Analysis Scripts

Description. This file contains the pseudocode representation of the analytical procedures used in the study *"Language as a Trace-Behavioural Matrix: Profiling the Cognitive and Emotional States of Artists through War-Conditioned Narratives"*. The scripts outline the qualitative coding logic applied to the two corpora — Harper's Bazaar Ukraine (2025) and Postimpreza (2024) — during the content analysis phase of the research.

Purpose. The scripts were developed to operationalize the **Trace-Behavioral Linguistic Matrix (TBLM)**, designed for the identification and systematic classification of cognitive, emotional, and social narrative markers. These markers served as the foundational data for both quantitative distributions and qualitative pattern identification throughout the study.

Structure:

- **Emotional Marker Identification Logic:** Focuses on lexical and syntactic indicators of affective states, including fear, resilience, despair, pride, and adaptive emotion regulation under wartime stress.
- **Cognitive Marker Identification Logic:** Centers on language structures reflecting self-reflection, identity reformulation, and temporal anchoring, which are typical for narrative responses to traumatic experiences.
- **Social Marker Identification Logic:** Captures references to group identification, solidarity, collective moral frameworks, and the rhetorical construction of in-group/out-group boundaries.

Important Note: These scripts are conceptual representations, written to document the linguistic decision-making process during manual qualitative coding. They are not executable software but rather a transparent illustration of the applied analytic methodology, consistent with the ethical handling of human language data and qualitative research standards.

Usage: These pseudocode scripts are provided to support methodological transparency and allow other researchers to replicate or adapt the marker-based coding process for comparable studies in trauma linguistics, narrative analysis, and wartime discourse.

References

Bazaar Ukraine. (2025). Art during wartime: Artists on life, work, and creativity. *Harper's Bazaar Ukraine*. https://harpersbazaar.com.ua/culture/art/mystetstvo-pid-chas-viyny-khudozhnyky-pro-zhyttya-robotu-ta-tvorchist/ [in Ukrainian]

Postimpreza. (2023, October 19). It is impossible to be an actor, artist, or engineer and a soldier at the same time. You become just a soldier. *Postimpreza*. https://postimpreza.org/talsk/nemozhlyvo-buty-odnochasno-i-aktorom-khudozhnykom-chy-inzhenerom-i-viiskovym-ty-staiesh-prosto-viiskovym [in Ukrainian]

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# Pseudocode for Emotional Marker Extraction

for text_unit in corpus:

    if contains_any(text_unit, ["страх", "ненависть", "спокій", "гордість", "розпач"]):

        tag(text_unit, marker='Emotional')

        classify_valence(text_unit) # Positive / Negative / Mixed

        score_intensity(text_unit) # 1-5 scale: Low to High


# Pseudocode for Cognitive Marker Extraction

for text_unit in corpus:

    if contains_any(text_unit, ["усвідомлення", "адаптація", "сприйняття", "ідентичність"]):

        tag(text_unit, marker='Cognitive')

        assess_temporal_frame(text_unit) # Past / Present / Future

        map_metacognitive_statements(text_unit) # Reflection level


# Pseudocode for Social Marker Extraction

for text_unit in corpus:
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if contains_any(text_unit, ["ми", "разом", "єдність", "солідарність"]):
    tag(text_unit, marker='Social')
    determine_identification(text_unit)  # Group or Self
```