SFL-BASED APPRAISAL THEORY AS AN EFFECTIVE METHOD FOR EMOTION DETECTION IN PUBLIC DISCOURSE

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This article delves into the emotional analysis of motivational speeches, a vital subtype of public discourse recognized for its emotive character and strategic linguistic devices aimed at influencing and engaging the audience. Within this research, efforts are dedicated to unveiling the intricate facets of emotional expression revealed through lexical choices and grammatical structures across various domains, including politics, education, and business. To systematically process and analyze data, this research leverages the UAM Corpus Tool (O'Donnell, 2008) and AntConc software (Anthony, 2005), with a particular focus on the Key-Word-In-Context (KWIC) analysis. Employing a corpus-driven analytical approach firmly rooted in the principles of SFL-based Appraisal Theory, this study effectively identifies and delineates the full spectrum of emotional expressions within motivational speeches. SFL-based Appraisal Theory emerges as the central and most effective method for unraveling the complex emotional landscape within motivational speeches. This tool is combined with rigorous corpus analysis to unveil significant linguistic patterns and markers representing a spectrum of emotional dimensions, particularly through the categories of Affect, Attitude, Engagement, and Graduation. Notably, within the Affect category of Appraisal Theory, specific attention is given to the meticulous analysis of the word "feel" and its combinations with adjectives, nouns, and other parts of speech. This analysis sheds light on how these linguistic constructs contribute to the expression and interpretation of emotions in motivational speeches. Consequently, the above-mentioned analysis contributes significantly to a deeper understanding of the persuasive strategies strategically deployed within this genre of discourse.

ТЕОРІЯ ОЦІНКИ НА ОСНОВІ SFL ЯК ЕФЕКТИВНИЙ МЕТОД ВИЯВЛЕННЯ ЕМОЦІЙ У ПУБЛІЧНОМУ ДИСКУРСІ

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Статтю присвячено емоційному аналізу мотиваційних промов як важливого підтипу публічного дискурсу, який характеризується емоційною спрямованістю та наявністю стратегічних мовних засобів, котрі впливають на залучення та мотивацію аудиторії. У цьому дослідженні особлива увага приділяється розкриттю складних аспектів виразності емоцій, які проявляються через низку лексичних одиниць та граматичних структур, що корелюють у різних галузях, таких як політика, освіта та бізнес. Для систематичної обробки та аналізу даних у ході роботи використовуються передові програми комп'ютерного забезпечення – UAM Corpus Tool (O'Donnell, 2008), котра містить вбудовані схеми для ручної анотації, та AntConc (Anthony, 2005), котра має вбудований метод аналізу KWIC (Key-Word-In-Context). Це дослідження ефективно ідентифікує та виокремлює повний спектр емоційних виразів у мотиваційних виступах за допомогою взаємодії корпусного підходу, що тісно пов'язаний із теоретичними засадами Теорії оцінки, вибудованої на основі системно-функціональної лінгвістики (SFL). Теорія оцінки на основі SFL слугує як найбільш ефективний метод розкриття багатогранного емоційного пласту, використаного у мотиваційних виступах. Вона має багатошарову будову та складається із низки категорій, таких як Affect, Attitude, Engagement, and Graduation. Зокрема, у ході роботи було виявлено, що слово "feel" є найбільш активним та поширеним серед усіх елементів категорії Affect і найчастіше вступає у лінгвістичні варіації з прикметниками, іменниками та іншими частинами мови. Також результати свідчать про те, що саме ці мовні конструкції впливають на виразність мовлення та інтерпретацію емоцій у мотиваційних промовах. Відповідно, отримані дані поглиблюють розуміння особливостей стратегій переконання у публічному дискурсі.

Introduction. Emotions play a pivotal role in human communication, serving as a powerful tool for persuasion, motivation, and connection. Within the vast framework of public discourse, motivational speeches emerge as a compelling genre distinguished by their emotive character and strategic linguistic devices aimed at influencing and engaging the audience.

In this regard, the **object** of the study is public discourse, particularly motivational speeches.

The **subject** of the study is SFL-based Appraisal Theory as an effective method for emotion detection in public discourse.

Research materials are motivational speeches, delivered across various domains such as politics, education, and business, which constitute a rich and diverse source of data for the investigation. This corpus of speeches provides a rich and varied source of data for the analysis.

The principal **aim** of this research is to explore and decode the intricate facets of emotional expression within motivational speeches using the SFL-based Appraisal Theory as a discerning analytical framework.

To achieve this aim, the following **specific objectives** have been outlined:

– to conduct a comprehensive analysis of emotional patterns within motivational speeches using a combination of the UAM Corpus Tool and AntConc software;

– to investigate the linguistic combinations of the word "feel" within the Affect category of SFL-based Appraisal Theory, shedding light on its role in conveying emotions within these speeches;

– to detect and analyze the most frequent emotional patterns within the categories of Attitude, Engagement, and Graduation, providing insights into the persuasive strategies employed in motivational discourse.

By pursuing these objectives, it is possible to enhance a general understanding of the intricate emotional tapestry embedded into motivational speeches, ultimately contributing valuable insights to scholars and researchers engaged in discourse analysis, linguistics, and the study of public speaking.

Data processing for the analysis of motivational speeches was carried out utilizing two primary software programs specifically designed for conducting comprehensive corpus analysis: AntConc (Anthony, 2005) and UAM Corpus Tool (O'Donnell, 2008). As Anthony (2005) suggests, AntConc is recognized as a versatile, computational, and publicly available software that facilitates the meticulous examination of substantial datasets. It encompasses a wide array of tools, including the Key-Word-In-Context (KWIC) Tool, Plot Tool, File Tool, Cluster Tool, N-Gram Tool, Collocate Tool, Word List Tool, Keyword List Tool, and WordCloud Tool. In the context of this article, corpus-driven analysis is executed through the utilization of the AntConc software, primarily for the purpose of conducting an extensive Keyword analysis.

The term "key" serves a dual purpose in language, as it is used to denote fundamental entities and objects, while also playing a pivotal role in the process of retrieving and substantiating research findings within databases. Consequently, keyness emerges as an unequivocal phenomenon, closely tied to the "quality of words" within a given textual category or linguistic set. In this regard, keyness can be defined as the "textual quality", as suggested by Scott, Mike, and Tribble (2006: 55–56). According to Stubbs (2002), the most effective approach for examining "cultural keywords" involves the utilization of corpus tools. Given that discourse formation and realization represent intricate cognitive processes, they are fundamentally influenced by a wide range of emotions (Klann-Delius, 2015: 141).

The study of effectively delivered public speeches has been a subject of investigation for several decades, forming an integral component of linguistic research. Of particular interest to researchers is the identification of distinctive features within logically structured communicative expressions. Recent research in this field has revealed that speeches infused with emotional content tend to be more impactful than fact-based narratives. Consequently, the level of emotionality significantly contributes to enhanced persuasiveness and memorability (Kim, Ratneshwar, and Thorson, 2017).

The emotional aspects of various forms of discourse are commonly analyzed through the framework of Appraisal Theory. This theory posits that individuals assess specific contextual situations based on their cognitive evaluations, and these emotional appraisals subsequently influence human behaviour in alignment with the emotional content of the appraisal (Raghunathan & Pham, 1999).

Appraisal theory falls under the interpersonal metafunction, which primarily concerns the negotiation of social relationships, particularly in terms of how people communicate and convey various emotions (Martin & White, 2005: 7).

The core objective of Appraisal Theory is to explore how speakers convey a range of positive or negative emotions within linguistically constructed discourse. This encompasses a wide array of emotions, including but not limited to approval or disapproval, certainty or uncertainty, truthfulness, capability, and persistence (Martin & White, 2005; Bednarek, 2006).

Appraisal theory comprises three essential structural components: Attitude, Engagement, and Graduation. Attitude, in particular, is a multifaceted phenomenon built upon other crucial elements, including Appreciation, Judgment, and Affect.

Appreciation serves the purpose of assessing or evaluating objects or concepts within specific domains. Judgment, on the other hand, is employed to analyze how individuals perceive and adapt their behaviour in various circumstances. Affect is intricately linked to the speakers' emotions, which are expressed through linguistic means (Martin & White, 2005: 35–36).

Engagement, as another key component, delineates the speakers' stance through various strategies, encompassing additional tools such as modality, projection, concession, polarity, and comment adverbials. Additionally, a range of linguistic devices influences the speakers' attitude toward value positions, including denial, counterargument, quotation, and reporting (Martin & White, 2005: 36).

Regarding the structure of engagement, it can encompass both monoglossic and heteroglossic elements. Monoglossic subcategories do not incorporate dialogistic alternatives, while heteroglossic subgroups encompass the full spectrum of these features (Martin & White, 2005: 100).

Graduation, within the Appraisal theory framework, is perceived as a scalable ranking of an individual's assessment along two axes: Force and Focus. Force pertains to the grading concerning the quantity or intensity of the evaluation, whereas Focus involves grading based on prototypicality (Martin & White, 2005: 137).

The following scheme is developed by Martin & White to encapsulate the essence and structural elements of the Appraisal theory.

Benítez-Castro and Hidalgo-Tenorio emphasize the significance of emotional references to the contextual situation in discourse interpretation. This reliance on emotional references has a direct impact on the emergence of convergences and challenges when analyzing emotions. While Appraisal Theory is widely recognized as an effective approach for
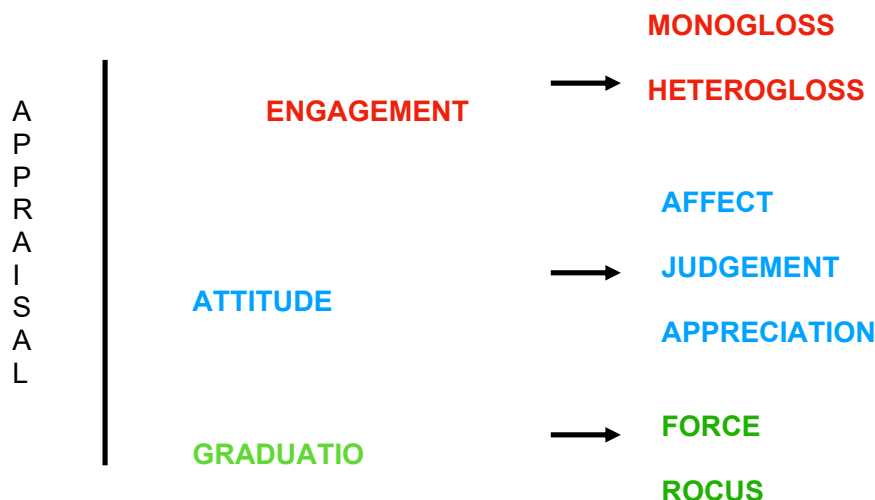
Fig. 1. The Overview of the Appraisal Theory

investigating various emotional aspects in discourse, it is not without its gaps, particularly in the domain of the Affect sub-system.

To address this gap, it is essential to explore the Affect sub-system using three interconnected axes: construction theories, neuroscience, and, of course, Appraisal Theory itself (Benítez-Castro & Hidalgo-Tenorio, 2019: 207). In the course of the research, it was found that almost all the categories of the Appraisal Theory are vibrant and multifaceted. Furthermore, they numerate a great number of emotionally-coloured words and collocations conveying the speakers' feelings.

– **Affect:** feel;
– Inclination: want, wish, need, demand, desire, eager;
– *Disinclination:* worried, fearful, anxious, afraid, terrified, frightened;
– *Happiness:* happy, pleased, lucky, like, love, passion;
– *Unhappiness:* hate, dislike, pain, suffering, anxiety, distress;
– *Security:* confident, secure, sure, belief, faith, care;
– *Insecurity:* worried, concerned, upset, nervous;
– *Insecurity/surprise:* surprised, shocked, amazed, stunned;
– *Satisfaction:* glad, satisfied, thrilled;
– *Satisfaction/interest:* focused, curious, interested;
– *Dissatisfaction:* like irritate, angry, rejection;
– *Ennui:* bored; tired, annoyed;
– **Attitude/Social Sanctions**
– *Propriety:* ethical, moral, decent;
– *Veracity:* fair, honest, genuine;
– **Attitude/Social Esteem**
– *Normality:* strange, normal, terrible;

– *Capacity:* strong, weak, powerful;
– *Tenacity:* brave, determined, ambitious;
– **Attitude/Appreciation**
– *Reaction:* beautiful, attractive, ugly;
– *Composition:* complex, logical, simple;
– *Valuation:* unique, extraordinary, usual;
– **Graduation:** force, focus, slightly, somewhat, rather, very, entirely;
– **Engagement:** but, just, suppose, would like to.

Nevertheless, in most cases, Affect is realized in speech through the combination of the word "feel" altogether with the attributive concepts (Martin & White, 2005: 58). In the corpus, there are 515 concordance hits.

Pattern 44 a. Feel+noun

And I know it may sound silly, but I ***feel a connection*** to you because Hunter College and HuffPost are both on the 6 train (Ferriss, 2020).

In such pattern in our corpus of public speeches there are also another nouns like *empathy (1 occ.), fear (4 occ.), pain (1 occ.), part (1 occ.), people (1 occ.), pressure (1 occ.), pride (1 occ.), responsibility (1 occ.), stress (2 occ.), tense (1 occ.), benefit (5 occ.), brunt (1 occ.), bump (1 occ.), change (1 occ.), energy (2 occ.), impact (1 occ.), love (2 occ.), way (2 occ.) and work (1 occ.).*

Pattern 44 b. Feel+adjective+noun

These are some of the biggest issues that the company has faced, and we ***feel a huge responsibility*** to get these right (ABC News Network, 2018).

Pattern 44 c. Feel+about+noun

That is one of the biggest decisions you make is how you ***feel about*** your own ***self*** (Jay Shetty, 2019).

Pattern 44 d. Feel+adjective

. then I will just breathe in for a counterfoil and I'll breathe out for more than four and I'll ***feel*** absolutely ***set*** and I'll feel ready to go out (Jay Shetty, 2019).

In such pattern in our corpus of public speeches there are also another adjectives like *afraid (1 occ.), alive (1 occ.), alone (1 occ.), angry (4 occ.), anxious (2 occ.), betrayed (1 occ.), ashamed (1 occ.), bad (1 occ.), bleak (1 occ.), cheated (1 occ.), comfortable (3 occ.), compelled (1 occ.), confident (2 occ.), confused (1 occ.), contracted (2 occ.), crazy (1 occ.), disconnected (4 occ.), dislocated (2 occ.), dissatisfied (1 occ.), emotional (2 occ.), fabulous (1 occ.), familiar (1 occ.), free (3 occ.), frustrated (1 occ.), fulfilled (1 occ.), fun (1 occ.), gross (1 occ.), guilty (8 occ.), happy (1 occ.), helpless (1 occ.), important (1 occ.), inadequate (1 occ.), insecure (2 occ.), inspired (1 occ.), isolating (1 occ.), liberated (1 occ.), lighter (2 occ.), lost (2 occ.), loved (1 occ.), okay (5 occ.), old (1 occ.), overwhelmed (3 occ.), perfect (1 occ.), polarized (1 occ.), powerful (1 occ.), powerless (2 occ.), pretty (2 occ.), proud (2 occ.), ready (2 occ.), responsible (1 occ.), right (5 occ.), sad (3 occ.), safe (2 occ.), sick (1 occ.), smarter (1 occ.), sorry (1 occ.), special (2 occ.), strange (1 occ.), stressed (3 occ.), stuck (1 occ.), supported (1 occ.), terrific (1 occ.), tested (1 occ.), torn (1 occ.), uncomfortable (1 occ.), undervalued (1 occ.), unfocused (1 occ.), unsafe (1 occ.), useless (1 occ.) and young (2 occ.).*

Pattern 44 d. Feel+and+verb

You don't have to wait for special occasions – like graduation – to *feel and show* your gratitude to your family … (Stanford eCorner, 2011).

Pattern 44 e. Feel+as+adjective

Because when the stock is down 10% some month you're gonna have to feel 10% dumber, and it's not gonna *feel as good* (Stanford University, 2022).

Pattern 44 f. Feel+adverb+about

I *feel better about* Gillette if people buy the Mach 3 because they like the Mach 3 than if they get a Beanie Baby with it (University of Nebraska–Lincoln, 2020).

Pattern 44 g. Feel+for+adverb+noun

But it's – you can get a *feel for some products*, and then there are others you can't (University of Nebraska–Lincoln, 2020).

Pattern 44 h. Feel+adverb+adjective

I think, personally I *feel extraordinarily good* about being able to listen to Dr. Fauci, who I had never heard of a year ago (University of Nebraska–Lincoln, 2020).

Pattern 44 i. Feel+good+about

People that *feel good about* themselves have done some of the most terrible things in human history (ABC News Network, 2018).

Pattern 44 j. Feel+if

. fearing how my girls would *feel if* they found out what some people were saying about their mom (The City College of New York, 2006).

Pattern 44 k. Feel+in+noun

I have met working parents in Denmark who talk about the comfort they *feel in knowing* that their children can be cared for in safe… (Clintonlibrary42, 2012).

Pattern 44 l. Feel+like

That when he sang a song at the ripe old age of 8, he could make you *feel like* an experienced adult was squeezing your heart with his words (Billboard, 2016).

Pattern 44 m. Feel+so+adjective

And let me tell you, you should *feel so proud* of making it to this day (The City College of New York, 2006).

Pattern 44 n. Feel+such+noun

. *feel such a divide* between one another… (Billboard, 2016).

Pattern 44 o. Feel+that

But whenever you *feel that* creeping cynicism, whenever you hear those voices say you can't make a difference… (UMass Boston, 2009).

Pattern 44 p. Feel+pronoun+verb

And in the macho boys' club atmosphere that dominates many offices, women too often *feel they have to overcompensate* by working harder… (Ferriss, 2020).

Pattern 44 q. Feel+when

So, I wonder, how does it *feel when* you look back and see that it's just as easy to use Facebook, to use social media, as a force for evil? (MZ_04042019_MA_I-ENTR).

Pattern 44 r. Feel+pronoun+noun

I *feel your pain* (Stanford University, 2022).

As a result, the word "feel" exhibits numerous linguistic combinations with various parts of speech. As previously revealed, the word "feel" most frequently combines with adjectives denoting a wide array of both positive and negative emotions. These combinations distinctly elucidate the speakers' intentions and emotions.

Conclusions. This research has delved into the emotional analysis within motivational speeches, a distinct genre of public discourse known for its emotive character and strategic linguistic techniques designed to engage and influence audiences. Through a meticulous examination of a corpus comprising motivational speeches from diverse domains, including politics, education, and business, this study has explored the multifaceted expressions of emotions within public discourse.

One key observation is that the word "feel" plays a central role in conveying emotions within motivational speeches. The analysis of its combinations with adjectives, nouns, and various parts of speech has shed light on the linguistic constructs contributing to the expression and interpretation of emotions. In the corpus, there were 515 concordance hits for patterns involving "feel", emphasizing its significance in conveying emotional content.

Applying Systemic Functional Linguistics (SFL)-based Appraisal Theory as the analytical framework, this research has uncovered significant linguistic patterns and markers indicative of a spectrum of emotional dimensions, particularly within the categories of Affect, Attitude, Engagement, and Graduation. While the emphasis was placed on the Affect category, other categories have also revealed valuable insights into the persuasive strategies employed in motivational discourse.

Moreover, the utilization of corpus analysis tools, including the UAM Corpus Tool and AntConc software, combined with the Key-Word-In-Context (KWIC) analysis method, has facilitated a comprehensive exploration of emotional patterns in motivational speeches. This methodology has proven effective in identifying and delineating emotional expressions, contributing to a deeper understanding of the intricate emotional tapestry intruded into these speeches.

The findings of this research hold significance for scholars and researchers engaged in the fields of discourse analysis, linguistics, and public speaking. By unraveling the emotional dimensions of motivational speeches, this study not only enriches our understanding of persuasive strategies but also underscores the potency of SFL-based Appraisal Theory as a discerning instrument for emotion detection within public discourse. Ultimately, this research contributes to the broader discourse on the role of emotions in communication and persuasion, offering valuable insights into the dynamics of motivational speeches.

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