

Emotion and composition*

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1. Intro

- Expressives can have apparently non-compositional (hf. “non-compositional”) uses:
 - (1) a. Where is my {fucking, bloody, goddamn} pen?!
 - b. Will you please (never) {fucking, bloody, goddamn} stop?!
- Two questions:

Q1: How do we operationalize these uses in the syntax/semantics, via
Strategy 1 (S1): actual lack of compositional integration, or
Strategy 2 (S2): vacuous compositional integration?

Q2: Which types of feelings can be encoded “non-compositionally” and why?

In this talk I:

- explore novel data from Russian that
 - (i) re Q1, show that both S1 and S2 exist in natural language, and
 - (ii) re Q2, suggest that what matters isn’t the polarity of the feeling involved (contra Esipova et al. 2019), but rather its intensity and immediacy;
- show that both S1 and S2 expressives can be given Potts 2007-style semantics in a way that sets them apart from other evaluative items, but questions remain;
- discuss how non-word ways of expressing emotions and attitudes, such as facial expressions, hand gestures, and intonation, fit into the picture.

2. More background on expressives and compositionality

Items like *fucking* can have purely expressive, “non-compositional” uses, but plain evaluative items like *lovely* cannot. I conjecture two strategies for obtaining “non-compositional” uses: no composition (S1) and vacuous composition (S2).

2.1. Pure expressives vs. plain evaluative items

- Lexical items like *fucking*, *bloody*, or *goddamn*, used as in (2), are often called *expressives*.

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(2) Zoe is bringing her {fucking, bloody, goddamn} dog to the party.

- Some other lexical items that convey the speaker’s emotions or attitudes are also occasionally referred to as *expressives*. E.g., Potts (2005) speculates adjectives like *lovely* to be potential positive-by-default counterparts of negative-by-default items from (2).

(3) Zoe is bringing her {lovely, awesome} dog to the party.

- In both (2) and (3), the target items seem to be *truth-conditionally vacuous*:

(4) Zoe is bringing her {fucking, bloody, goddamn, lovely, awesome} dog to the party.
→ Zoe is bringing her dog to the party.

- But only items from the first group can have purely expressive, “non-compositional” uses, when they only signal the speaker’s emotions
 - without said emotions being linked to anything in the rest of the utterance:

(5) Where is my {fucking, bloody, goddamn, #lovely, #awesome} pen?!

- and even without ostensibly being part of the same syntactic—and, thus, compositional—structure as the rest of the utterance:

- (6)
- I hate it when you {fucking, bloody, goddamn} lecture me!
 - *I love it when you {lovely, awesome} talk to me!
 - Will you please {fucking, bloody, goddamn} stop?!
 - *Will you please never {lovely, awesome} stop?!

- The picture so far:

	Truth-conditional vacuity	Composition	
		compositional	“non-compositional”
<i>fucking</i>	✓	?✓	✓
<i>lovely</i>	✓	✓	

2.2. Expressive composition in Potts 2005

- Potts (2005) proposes that (adnominal) expressives are syntactically integrated like normal adjectives, but can compose with any constituent at LF. E.g., in (7), *damn* actually composes with the proposition that the machine didn’t come with an electric plug.

(7) Nowhere did the instructions say that the damn machine didn’t come with an electric plug!

- But:
 - This is still too compositional for examples like (5).
 - How is this syntax/semantics mismatch constrained?

2.3. S1 vs. S2 expressives

- Two strategies to obtain “non-compositional” uses of expressives:

S1: prosodic integration with the rest of the utterance, but no syntactic—and, thus, no compositional—integration; the expressives are independent speech acts, akin to standalone interjections like *Fuck!* (e.g., (6)?)

S2: full syntactic integration with the rest of the utterance, but semantic composition is in some sense vacuous (e.g., (5)?)

3. “Non-compositional” expressives in Russian

Russian clearly exhibits both S1 via expressive particles and S2 via expressive suffixes.

3.1. Russian expressive particles (S1)

- Russian expressive particles are good candidates for S1 expressives.
- E.g., *bljad’* in (8) is an (obscene) particle and *blin* is its euphemism; both:
 - signal the speaker’s heightened emotions, often negative;
 - can be fairly freely sprinkled over an utterance;
 - are morphologically inert;
 - only integrate with the matrix utterance prosodically (often, but not necessarily as a clitic on the preceding word);
 - can be used as a standalone interjection.

- (8) a. Gde (**{bljad’, blin}**) moja (**{bljad’, blin}**) ručka (**{bljad’, blin}**)?!
 where **EXPR_{prt}** my **EXPR_{prt}** pen **EXPR_{prt}**
 ≈‘Where is my {fucking, freaking} pen?!’
 b. {Bljad’, Blin}!
 ≈‘{Fuck, Shoot}!’

- Some Russian speakers can also use *suka* ‘bitch’ (also obscene) in a similar way, but it seems to be a bit more constrained:

- (9) a. Gde (**suka**) moja (**suka**) ručka (?**suka**)?!
 where **EXPR_{prt}** my **EXPR_{prt}** pen **EXPR_{prt}**
 ≈‘Where is my fucking pen?!’
 b. Suka!
 ≈‘Fuck!’

- The adversative *da* (not obscene!) is a (usually utterance-initial) clitic and can also be used as an S1 (?) expressive signaling the speaker’s anger or annoyance:

- (10) a. **Da** kuda ty bežiš'?!
EXPR_{prt} where you run.PRS.2SG
 ≈‘Where the hell are you running?!’
- b. **Da** ne nado mne ničego!
EXPR_{prt} not needed I.DAT nothing
 ≈‘I don’t freaking need anything!’

3.2. Russian expressive suffixes (S2)

- Steriopolo (2008) analyzes all Russian evaluative suffixes as Pottsian (2005; 2007) expressives and assumes their integration is uniformly and strictly compositional.
- The diminutive suffixes¹ in (11), however, qualify as S2 expressives as they:
 - are used to signal affection towards the dog (not water, bowls, quick events, or walks);
 - are bound morphemes that are fully morphologically integrated with the rest of the utterance (subject to constraints on linear order, lexical idiosyncrasy, etc.).

(11) *Context: The speaker is talking to their dog.*

Ja sečas nal’ju tebe svež-**en’k**-oj vod-**ičk**-i v
 I.NOM now pour.1SG.FUT you.DAT fresh-**EXPR_{suff}**-PTV water-**EXPR_{suff}**-PTV in
 mis-**očk**-u, a potom my bystr-**en’k**-o pojdëm
 bowl-**EXPR_{suff}**-ACC, and then we quick-**EXPR_{suff}**-ADV go.1PL.FUT
 guljat-**en’k**-i.
 walk-INF-**EXPR_{suff}**-INF
 ≈‘I will now pour some fresh water into a bowl for you, and then we will quickly go for a walk.’

- As affection-signalling suffixes can go on adjectives, adverbs, and even certain verbs, (11) is probably not an instance of “affection-spreading” by adjacency.
- Updated typology:

	Truth-conditional vacuity	Composition		
		compositional	“non-compositional”	
			S1	S2
<i>fucking</i>	✓	?✓	?✓	?✓
<i>lovely</i>	✓	✓		
Rus. expressive particles (<i>bljad’</i>)	✓		✓	
Rus. affectionate suffixes (<i>-ičk-</i>)	✓	?✓		✓

¹ They are all, in fact, morphologically complex, but here I only split suffix clusters if I believe that they are internally compositional in a transparent way.

<p>c. mam-ul'-ečk-a mother-EVAL-EVAL-N.SG (affectionate)</p> <p>d. kot-ik cat-EVAL (affectionate)</p> <p>e. kot-ič-ek cat-EVAL-EVAL (affectionate)</p> <p>f. kot-in'k-a cat-EVAL-N.SG (affectionate)</p> <p>g. star-uš-k-a old-EVAL.N-EVAL-N.SG 'old woman' (affectionate)</p>	<p>h. star-uš-enci-ja old-EVAL.N-EVAL-N.SG 'old woman' (pejorative)</p> <p>i. star-ik-an old-N-EVAL 'old man' (derogatory)</p> <p>j. star-ik-ašk-a old-N-EVAL-N.SG 'old man' (pejorative)</p> <p>k. zver'-ug-a animal-EVAL-N.SG (augmentative + derogatory)</p> <p>l. dev-ax-a girl-EVAL-N.SG (augmentative + derogatory)</p>
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- However, AFAICT, only affection-signalling suffixes can be used “non-compositionally”. Furthermore, none of the derogatory/pejorative suffixes can go on anything other than nouns (cf. the diminutive *-en'k-*).
- Why? Derogatory and pejorative attitudes don't seem to come in intense bursts that need an immediate outlet; also, the derogatory/pejorative suffixes in (14) are quite mild.
- Another update to the typology:

	Truth-conditional vacuity	Composition		
		compositional	“non-compositional”	
			S1	S2
<i>fucking</i>	✓	?✓	?✓	?✓
<i>lovely</i>	✓	✓		
Rus. expressive particles (<i>bljad'</i>)	✓		✓	
Rus. affectionate suffixes (<i>-ičk-</i>)	✓	?✓		✓
Rus. derog./pejor. suffixes (<i>-ašk-</i>)	✓	✓		

5. S1 and S2 expressives in Potts's (2007) semantics

Potts's (2007) semantics gives us tools to handle both S1 and S2 expressives and capture various contrasts across different types of emotion/attitude-conveying items. But the link between immediacy/intensity and “non-compositionality” remains opaque.

- Potts (2007) recognizes the role of immediacy in expressives, but doesn't explicitly link it to their “non-compositionality”.

- Below I give a vastly simplified version of Potts’s (2007) semantics for expressives, focusing on the differences across various types of evaluative items.
- Expressives are functions that take some input and pass it unchanged but shift the expressive parameter c_ε of the context of interpretation c , outputting a new context c' in which the speaker is experiencing the relevant emotion. I will simplify this effect as $\mathbf{feels}(c_s, c_\varepsilon)$.
- S2 expressives compose with the α they syntactically merge with, but this composition is:
 - truth-conditionally vacuous, since the denotation of α is passed unchanged in the left, truth-conditional dimension;
 - compositionally vacuous, since the right, expressive dimension does not interact with any of the arguments of α :

$$(15) \quad \llbracket [\text{EXPR}_{S2} [\alpha_{(\tau_1 \dots \tau_n, ct)}]] \rrbracket^c = \lambda X_{\tau_1}^1 \dots X_{\tau_n}^n . \llbracket \alpha \rrbracket^c (X^1) \dots (X^n) \bullet \mathbf{feels}(c_s, c_\varepsilon)$$

$$(16) \quad \begin{array}{l} \text{a. } \llbracket [-i\check{k}-] \rrbracket^c = \lambda P \lambda x \lambda w . P(x)(w) \bullet \mathbf{feels}(c_s, c_\varepsilon) \\ \text{b. } \llbracket [vod-i\check{k}-a] \rrbracket^c = \lambda x \lambda w . \mathbf{water}(x)(w) \bullet \mathbf{feels}(c_s, c_\varepsilon) \end{array}$$

- S1 expressives don’t combine with anything, so they just have the following semantics:

$$(17) \quad \llbracket [\text{EXPR}_{S1}] \rrbracket^c = \lambda w . \top \bullet \mathbf{feels}(c_s, c_\varepsilon)$$

- We can think of S2 expressives as obligatorily *non-restricting modifiers*² and S1 expressives as obligatorily non-restricting context updates.
- Items like *lovely* differ from S2 expressives in that they link the speaker’s feelings to the denotation of the expression they merge with (cf. nothing or a contextually resolved free variable in S1 and S2 expressives) in the truth-conditional dimension:

$$(18) \quad \llbracket [lovely] \rrbracket^c = \lambda P \lambda x \lambda w . P(x)(w) \wedge \mathbf{feels}(c_s, x, w)$$

- Items like *lovely* are thus:
 - compositionally non-vacuous;
 - potentially truth-conditionally non-vacuous.
- Empirically, items like *lovely* can in principle be restricting without losing their evaluative meaning, although there might be a pragmatic preference for them to be non-restricting (see Esipova 2019 on pragmatic non-restrictingness):

$$(19) \quad \begin{array}{l} \text{A: } \text{Which of her dogs is Zoe bringing?} \\ \text{B: } \text{The \{#\fucking, \#bloody, \#goddamn, lovely\} one.} \end{array}$$

- This difference between expressives and items like *lovely* is uncaptured under Schlenker’s (2007) reductionist response to Potts 2007, whereby both expressives and plain evaluative items trigger informative presuppositions that are easy to globally accommodate due to the speaker being “an authority on [their] own mental states”.

²I.e., truth-conditionally vacuous modifiers; see Leffel 2014; Esipova 2019.

- **Problem:** The semantics above doesn't capture the link between immediacy/intensity of the feeling and "non-compositionality", unless we make compositional vacuity an obligatory consequence of being an expressive context shifter. But would it be justified?

– *Wicked* has been argued in Esipova et al. 2019 to be strictly compositional, but obligatorily non-restricting under the positive evaluative meaning:

- (20) a. #Where is my wicked pen?
 b. *I love it when you wicked praise me!
 c. *Will you please never wicked stop?!

- (21) A: Which of her dogs is Zoe bringing?
 B: #The wicked one.

– If that's correct, *wicked* is an example of truth-conditional vacuity and compositional vacuity coming apart empirically. This is easy to capture in the current system:

- (22) $\llbracket \textit{wicked} \rrbracket^c = \lambda P \lambda x \lambda w. P(x)(w) \bullet \text{feels}(c_s, x, c_\epsilon)$

– Russian derogatory/pejorative suffixes don't seem to ever have restricting uses either.

- Yet another update to the typology:

	Truth-conditional vacuity		Composition		
	preferable	obligatory	compositional	"non-compositional"	
				S1	S2
<i>fucking</i>		✓	?✓	?✓	?✓
<i>lovely</i>	✓		✓		
<i>wicked</i>		?✓	?✓		
Rus. expressive particles (<i>bljad'</i>)		✓		✓	
Rus. affectionate suffixes (<i>-ičk-</i>)		✓	✓		✓
Rus. derog./pejor. suffixes (<i>-ašk-</i>)		?✓	✓		

6. Beyond words

Non-word means of conveying emotions and attitudes (facial expressions, gestures, intonation) exhibit some of the same contrasts as spoken morphemes and, thus, can and should be treated on a par with those.

- Non-word means of conveying emotions and attitudes:
 - intonational: higher intensity, "choppy" meter, higher/lower pitch
 - hand gestures: beat gestures (+ "choppy" meter), sometimes with an iconic component
 - facial expressions: smiling, frowning, eye-rolling, the surprised facial expression (*O_O*)

- Non-word ways of conveying emotion are often put into the “paralinguistic” basket (e.g., Ladd 2008).
- Yet, a system that can handle spoken expressive morphemes should be able to handle other ways of conveying emotion. So, the “parainguistic” basket is not needed.
- Furthermore, non-word means of conveying emotions are not a homogeneous class, and some of the same contrasts emerge for them as for spoken morphemes. E.g.:
 - Some uses of facial expressions seem to locally interact with spoken content in a way that suggests compositional integration; e.g., “docked” O_O seems to be focus-sensitive³ in the same way as adverbs like *surprisingly*:
 - (23) a. Surprisingly, KIM brought her husband to the party.
 - b. Surprisingly, Kim brought her HUSBAND to the party.
 - (24) a. $^{O_O}\overline{\text{KIM}}$ brought her husband to the party.
 - b. Kim brought her $^{O_O}\overline{\text{HUSBAND}}$ to the party.⁴
 - But the speaker of (23) or (24) is not experiencing any intense surprisal at the moment of speech. Cf.:
 - (25) *Context: Kim’s husband comes in, which the speaker neither expected nor wanted.*
 $^{O_O}\overline{\text{Oh my god, what do I do now?!}}$
- Under the typology developed above, O_O in (24) is a plain attitudinal item (but a supplement, not a modifier), but O_O is an S1 expressive.
- Can non-word morphemes ever be S2 expressives?

7. Outro

- The typology of emotion/attitude-conveying items so far is summarized in Table 1.
- Take-home points:
 - Natural language has both compositionally non-integrated expressives (S1) and compositionally integrated expressives whose integration is semantically vacuous (S2).
 - The availability of “non-compositional” interpretations of expressives correlates with immediacy and intensity of the emotional experience.
 - “Non-compositionality” of expressives seems to be divorced from their truth-conditional vacuity, even though a link between the two would be desirable.
 - Truth-conditional vacuity comes in many colors; we can’t conflate the very conventional vacuity of expressives and the very pragmatic vacuity of plain non-restricting modifiers.
 - Non-word ways of conveying emotions and attitudes can and should be analyzed on a

³The possibility that O_O might sometimes be focus-sensitive was suggested to me by Patrick Grosz (p.c.).

⁴The focused items aren’t regular foci prosodically here; they seem to at least bear L^*+H instead of $(L+)H^*$ and involve extra breathiness. Cf. intonational degree modifiers in Appendix A.

	Truth-conditional vacuity		Composition		
	preferable	obligatory	compositional	“non-compositional” S1	S2
<i>fuckin</i>		✓	?✓	?✓	?✓
<i>lovely</i>	✓		✓		
<i>wicked</i>		?✓	?✓		
Rus. expressive particles (<i>bljad'</i>)		✓		✓	
Rus. affectionate suffixes (<i>-ičk-</i>)		✓	?✓		✓
Rus. derog./pejor. suffixes (<i>-ašk-</i>)		✓	✓		
docked <i>O_O</i>		✓	✓		
undocked <i>O_O</i>		✓		✓	

Table 1: Typology of emotion/attitude-conveying items: summary

par with their spoken confrères.

- Moving forward: more cross-linguistic, cross-subfield, and cross-disciplinary work.

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Appendix A: Expressives as degree modifiers

- Expressives, various attitudinal expressions, “strong” words, etc. often lexicalize as degree modifiers (more productive in English than in Russian):

- (26) a. This movie’s {fucking, bloody, goddamn, wicked, hella} good.
 b. This wine is wicked good.⁵
 c. Èto kino {pizdec, jebat’} horošee.
 this movie PIZDEC JEBAT’ good
 ≈‘This movie is fucking good.’ (Russian)
 d. Yesterday, there was a party, and Mia got {surprisingly, impressively} drunk.
 e. Yesterday, there was a party, and Mia got ^{o-o}drUUUnk.
 f. Yesterday, there was a party, and Mia got ^{o-o}DRUNK-gesture.

– *pizd-ec* vulva-N lit. ‘terrible situation’ (obscene)

– *jeb-at*’ copulate-INF lit. ‘copulate’ (obscene)

– *drUUUnk*: at least lengthening and L*+H

– *DRUNK-gesture*: a flick/tap on the neck, a conventionalized Russian gesture meaning ‘drink’ (root)

- Degree modifiers of open scale predicates are persistently truth-conditionally non-vacuous (see also Esipova 2019):

- (27) a. If the {fucking, bloody, goddamn} movie is good, I’ll stay till the end of the credits.
 → If the movie is good, I’ll stay till the end of the credits.
 b. If the movie is {fucking good, hella good, surprisingly good, ^{o-o}gOOOd}, I’ll stay till the end of the credits.
 ↗ If the movie is good, I’ll stay till the end of the credits.

- Can expressives simultaneously be truth-conditionally non-vacuous degree modifiers and serve as a “non-compositional” outlet for emotions? Probably:

- (28) *Context: Daniel Craig, when asked if Phoebe Waller-Bridge was a “diversity hire” for ‘Bond’:*

Look, we’re having a conversation about Phoebe’s gender here, which is **fucking** ridiculous. She’s a great writer. Why shouldn’t we get Phoebe onto Bond? (...) I know where you’re going, but I don’t actually want to have that conversation. I know what you’re trying to do, but it’s wrong. It’s absolutely wrong. She’s a **fucking** great writer. One of the best English writers around.⁶

⁵<https://www.wicked-wine.com/>

⁶<https://www.esquire.com/entertainment/movies/a29696991/daniel-craig-phoebe-waller-bridge-james-bond-diversity-hire/>