Semantic-Pragmatic Evolution of Negative Emotive Words: A Corpus-Based Analysis

Martina Katalin Szabó

[1]University of Szeged, Institute of Informatics

[2]HUN-REN Centre for Social Sciences, Research Center for Educational and Network Studies (CSS RECENS)

Szabo.Martina@tk.hu

martina@inf.u–szeged.hu

Introduction

- **Focus of study**:
  - Examination of semantic-pragmatic evolution of Negative Emotive Words (**NEWs**), particularly the Hungarian word *durva* ('coarse, rough') in automotive text domain.

- **Research aim**:
  - Explore the diachronic shifts in the semantic-pragmatic functions of *durva*.

- **Definition of NEWs**:
  - Words with prior negative semantic content (Szabó and Bibok, 2019).
  - May be used as an intensifier and even for expressing an emotion or evaluation, such as surprise or positive opinion of the speaker (e.g., *terribly* or *terrific* in English: *you really are terribly nice people* or *the party was terrific!*)

Overview of *durva* in Hungarian dictionaries

Exploring the various meanings of *durva* across key lexicons: how main Hungarian dictionaries define and interpret the term *durva*.

Lexicons:

- **Bárczi and Országh (1959)**

- **Czuczor and Fogarasi (1862)**

- **Zsemlyei (1993)**

Meanings of *durva* according to Bárczi and Országh (1959) (ÉrtSz I/1082)

- **Physical texture or surface**
  - Surface that is uneven, rough, or coarse.
  - Examples:
    - **a)** Crushed or powdery substances with larger grains than desired.
    - **b)** Objects or tools that are rough, wrinkled, or toothed with large grains, folds, or teeth.
    - **c)** Thick, coarse fibrous materials or fabrics.
    - **d)** Surfaces that are rough to the touch, crusty, or stiff.

- **Crude or undetailed creations**
  - Refers to objects or works that are crudely crafted or lacking fine detail.
  - Examples:
    - *Durva hamisítvány* ('rough fake'): A quickly made, easily recognizable forgery.
    - **Architectural context**: Intentional avoidance of fine details for a monumental effect.
    - *Durva vázlat* ('rough draft'): An initial, undetailed draft.

- **Poorly made or demanding tasks**
  - Describes tasks or objects that are imperfect or physically demanding.
  - Examples:
    - *Durva munka ez a bútor* ('This piece of furniture is harsh'): Refers to poorly made furniture.
    - Physical labor that is harsh on the body or skin.

- **Rude or offensive behavior**
  - Describes individuals or groups who offend others through rude or violent behavior.
  - Examples:
    - **a)** A person who is merciless, grumpy, or indelicate.
    - **b)** Jobs or occupations perceived as rude or unpolished in fictional or archaic contexts.

- **Actions performed by rude individuals**
  - Refers to actions that are harsh, rude, or violate social norms.
  - Examples:
    - **a)** Actions that disregard social conventions or order.
    - **b)** Behaviors or utterances that offend good taste or morality.
    - **c)** Unpleasant or offensive sounds.

Meanings of *durva* according to Zsemlyei (1993)

- **Rough, hard, coarse surface**
  - Refers to a surface or material that is palpably rough to the touch.
- **Rude or churlish nature**
  - Describes something that is rude or lacking refinement.
- **Rough-and-ready or superficial**
  - Refers to an object or thing that is hastily made or superficial in quality.
- **Unchivalrous or obscene expression**
  - Describes words or expressions that lack propriety and are considered indecent.

- **Strong or sharp sensory impact**
  - Denotes a sound or light that is strong or sharp.
- **Offensive intensity**
  - Indicates a degree of intensity that is so pronounced it is deemed offensive.
- **Shocking predicate**
  - Used to denote something that is shocking or surprising in its nature.
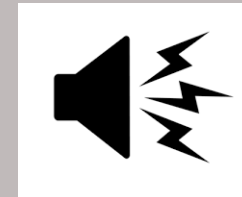
Meanings of *durva* according to Pusztai and Gerstner (2006)

- **Uneven surface or rough texture**
  - Describes something with a coarse, uneven surface; composed of relatively large grains; or made of thick fibrous material.
- **Roughly elaborated or imprecise**
  - Refers to objects or tasks that are roughly crafted, not exact, or lacking precision.
- **Physically demanding work**
  - Pertains to work or tasks that are rough-and-ready, physically demanding, or harmful to the hands.
- **Offensive or rude behavior**
  - Characterizes someone or something that is violent, ruthless, or rude, including actions or words that offend good taste, decency, or moral sense.
- **Unsophisticated or uneducated (archaic/fictional contexts)**
  - Used to describe someone or something as unsophisticated or lacking education. Also refers to a person's appearance that lacks delicacy or attractiveness.
- **Harsh or earsplitting noise**
  - Refers to a hurtful or loud noise, such as the sounds produced by rolling or lamination.

Semantic-pragmatic development of *durva* over time

Lexicons and preliminary findings

- **Meanings of *durva* according to Czuczor and Fogarasi (1862):**
  - Natural, unrefined state
    - *durva bőr* ('rough leather'), *durva posztó* ('rough baize'), *durva kövek* ('rough stones')
  - Figurative Meaning: unrefined or rude behavior
    - *durva ember* ('rude person'), durva hang ('rude voice'), durva szó ('rude word'), *durva beszéd* ('rude language'), *durva bánásmód* ('severe treatment'), *durva magaviselet* ('rude behavior')

- **Current research landscape: Few papers on the semantic development of *durva* over time (Szabó et al. 2023, 2024).**
  - Both studies are based on news texts (domain specificity!)
  - Szabó et al. (2023): focusing on sentiment features.
  - Szabó et al. (2024): Use of word embedding techniques to track semantic evolution.
  - Key finding: slight differences over the examined 4 time periods: **Initial trends:** Predominantly negative contexts. **Evolution:** Shift toward more neutral contexts → **signs of <u>desemantization</u> and <u>delexicalization</u>** (cf. e.g. intensifier function)

The current research work

Source, processing, annotation

Data collection and annotation process

- **Source:** *Autó-Motor* journal (on cars and motorcycles) (January 1950 - December 2020); available: Arcanum Digitheca platform.
- **Method:** Word-to-word search for the wordform *durva* from scanned PDFs (avoid: problems caused by multi-column structure and OCR errors) → corpus of sentences for analysis
- **Total occurrences:** 893. **Final count:** 892 examples annotated (one example excluded due to ambiguity).
- **Annotation process: Exploratory analysis:** Identified semantic-pragmatic functions without a predefined category system.
- I divided the entire material into **6 subcorpora** for every 10 years to observe the changes over time.

The resulting category system – meanings

Category 1: Rough, coarse

- **Coarse grains or particles**: *durva murvás pályák* ('rough gravel tracks'), *durva benzincsepp* ('coarse gasoline droplets')
- **Large or robust object** (stones, holes, etc.): *durva hepehupák* ('rough humps')
- **Rough, textured surface**: *durva csiszolóvászon* ('coarse sand-cloth')
- **Coarse fabrics or fibers**: *durva rongy* ('rough cloth')
- **Rough to the touch**: *felülete durva* ('its surface is rough')
- **Not smoothed or rounded, but sharp or uneven**: *durva élek* ('rough edges')

Category 2: Behavior, speech, action

- Actions or speech: *Az új 4 fokozatú váltómű érzéketlen a durva kapcsolásokra.* ‚The 4-speed gearbox is insensitive to crude changes.' (1959)
- **Objects/Tools**: *durva vegyi anyagok* ‚harsh chemicals' (2011)
- **Events/activities**: *durva landolás* ‚rough landing.' (2017), *durva pofozkodás* ‚slapping in a rough way'* (2015)
- **Some cases here: intensifier Role**: *durva* intensifies the action, highlighting its severity or roughness.

Category 3: Non-descript or roughly made

- **Approximate or rough characteristics**: *csak az akku durva minősítésére alkalmas,* '[test] is only for the rough qualification of the battery' (1973)
- **Rough or sketchy description**: *durva utódai csupán* , (…) are only crude descendants' (1991)
- **Without inherent negative evaluation**

Category 4: Intensification

- **„Pure" intensification**: *durva gázadás* ‚rough acceleration'* (1961), *durva erőbehatás* 'great force' (1988)
- **With additional nuances**: *durva pofozkodás* ‚slapping in a rough way* (2015), *durva szabálytalanság* ‚rough malpractice' (1995)

Category 5: Sentiment word

- Reflecting the speaker's evaluation or stance (positive, negative, or neutral).
- **Total**: 90:
- **Negative sentiment**: 44 examples

  Viszonylag nem durva, és nem halálos eredményű eseteket mutattunk be (1987) ,They presented cases that were relatively mild and not fatal.'

- **Neutral sentiment**: 16 examples

  Az idei Acropolis igazi savát-borsát azonban nem is a szokatlanul durva pályák, hanem a példátlanul erős mezőny jelentette. (1999) ,However, the real highlight of this year's Acropolis was not the unusually crushing tracks, but the unprecedentedly strong field of competitors.'

- **Positive sentiment**: 30 examples

  fekete és vörös színdomináció, látványos öltések, durva sportülések (2015) ,color dominance of black and red, spectacular stitches, rough sports seats.'
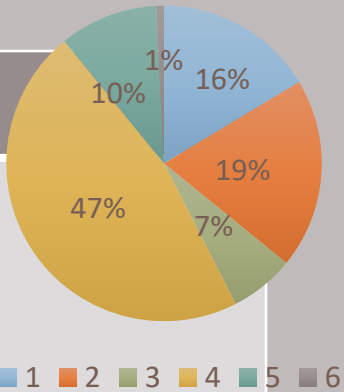
Category 6: Pragmatic marker

- **Definition**: *Durva* conveys an interactional function rather than fitting into previous categories; reaction in conversations, beyond purely descriptive or evaluative functions.
- **Total**: 7 cases, e.g.

  Mentem a hondás haverommal 300-zal, jött a kanyar, bevettem, de hirtelen kisodródtam. - Hú, ez durva - mondja az ápolónő. (2008) ,I went with my friend by Honda at 300, the turn came, I took it, but suddenly I drifted out. - Wow, that's rough - says the nurse.'

Results

Quantitative and qualitative results of the analysis

Meanings and shades of meanings of each cases

Annotation tags	Number of occurrences	Shades of meaning
1	146	a) uneven, rough, coarse surface; b) grains, drops or pieces larger than desired or usual; c) a big size or robustness; d) rough, wrinkled or toothed object, device, tool; e) thick, hard, coarse fiber or fabric made from such fibers; f) rough to the touch, crusty or stiff surface; g) edge that is not properly rounded but sharp;
2	174	a) someone is violent, cruel, rude, merciless, grumpy, or indelicate with others; b) handling objects in an indelicate manner; c) corrosive chemical agent; d) the manner of the given happening or activity (the action is not specifically aimed at a person or object as in a and b; it is the manner of the action itself).
3	59	a) rough-and-ready, lacking detail (negative feature); b) intentional, deliberate sketchiness, lack of elaboration (not negative); c) rough estimate; d) exaggeration; e) something of poor quality, a poor replica or forgery
4	416	intensification
5	90	negative, positive or neutral sentiment word
6	7	pragmatic marker
ALL:	892	

Distribution of each annotation tag in each sub-corpus (divisor: the total number of occurrences)

|	1	2	3	4	5	6
1950	15.79	28.95	17.11	36.84	1.32	0.00
1960	15.53	19.42	13.59	48.54	2.91	0.00
1970	10.56	27.33	3.73	57.76	0.62	0.00
1980	14.20	24.43	6.25	48.86	6.25	0.00
1990	27.55	15.31	12.24	37.76	7.14	0.00
2000	21.64	8.21	0.75	37.31	29.10	2.99
2010-2020	13.89	13.19	1.39	50.00	19.44	2.08

Observations:

- the more "classic" meanings (Categories 1, 2, and 3) are dominant during the first approximately 50 years.
- From the 2000s onwards, this tendency is reversed (cf. Category 5 and 6).
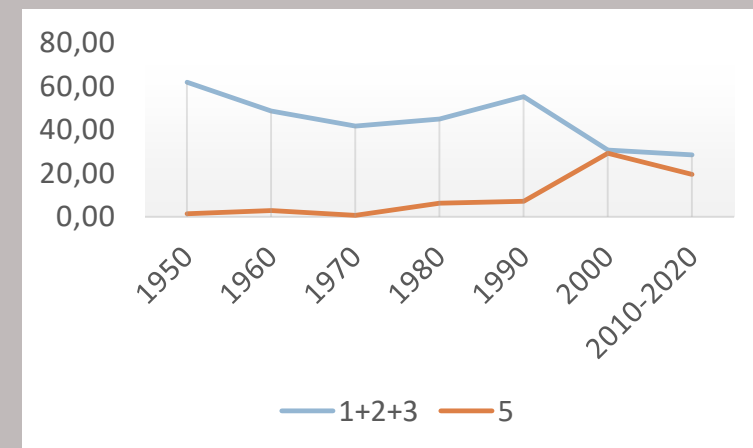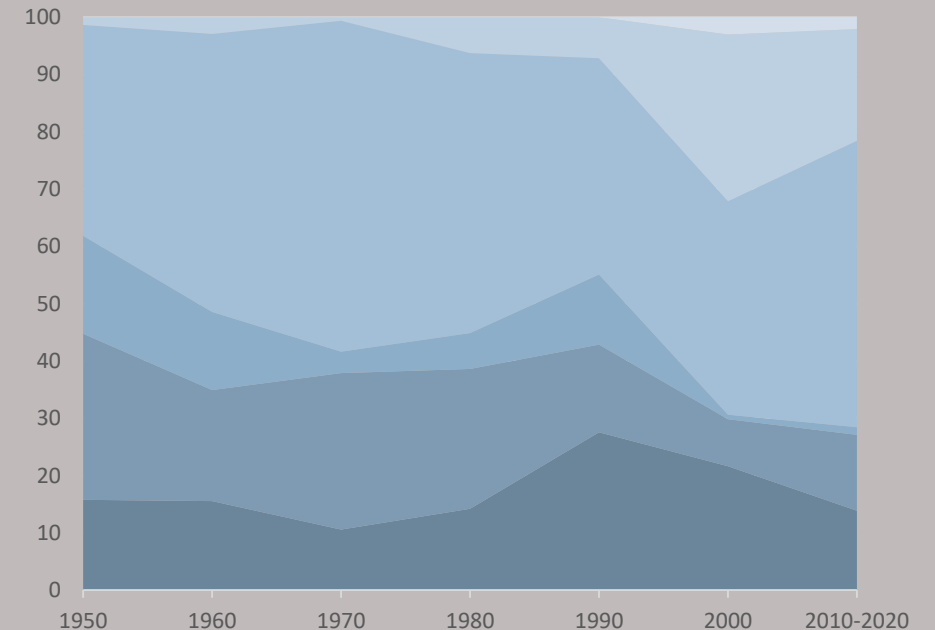
Evolution of sentiment values

When *durva i*s an intensifier (Category 4); sentiments of the modified head:

- Shift in sentiment over time:
  - By 2000, modified words are mostly negative.
  - Growth in neutral contexts since the 1990s
  - It appears with a positive word in the last subcorpus
- Signs of desemantization
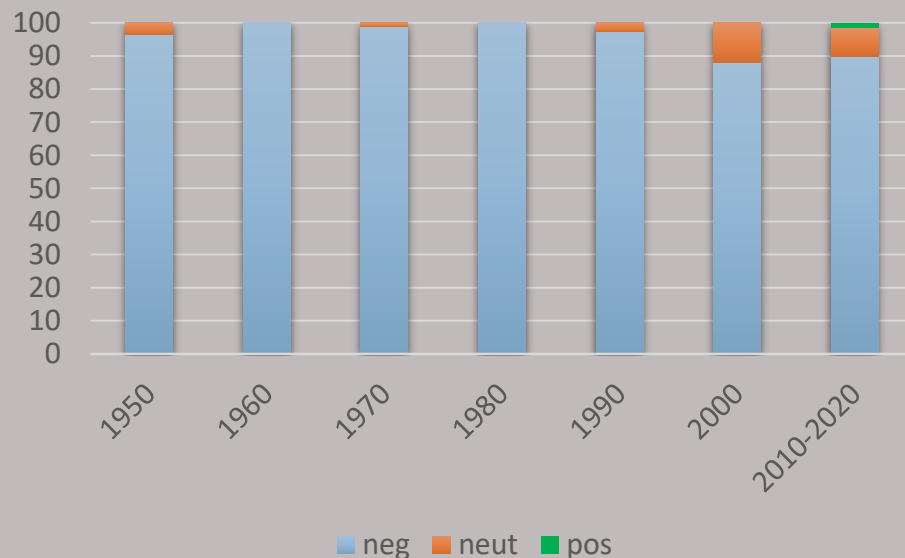
durva as a sentiment word (Category 5)

- Constantly losing its negative connotation:
  - Up until the **1980s**, *durva* predominantly functioned as a **negative sentiment word**.
  - From the **1980s onwards**, over the decades, the proportion of non-negative uses has **steadily increased**
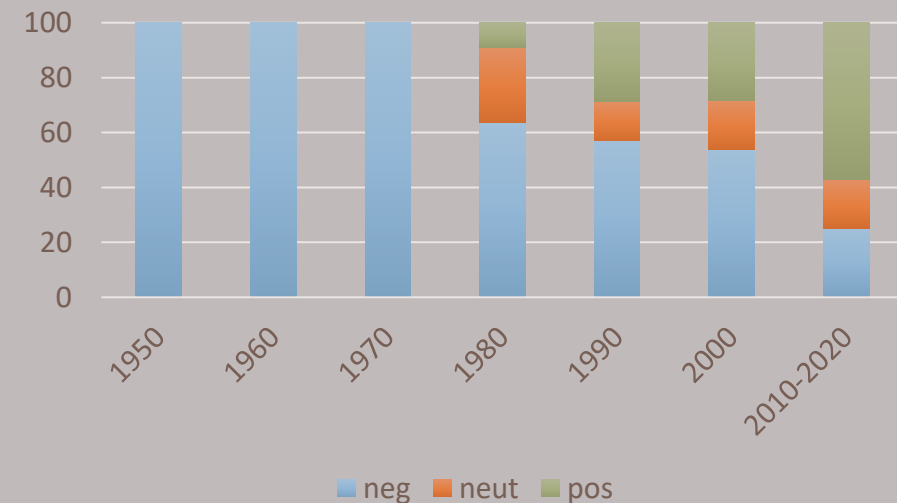
Discussion of the results

Key findings and approach to semantic-pragmatic development of NEWs over time

Previous literature results

- My analysis is grounded in three key studies: Ahn and Yap (2022), Khormee et al. (2024), and Bartolotta (2023).
- **Ahn and Yap (2022): Korean *com***
  - transition from a quantifying noun to a discourse marker (DM) three development stages: **early grammaticalization** (from noun to adverb), **cooptation** (adoption as DM), and **late grammaticalization** (broadening to subjective meanings).
- **Khormee et al. (2024): Persian *ya'ni***
  - They apply the Sentence Grammar (SG)–Thetical Grammar (TG) dichotomy and Heine's **pragmaticalization** framework (et al., 2013); emphasize **cooptation** as central.
- **Bartolotta (2023): Latin *maxime***
  - Shifts from a degree adverb to intersubjective meanings.

Own approach to NEWs
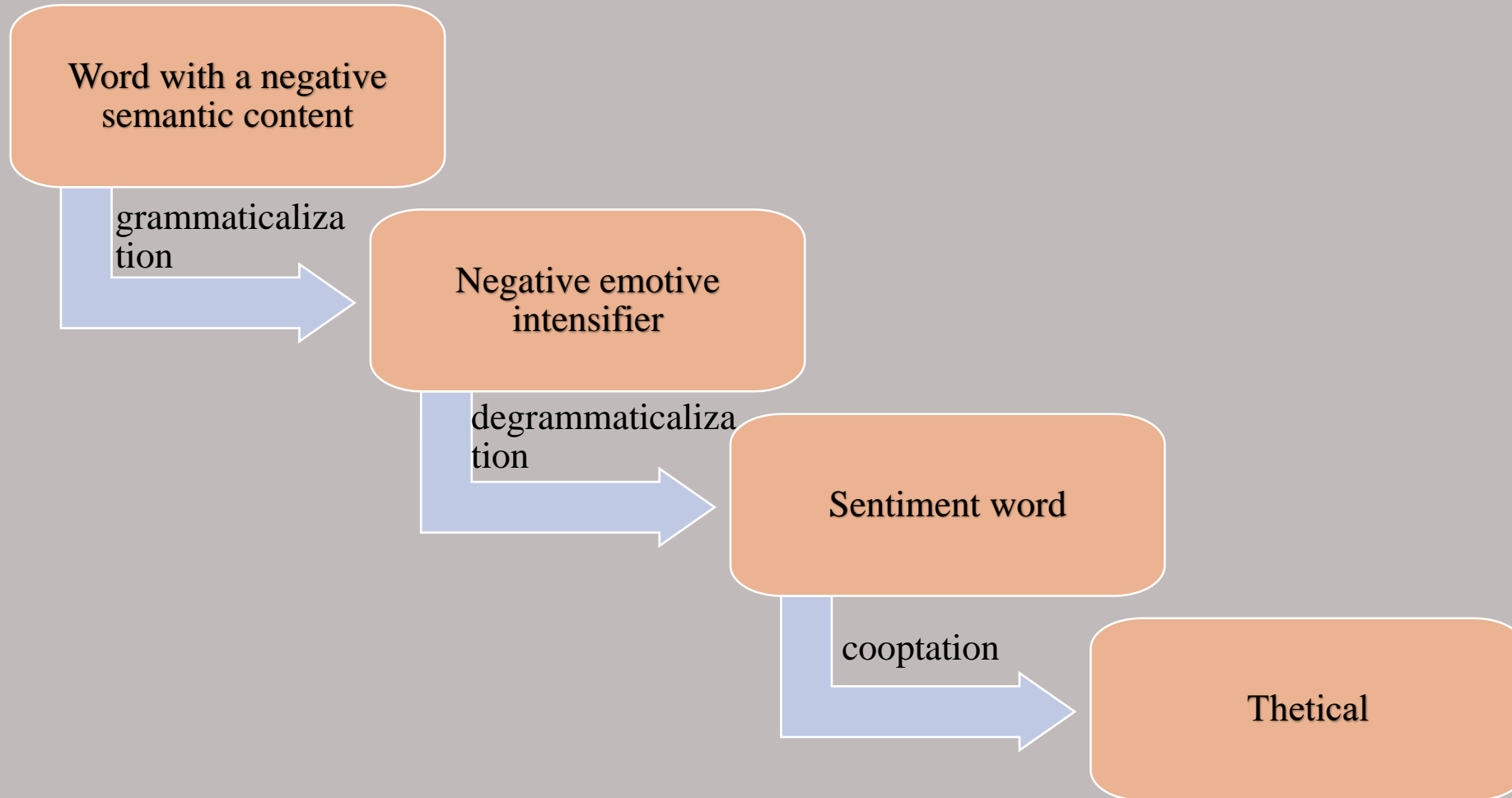
The semantic-pragmatic development of NEWs over time I.

- All the mentioned three studies support the idea that NEWs evolve through the following main stages:

- **I. Emergence of the intensifier function:** shift from their prior lexical meanings to grammatical roles as intensifiers
  - **Initial negative connotation**: NEWs originally have meanings like "dangerous," "harsh," or "brutish."
  - **Grammaticalization**: NEWs undergo grammaticalization → serve as intensifiers (e.g., "brutally" to mean "extremely").
  - Remain **grammatically dependent** and contribute to the propositional meaning of sentences (Heine et al., 2013).
  - **Collocational erosion**: their usage expands to neutral or positive contexts (Lorenz, 2002) → collocational restrictions reduces

The semantic-pragmatic development of NEWs over time II.

- **II. Emergence of the sentiment word function:** convey evaluative meaning metaphorically.
- **Degrammaticalization:** shift from a function word to a content word (Norde, 2009; Dér 2013).
  - NEWs move from intensifying meanings to expressing subjective evaluations and stances.
- **syntactically dependent** and adhere to Sentence Grammar (SG) principles (e.g. modify nouns, verbs, or entire clauses)

The semantic-pragmatic development of NEWs over time III.

- **III. The thetical function via cooptation**

- **Theticals**: Linguistic units (words, phrases, clauses) used to express speaker attitudes, emotions, or metacommunicative content (Kaltenböck et al., 2011; Heine et al., 2013).

- **syntactically independent;** various syntactic positions; meaning shifts from propositional (contributing to sentence content) to **non-restrictive or discourse-interactional**

- The meaning is **procedural** rather than **conceptual**: SG → TG (Ahn and Yap, 2022).

Conclusion; future steps

- **Semantic-pragmatic evolution of NEWs**:

    NEWs progress from their initial meanings → to becoming intensifiers → then evolving into sentiment words → and finally transforming into theticals.

- **Three stages**:
  - Grammaticalization to intensifiers
  - Degrammaticalization to sentiment words
  - Cooptation to theticals

- **Research contributions**:
  - A comprehensive model for understanding the temporal dynamics of NEWs' semantic-pragmatic changes.
  - Broader implications: applicable across different linguistic contexts (beyond Hungarian).
  - Enhances general theories of language change with data-driven analysis of Hungarian language data.

References

Ahn, M., & Yap, F. H. (2022). On the evolution of a multifunctional discourse marker: A Discourse Grammar analysis of Korean com. *Journal of Pragmatics,* 195, 31-47. https://doi.org/10.1016/j.pragma.2022.01.013

Bartolotta, A. (2023). From degree adverbs to discourse markers: the case of maxime in Early Latin. In *The ICLL 2023 Book of Abstracts.* 44-46.

Dér, C.I. (2013). Mi számít grammatikalizációnak? Kísérlet a fogalom újradefiniálására. In Forgács, T., Németh M., Sinkovics B. (Eds.) *A nyelvtörténeti kutatások újabb eredményei* VII. Szeged: Szegedi Tudományegyetem Magyar Nyelvészeti Tanszék. 17-28.

Heine, B., Kaltenböck, G., Kuteva, T., Long, H. (2013). An outline of discourse grammar. *Functional approaches to language,* 175, 233.

Kaltenböck, G., Heine, B., Kuteva, T. (2011). On thetical grammar. *Studies in Language. International Journal sponsored by the Foundation "Foundations of Language"*, 35(4), 852-897.

Khormaee, A., Abbasi, S. M., Moloodi, A. (2024). The Pragmaticalization and Grammaticalization of the Discourse Marker. *Research in Western Iranian Languages and Dialects,* 12(2), 39-58.

Lorenz, G. (2002). Really worthwhile or not really significant. n Ilse Wischer & Gabriele Diewald (Eds.), *New reflections on grammaticalization,* 143-161.

Norde, M. (2009). *Degrammaticalization*. Oxford University Press.

Szabó, M.K., Bibok, K. (2019). Értékvesztésre és értékváltásra képes lexémák újabb vizsgálata. *Argumentum* 15, 639-649.

Szabó, M.K., Dam, B., Vincze, V. (2023). *On the Semantic Development of Negative Emotive Intensifiers.* Manuscript.

Szabó M.K., Nagy B., Sánta P., Vidács L. (2024). *Determining the Semantic Features of Negative Emotive Words using a Computational Semantic Analysis Approach.* Manuscript.

References

Autó-Motor journal [https://adt.arcanum.com/hu/collection/AutoMotor/]

Bárczi, G., Országh, L. (1959). *A magyar nyelv értelmező szótára.* Akadémiai kiadó.

Czuczor, G., Fogarasi, J., 1862. *A magyar nyelv szótára* I-VI. Akadémiai.

Zsemlyei, J. (1993). Az új magyar etimológiai szótár. *Modern Nyelvoktatás*, 29(1–2), 184-187.

Thank you for your attention!

Martina Katalin Szabó

University of Szeged, Institute of Informatics; HUN-REN Centre for Social Sciences, Research Center for Educational and Network Studies (CSS RECENS)

Szabo.Martina@tk.hu