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SEMANTIC UNITS PROSODIC ACCENTUATION OF TRAGIC CONCEPT OF WAR (ON THE MATERIAL OF W. SHAKESPEAR'S PLAYS)

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Abstract. This study investigates the conceptual-semantic structure of the concept WAR in the context of William Shakespeare's historical chronicle *Richard III*, with a focus on its cognitive links to the concepts KILL and DEATH. Using a combination of corpus-based linguistic analysis and experimental phonetics, the research identifies lexical and prosodic markers that encode war-related meanings in actor-delivered monologues. Perceptual and instrumental analyses reveal systematic patterns in pitch, intensity, temporal organization, and pause placement that correspond to the information and pragmatic centers of war-related discourse. Building on these findings, the study proposes conceptual-semantic models of WAR and its associated notions, highlighting how prosodic cues realize cognitive and emotional dimensions of conflict. The research further outlines the potential for computer-based speech processing to extend the analysis, enabling automated modeling of war-related discourse and the synthesis of vocal performances that preserve the cognitive and affective structures identified in Shakespeare's texts. The results provide insights for cognitive linguistics, historical pragmatics, digital humanities, and applied phonetics.

Keywords: WAR; KILL; DEATH; conceptual-semantic model; prosody; Shakespear; cognitive linguistics; speech analysis

Introduction

Shakespeare's works began to be studied and interpreted abroad during his lifetime. Early commentators included Robert Greene, François Meres, Ben Jonson, John Milton, John Dryden, and Morgann. Textual studies were later developed by Blayney, Warren, Wells, Taylor, Montgomery, McEvoy, and others. Shakespeare's

language has been examined by Hussey, Blake, Culpeper, and two major dictionaries of his lexicon have been published (Minkov, 1954; Nikonova, 2008).

Shakespeare's plays, especially the tragedies, continue to attract strong interest from readers and audiences, indicating the enduring relevance of Renaissance conceptions of the tragic.

Modern linguistics is marked by the growing use of cognitive approaches, which allow researchers to reveal national ways of conceptualizing reality and to analyze semantic material through a general knowledge base. A key assumption of this approach is that language reflects human thought (Demjankov, 1994).

This study focuses on the cognitive-semantic analysis of the concept *war* within the paradigm of "the tragic," using Shakespeare's *Richard III* and the soundtracks of *The Hollow Crown* series (Shakespeare, 1969).

The relevance of the work lies in the limited linguistic exploration of the tragic as an interdisciplinary phenomenon. The cognitive approach prompts a reassessment of many semantic phenomena.

The aim of the study is to analyze the concept *war* through cognitive, semantic, and prosodic parameters. The main tasks are:

1. To define "the tragic" in Renaissance England and identify linguistic factors shaping it.
2. To extract lexicon forming the semantic space of "the tragic" in *Richard III*.
3. To determine the cognitive-semantic characteristics of *war*.
4. To perform a phonological analysis of relevant utterances.

The material includes the lexicon of "the tragic" from *Richard III* and audio excerpts from *The Hollow Crown*. The object of study is the chronicle's text and its screen adaptation; the subject is the concept *war* and its semantic and prosodic realization. Quantitative, perceptual, and instrumental analyses were employed alongside semantic and cognitive methods.

1. Theoretical Background of the Study

Tragedy is usually studied by literary scholars and philosophers, but for our research it is important to clarify a unified definition of English Renaissance tragedy in order to understand the concept of "the tragic." To do this, we first examine how "tragedy" and "the tragic" were interpreted during the Renaissance.

The study requires analyzing the semantic core of "the tragic," using lexicographic sources published in England between 1530 and 1657. Such sources are relatively few, and the most authoritative is the *Oxford English Dictionary* (OED). However, the OED definition reflects the idea of a theatrical performance rather than the Renaissance understanding of the tragic and does not account for specific literary traditions.

Most lexicographers describe tragedy as an art form distinct from comedy, marked by sorrow and violence. Terms such as *solemn*, *murder*, *cruel*, and *outrageous* form

its basic features. Examples include definitions of tragedy as "a solemn play," "a play describing cruel murders and sorrows," or one "ending with great sorrow and bloodshed" (Lord Lumley,1971; Nashe, 1973; Sidney, 1971; Thomas, 1587).

Thomas and Rider further note that tragedy can mean "to make a matter much worse than it is," implying any intensifying situation. Related terms also show broad usage: Bullokar defines *tragical* as *mournful, lamentable, deadly*; Cawdrey expands this to *cruel* and *sorrowful* (Cawdrey, 1604); Rider equates *tragic* with *cruelly* (Rider, 1970).

Thus, lexicographers emphasize sorrow and cruelty while omitting features such as unity of time and place, catharsis, or moral impact. In our view, these observations allow us to identify the basic features necessary for defining tragedy (Cockeram, 1623).

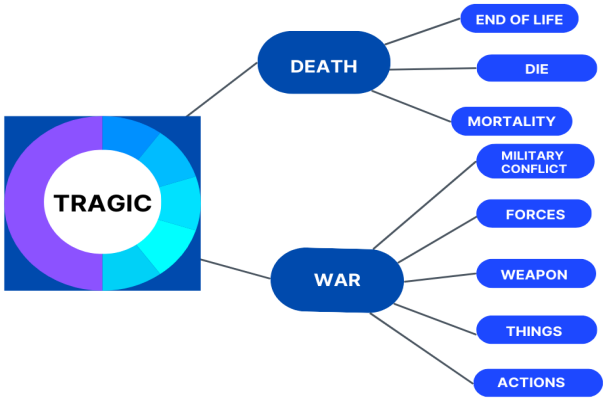
Table 1

№	Characteristic feature	Source
1.	solemn; lofty	Lumley, Thomas,
2.	making matters much worse than indeed it is; aggravate	Rider, Thomas, Heywood
3.	stately; lofty; matters of great princes	Lumley, Sidney
4.	doleful; sorrowful; mournful; lamentable	Lumley, Bullokar, Cawdrew, Rider, Thomas
5.	things tyrannical	Sidney
6.	fatal; deadly; abortive end; murder	Nashe, Thomas, Bullokar, Cawdrey Heywood
7.	cruel	Cawdrey, Rider, Thomas, Heywood, Nashe,
8.	blood; bloodshed	Nashe, Thomas

From the above data, it follows that the most frequent lexemes describing the semantic minimum of the concept *tragedy* are *doleful, sorrowful, mournful, lamentable, fatal, deadly, end, murder, cruel, blood,* and *bloodshed*. Features 1 and 3 (a solemn play about royal figures written in an elevated style) are not relevant to our cognitive study of tragedy: although they are intentionally maintained in the chronicles, we are not concerned with the genre-specific characteristics of Shakespeare's chronicles. Feature 5 (*things tyrannical*) is mentioned only by Sidney. However, we acknowledge its importance because it is rooted in the narrative of the chronicles and has a philosophical rather than literary nature, allowing us to reveal notions of good and evil, crime and punishment, and thus form a fuller picture of the worldview reflected in Shakespeare's texts (Cotgrave, 1611).

All identified features in the definitions of tragedy together provide a necessary and sufficient minimum for understanding the object of study and allow us to

formulate an adequate definition of tragedy as it developed in English drama between 1587 and 1616. Tragedy may therefore be defined as a depiction of a sequence of violent events centered on murder or revenge, usually motivated by excessive greed, envy, jealousy, or anger. Its emotional tone is created through language rich in lexemes belonging to the semantic field of *the tragic*.



2. Semantic Analysis of the Concept War

2.1. Semantic Core of the Concept "War"

Definitions of the term *war* are relatively limited. Thomas describes war as *martial affairs or powers*. Coote gives *martiall, warlike, militant – warning*. Blount equates *warlike* with *agonistical*. Cawdrey is perhaps the closest to a complete definition, which we take as foundational: *hostilitie, hatred or enmitie, or open war (Thomas, 1587; Blount, 1656; Cawdrey, 1604)*.

Thus, for a person of the late Renaissance, war (armed conflict) was understood as hostile (*hostilitie*) armed struggle (*martiall affairs*) between opposing (*agonistical*) forces (*powers*).

Far more attention is devoted by Thomas, Coote, Cawdrey, and Blount to weapons, military attributes, and participants in warfare. Thomas, defining *ARMORUM*, writes: *Armour, harness or weapons; battell, armes, or deeds of arms; all manner of instruments and tools; standards and banners; a sword; warres; counsel and deceit; all store for warres and ships; armour; tackling.* Cawdrey adds: *artillery, engines or instruments for war… munition, defence, supportation, or strength, and plenty of weapons to resist in warre (Thomas, 1587; Cawdrey, 1604).*

Specific weapons beyond *sword* are also mentioned. Thomas lists the *ballista* and *crossbow*: *ballista, an instrument of war to cast stones… a crosbowe; a gunne.* Bullokar defines *barricado* as *a warlike defence of empty barrels… to keep out*

enemies, and describes the *calthrope*, a device used to injure horses: *a little thing made with four iron picks… one point will always stand up to spoil the enemies' horsefeet*. Blount mentions *arcuballista*, though without explanation *(Blount, 1656; Bullokar, 1616)*.

Participants in warfare appear under general terms such as *POWERS, ARMIE*, and *ENEMIES*. Blount also includes *ARMIFEROUS* – "one who bears arms."

Another major component is military attributes: banners, flags, standards (banners, flags, standerds), as in Thomas. Coote also lists an *ensigne flagge for warre*. Interestingly, none of the lexicographers mention trumpets or drums, although they are also standard elements of military symbolism.

A further group of lexemes concerns planning, initiating, conducting, and ending military actions. Cawdrey discusses strategy and tactics: *stratageme, a pollicie, or wittie shift in warre; stricke, an alphabeticall table.* He also mentions *excursion, skirmish in warres*. Thomas and Bullokar note *defence*, and Thomas adds *counsel* and *deceit*. Thomas's definitions are often poetic; he describes preparation for war as: *to cause to take armour, to harness; to strengthen; to incense or stirre to armour; to make puissant; to furnish.* Cawdrey and Thomas also speak of *munition*, *supportation*, and *harness*.

Cawdrey and Coote address the issue of greed and lawlessness among victors—specifically, *pillage*:

– *spoyle in warre* (Coote)

– *pillage, spoile in warre, and sacking of the enemies* (Cawdrey)

Thus, our classification of the semantic minimum of the concept *war*, based on dictionary entries from Cawdrey, Coote, Thomas, Bullokar, and Blount, and used as the basis for selecting lexemes for the *WAR* frame, is as follows:

A. Hostile armed conflict between opposing forces (military conflict)

B. Participants in warfare (forces)

C. Weapons used in battle (weapon)

D. Military attributes and equipment (munitions & things)

E. Military maneuvers and their outcomes (actions)

2.2. Structure of the WAR Subframe

The WAR subframe is organized into five interrelated components: MILITARY CONFLICT, FORCES, WEAPON, THINGS, and ACTIONS.

The MILITARY CONFLICT subframe encompasses lexical items that describe armed conflict, hostility, and political unrest. Core terms include warlike, war, strife, quarrel, discord, tumult, challenge, rebel, enmity, the law of arms, broiling, and hostility. Additional entries found in other chronicles, which expand the semantic scope of the subframe, include revolt, military rules, rebellion, and confrontation. Collectively, these lexemes capture the various dimensions of conflict, ranging from interpersonal disputes to organized armed engagements, highlighting both the physical and sociopolitical aspects of warfare.

FORCES represents the participants in warfare. Lexical items include: foe, enemy, soldier, warrior, captain, troops, army, in arms, horsemen, guard, conqueror, watch, watchmen, forces, general, champion, commander, lieutenant, armed, servant-in-arms, man-of-arms, foemen, combatant, archer, batt'ry, captive, pursuviant-in-arms, trumpeter, gunner, adversary, sentinel, liegemen, and defacer of public peace. For analytical purposes, these can be grouped by role (e.g., profession, wartime position, relation to the enemy, weapon used, or post-conflict status).

WEAPON includes both hand-held and artillery armaments: sword, weapon, steel, foil, arch, dagger, pike, blade, spear, cannon, gun, elder-gun, gunpowder, basilisk, culverin, knife, arms, arrow, curtle-axe, stone-gun, poniard, sheath, and rapier. Notably, the term basilisk refers to a uniquely powerful cannon, likely named for its destructive impact and fearsome appearance, reflecting cultural perceptions of weaponry.

THINGS covers battlefield equipment and settings, including: field, alarum, ship, tent, horses, warning bell, drum, and trench, with additions such as camp, trumpet, trencher, wounds, scars, and bruises. These lexemes denote the physical context of conflict, transport and logistics, field dwellings, signaling instruments, and injuries sustained in battle.

ACTIONS represents military maneuvers and their outcomes. Key items include: fly, fight, yield, siege, combat, battle, conquer, overthrow, conquest, shoot, strike, vanquish, submit, valour, besiege, beat up/down, to watch, assault, confusion, skirmish, disperse, fortify, to set/take/follow arms, batter, endamage, captivity, cannon-shot, ship-wrack, retreat, vaward, scatter, to burn a town, dismiss one's army, and defense, with additional items from other chronicles: assail, fight out, get the field, depart the field, ambush, burn sb. out, to brave the field, to be a truant, and discomfit. Frequent repetition of core action verbs (fly, fight, yield) enhances the dynamic portrayal of conflict.

The WAR subframe can be conceptualized as an activation algorithm:

A MILITARY CONFLICT is initiated with the engagement of FORCES.

FORCES employ WEAPON in the course of operations.

Maneuvers and tactics are carried out through ACTIONS.

The presence of THINGS signals ongoing or preparatory military activity.

A primary objective of military actions is the physical destruction of enemy forces, linking the WAR subframe to the DEATH frame through the ACTIONS → KILL connection.

3. Prosodic Parameters of the Concept of Tragic

3.1. Methodology of the Experimental-Phonetic Study

A comprehensive method was employed for this study, combining perceptual auditory analysis with subsequent functional interpretation of the results. The auditory analysis allowed the identification of prosodic features of speech as

perceived at the perceptual level (Voloshin, et al., 2011, pp 55 – 75).

The phonetic experiment was conducted in the following stages:

1. Selection of actors' dialogues and monologues, followed by linguistic analysis of the material.

2. Recruitment of actors and informants.

3. Execution of a comprehensive auditory analysis.

The experimental corpus consisted of excerpts from the series Richard III, which, upon further analysis, were grouped according to the dominant lexical fields: death, kill, and war. The total duration of the selected audio material was approximately one hour. Participants in the auditory analysis were specialists in English phonetics with extensive experience in auditory perception studies.

The aim of the auditory analysis was to interpret prosodic characteristics of the selected texts. The analysis was conducted in two stages.

In Stage 1, auditors evaluated whether the monologues identified emphatically marked segments, and located the main idea in each monologue.

In Stage 2, expert phoneticians analyzed informational and pragmatic centers, determining their positions, relative prominence, tonal characteristics (movement, level, range, and contour steepness), and performed intonational annotation.

Perceptual gradations applied included:

– Prominence: weak – strong
– Tonal level: low – high
– Tonal range: narrow – wide
– Nuclear tone type: falling, rising, fall – rise, rise – fall, level
– Nuclear tone range: narrow – wide
– Contour steepness: gentle – very steep

This methodology ensured systematic identification and functional analysis of prosodic features across the experimental corpus.

3.2. Procedure and Results

At this stage, auditors were asked to identify the type of intonational scale used in each utterance. The frequency of scale usage marking the concept WAR in the speech of the renowned English actor Benedict Cumberbatch is presented in Table 2.

Table 2. Frequency of Scale Usage (%)

SCALE TYPE	FALLING			RISING			LEVEL		
	Stepping	Sliding with violation of regularity	Sliding	Stepping	Sliding with violation of regularity	Sliding	Stepping	Sliding with violation of regularity	Sliding
Concept WAR	60%	18%	5%	5%	5%	-	7%	-	-

Next, auditors identified the nuclear tone in utterances containing WAR-related lexemes, and the frequency of each tone type was recorded (Table 3).

Table 3. Nuclear Tone Usage (%)

Concept / TYPE OF NUCLEAR TONE	WAR		WAR		WAR	
	die	kill	fight	battle	combat	weapon
Low Fall	31%	32%	38%	44%	46%	34%
High Fall	8%	5%	11%	15%	22%	25%
Low Rise	26%	34%	30%	17%	20%	20%
High Rise	4%	8%	3%	8%	1%	-
Fall Rise	16%	12%	14%	10%	8%	14%
Level	3%	-	-	2%	-	-
Low Rise + High Fall	5%	2%	-	1%	1%	3%
Fall Rise + Low Rise	-	2%	-	-	1%	1%
High Fall + Low Rise	7%	5%	4%	3%	1%	3%

The functional interpretation of the experiment focused on three aspects: (1) the interaction of prosodic, lexical, and grammatical resources in constructing the semantic structure of the concept; (2) the prosodic realization of the concept in the actor's speech; and (3) the identification of informational and pragmatic centers and their nuclei – activated informemes and pragmemes – that influence the listener.

Analysis revealed that the end of nearly every phonoparagraph was marked not only by semantic closure but also by pauses, nuclear tones, changes in loudness, and variations in speech rate. Monologue phrases, both simple and complex, were structurally, semantically, syntactically, and intonationally complete. Phrase boundaries were signaled by pauses, tonal contours (falling, rising, or level), loudness modulation, and tempo variation, with some phrases accelerating independently of the overall speech rate.

Intonational groups generally aligned with potential syntagms but sometimes exceeded them, particularly due to the separation of subject and predicate. Pauses served as key markers of semantic boundaries and integrative devices. Syntactic pauses reflected the semantic-syntactic structure, while emphatic pauses highlighted crucial words or phrases, occurring either before (preparing the listener) or after (drawing attention) the target word. Notably, WAR-related lexemes consistently triggered pauses without interrupting phonation.

Overall, the intonational patterns of actor monologues containing TRAGIC lexemes exhibited complex interactions of prosodic components, effectively marking informational prominence and pragmatic focus to realize the communicative function of Shakespeare's texts. Results are summarized in Table 4.

Table 4. Realization of Prosodic Parameters of the Concept "Tragic"
(at the perceptual level, %)

Phrases containing lexemes	PROSODIC PARAMETRES								
	TEMPO			LOUDNESS			PITCH		
	Slow	Medium	Fast	Low	Medium	High	Low	Medium	High
death	**64%**	36%	–	22%	9%	**69%**	–	**66%**	34%
die	**41%**	14%	**45%**	–	7%	**93%**	–	29%	**71%**
kill	–	**85%**	15%	9%	**71%**	20%	17%	**57%**	26%
war	7%	**72%**	21%	35%	**54%**	11%	30%	**46%**	24%
battle	**43%**	14%	**43%**	16%	19%	**65%**	10%	22%	**68%**
fight	**50%**	17%	33%	25%	33%	**42%**	15%	**49%**	36%

Thus, the analysis shows that prosody plays a key role in realizing the semantic structure of the concept TRAGIC in monologue phrases and in marking its informational and pragmatic centers:

Intonational segmentation of the actor's monologue aligns closely with syntactic structure, following the hierarchy: phonoparagraph → phrase → intonational group. The phonoparagraph serves as the minimal unit of thematic organization; phrases correspond to simple or complex sentences, while intonational groups may match potential syntagms or, when emphatic pauses occur, form incomplete syntagms.

Delimitation of the monologue is achieved not only through tonal cues but also via two types of pauses: syntactic pauses (ranging from very short to long) and emphatic pauses (ranging from short to very long), as well as pauses without interruption of phonation.

Conclusions

The aim of this study was to analyze the cognitive-semantic parameters of the concept WAR based on Shakespeare's historical chronicle Richard III. Using the chronicle as a source allowed for a detailed investigation of WAR in its linguistic and cognitive context, despite the overall limited set of lexical units in this genre.

The analysis revealed that, in the late Renaissance English context, WAR was conceptualized primarily as hostile armed conflict, encompassing military forces, weapons, battlefield actions, and the associated social and moral consequences. Frame-based modeling allowed the decomposition of WAR into four key subframes: MILITARY CONFLICT, FORCES, WEAPON, and ACTIONS/THINGS, capturing the multidimensional structure of the concept.

Perceptual and phonetic analysis of Benedict Cumberbatch's performance in Richard III demonstrated the prosodic markers that realize the concept WAR in speech:

– Narrow tonal range
– Low pitch level
– Falling contour
– Slowed speech tempo
– Prolonged pre-emphasis pauses
– Contrasting loudness

These prosodic features were consistently associated with lexemes of the WAR semantic field (e.g., war, battle, fight, kill, weapon), highlighting how vocal delivery encodes the cognitive salience of conflict, aggression, and military action. Temporal parameters – speech rate, pause placement, and nuclear tone – played a critical role in emphasizing key elements of WAR, differentiating them from other lexical fields, and guiding listener perception.

The results indicate that WAR in Shakespearean chronicles is not only a semantic construct but also a performative and cognitive event, realized through both lexical choice and prosodic patterning. These findings have practical applications in teaching English historical drama, phonostylistics, and in designing voice synthesis for educational or digital storytelling platforms based on historical narratives.

Future research will integrate instrumental electro-acoustic analysis with modern computer-based speech processing to examine WAR and its related concepts KILL and DEATH. This approach will map prosodic markers – pitch, intensity, temporal patterns – onto conceptual-semantic models, revealing how acoustic cues encode cognitive and emotional dimensions of conflict. Computational analysis will also enable dynamic modeling of war-related discourse, supporting applications in digital humanities, education, and synthetic speech, while deepening understanding of the interplay between language, prosody, and the representation of human conflict in English Renaissance drama.

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