersonal Level + Representational Level
  - Form: Morphosyntactic Level + Phonological Level
  - Function-to-form approach

- Three kinds of primitives, stored in the Fund:
  - Lexemes: listed in the lexicon
  - Operators: grammatical elements, listed in the grammaticon
  - Frames/Templates: possible combinations of linguistic elements, listed in the constructicon

- Productive, compositional expressions: interpersonal/representational frames chosen, operators/ lexemes added; results in specific form

- Idioms: analysed as combinations of partially instantiated frames/templates to capture the partly unpredictable and partly productive character of idioms (Keizer 2016)

Compositional clauses

The boy kicked the ball.

IL: (T_1) $(+id\ R_1)$ $(+id\ R_2)$

RL: (past ep_1: (e_1: (f^c_1: [(f^l_1: kick (f^l_1)) (1 x_1: $-$ boy $-$ (x_1))$_A$ (1 x_2: --ball-- (x_2))$_U$] (f^c_1)) (e_1)) (ep_1))

ML: (Cl_1: [(Np_1)$_{Subj}$ (Vw_1: kick-past (Vw_1)) (Np_2)$_{Obj}$] (Cl_1))

- Interpersonal Level: one Ascriptive Subact (T), two Referential Subacts (R)
- Default relations between the three levels

Group 1: −decompositional;−transparent

His uncle kicked the bucket.

IL: (T_1) $(+id\ R_1)$

RL: (past ep_1: $(e_1$: $(f^c_1$: $[(f^l_1$: kick_the_bucket $(f^l_1))$ $(1\ x_1)_U]$ $(f^c_1))$ $(e_1))$ $(ep_1))$

ML: $(Cl_1$: $[(Np_1)_{Subj}$ $(Vw_1$: kick-past $(Vw_1))$ $(Np_2$: --the bucket-- $(Np_2))]$ $(Cl_1))$

- *the bucket*: no referent at IL

- *bucket*: no denotation at RL (no meaning contributed); part of a complex lexical Property (f^l_1); no pluralization, relativization, nominalization etc.; only incongruous idiom-level (wide-scope) modification

- *kick* still analysed as a separate Verbal word at ML (can be inflected); *bucket* still part of an NP at ML (premodifier slot available)

Group 2: –decompositional;+transparent

The teacher hit the ceiling.

IL: (T_1) (+id R_1)

RL: (past ep_1: (e_1: (f^c_1: [(f^l_1: hit (f^l_1)) ($\underline{1}$ x_1: --ceiling-- (x_1))$_U$] (1 x_2)$_U$] (f^c_1)) (e_1)) (ep_1))

ML: (Cl_1: [(Np_1)$_{Subj}$ (Vw_1: hit-past (Vw_1)) (Np_2: --$\underline{the}$ ceiling-- (Np_2))$_{Obj}$] (Cl_1))

- *the ceiling*: no referent at IL, but there is denotation at RL (meaning contributed); allows also for congruous (narrow scope) modification
- nevertheless: at RL *hit* and *the ceiling* form one unit (f_1): no pluralization, relativization, nominalization etc.;
- some idiosynchronic features at RL (singular, 1) and ML (definite article, *the*)

Group 3: +decomposable

The government grasped the nettle.

IL: $\{(T_1)\ (+id\ R_1)\}\ (+\ id\ R_2)$

RL: $(past\ ep_1:\ (e_1:\ (f^c_1:\ [(f^l_1:\ grasp\ (f^l_1))\ (1\ p_1:\ \text{--nettle--}\ (p_1))_U\ (1\ x_2)_A]\ (f^c_1))\ (e_1))\ (ep_1))$

ML: $(Cl_1:\ [(Np_1)_{Subj}\ (Vw_1:\ grasp\text{-}past\ (Vw_1))\ (Np_2:\ \text{--the nettle--}\ (Np_2))_{Obj}]\ (Cl_1))$

- Analysed almost like any regular, compositional expression
- Two referents at IL, but T_1 and R_1 form one information unit { }: no pragmatic function assignment to individual Subacts – no clefting, topicalization, *wh*-questioning
- Except for fixed lexemes, no restrictions at RL, thus allowing for pluralization, relativization, as well as all kinds of modification
- Entirely predictable at ML

Idioms in the lexicon

- Idioms are stored in the Fund as combinations of partially instantiated frames/templates (COMPIF; Keizer 2016: 1011)

- A new kind of lexical entry, made up of combinations of frames/templates partially filled with lexemes and/or operators at different levels of analysis; associated with a conventional meaning

- Different combinations for different types of idiom

Idioms in the lexicon

- *to kick the bucket*: 'die'
  - IL: (T_1)
  - RL: $(f^l_1: kick\_the\_bucket\ (f^l_1))$
  - ML: $(Vw_1: kick\ (Vw_1))\ (Np_1: \text{--the bucket--}\ (Np_1))$

- *to hit the ceiling*: 'become very angry'
  - IL: (T_1)
  - RL: $[(f_1: hit_V\ (f_1))\ (\underline{\mathbf{1}}\ x_1: ceiling_N\ (x_2))_U]$
  - ML: $(Vw_1: hit\ (Vw_1))\ (Np_1: \text{--the ceiling--}\ (Np_1))$

- *to grasp the nettle*: 'boldly tackle a difficulty'
  - IL: $\{(T_1)\ (+id\ R_1)\}$
  - RL: $(f_2: grasp\ (f_2))\ (p_1: \text{--nettle}_N\text{--}\ (p_1))_U$

Conclusion

Conclusions

- Idiom adaptation is a wide-spread phenomenon: most kinds of syntactic processes, as well as lexical substitution, are allowed (against lexicon approach)

- Nevertheless, idiom adaptation is not unconstrained: some idioms are more flexible than others (against the grammar approach)

- This variation is systematic; systematicity only becomes evident when we (1) distinguish different types of idiom; (2) consider subtypes of adaptation (e.g. types of modification)

- If this is accepted, a theory should be able to capture the differences between the types of idiom; I have shown how this can be done in Functional Discourse Grammar.

Thank you.

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