

## REVIEW

# A Contrastive Linguistic Study of Physiological, Linguistic and Cultural Contexts of Expressions of Anger across Different Languages in English and Arabic

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## ABSTRACT

This study aims to compare how the metaphor of rage is expressed in Arabic and English, given the paucity of research on this topic in the Arabic language. In other words, the study investigates how Arabs perceive anger and whether Arabic and English expressions of anger are both culturally and physiologically corresponding. Kövecses' model and the framework developed by Lakoff and Kövecses are the main tools used in the present study. In order to find any parallels or differences in how rage is conceptualized in Arabic and English, it looks at a variety of Arabic terms and expressions related to anger and measure them against the previously outlined model of Lakoff and Kövecses. According to the study, anger expressions in Arabic and English are essentially the same. The cognition of speakers from both Arabic and English cultures has been significantly influenced by the physiological repercussions of anger, thereby reducing cultural disparities among speakers of the other languages. The Arabic language may demonstrate a wider array of expressions of anger than the English language. This work's originality is found in its comparative study of how the concept of anger is expressed in Classical Arabic and English, with fresh and inventive results

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## 1. Introduction

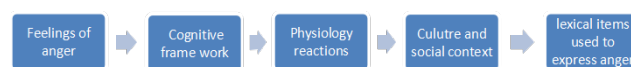
This research assumes that the expression of anger is a physical phenomenon. In other words, the physiological changes directly influence the metaphor of anger occurring in the human body when feeling anger. These expressions of anger are clear and direct. They directly correspond to the physical state that results from the pressure of anger. (Kovecses et al.<sup>[1]</sup>; Nozadi et al.<sup>[2]</sup>; Lakoff<sup>[3]</sup>; Lakoff and Kovecses<sup>[4]</sup>; Pavlenko<sup>[5]</sup>; Kulick<sup>[6]</sup>). Therefore, the present study is mainly interested in investigating how Arabs interpret the anger metaphor and whether they conceptualize it in a manner that is comparable to that of Westerners. The study looks into how Arabs understand the anger metaphor, whether Arabic culture addresses it in the same way that English culture does, and how Classical Arabic gets its receives the language describing anger from its surroundings. Therefore, this study contrasts the concepts of anger metaphors and fury expressions in both Arabic and English. It investigates whether the concepts of anger in Arabic and English are the same or different. It also investigates the manner in which Arabic speakers convey their anger and whether they employ the same conceptual metaphor or a different one.

## 2. Review of Literature

A review of previous research provides both motivation and significance for this study. To illustrate, Lakoff and Kövecses<sup>[4]</sup> first argued that expressions of anger primarily arise from physiological mechanisms. Lakoff<sup>[3]</sup> clarified that the physiological markers of anger language encompass heightened body temperature, high blood pressure, muscle tension, and restlessness. Secondly, Kovecses<sup>[7]</sup> asserted that a language must include our understanding of emotions, which is based on our physiological experiences of them. Bodily experiences form the foundation of emotions. This expression of the language of rage is fundamentally based on the concepts that “THE BODY IS A CONTAINER FOR EMOTIONS,” “ANGER IS HEAT,” and “EMOTIONS ARE FLUIDS.” Moreover, Lakoff and Johnson<sup>[8]</sup> contend that “when a cause generates an effect, it is typical to observe

the effect in close physical proximity to the cause”. Thus, all civilizations globally possess a common understanding of manifestations of rage. Kövecses<sup>[9]</sup> contends that understanding the language of anger requires an integration of physiological and cultural elements.

Kövecses<sup>[10]</sup> conducted a psycholinguistic analysis of the cross-cultural experience of wrath. He asserts that different languages and cultures employ a universal conceptual metaphor to express the feeling of rage. Kövecses<sup>[10]</sup> paradigm suggests two possible reasons why people show anger: how they think about their emotions and how they feel can both affect these actions (p. 181). In this context, Geeraerts & Grondelaers<sup>[11]</sup> introduced many anger-related phrases linked to physical heat. The dominant metaphor for wrath is that “anger is heat”<sup>[10]</sup>. Heat is a kind of a physical response to anger. Geeraerts and Grondelaers<sup>[11]</sup> regarded the metaphor anger as a cultural construct. Conceptual metaphor theory looks at how people show anger and how they use language. It finds two “extreme and seemingly diametrically opposed positions<sup>[10]</sup>”, that give different views on how emotions and language relate in different cultures. These include both physiological and cultural factors. Kövecses<sup>[10]</sup> says that even though cultural differences are growing, the expected difference in how people think about and use language of anger remains unchanged. The universality of emotions shapes their expression, which remains consistent across cultures. Thus, the language of emotion might overcome the cultural differences especially with the language, describing the physical emotions. Ogarkova and Soriano<sup>[12]</sup> present a similar viewpoint, contending that the manifestation of the metaphorical expressions of rage and anger is largely consistent in different world languages. Thus, Kövecses uses a framework that combines culture and the human body to determine the nature of language anger. The graphic below (**Figure 1**) illustrates the cognitive and physiological structure of anger.



**Figure 1.** Language of Anger Cognitive Framework.

The linguistic medium reframes the emotions of anger.

The linguistic medium operates through a reciprocal relationship between culture and our cognition. According to Kövecses<sup>[10]</sup> the physiological impacts of wrath shape the way we articulate such expressions linguistically. The effects of anger on human body are linguistically transformed into linguistic patterns corresponding to the metaphorical expressions borrowed from one's own culture. Our own cultural understanding of anger aligns with this. Our understanding of anger aligns with its physiological effects to some extent. Therefore, the present study integrates physiological with cultural elements with a particular emphasis on cognitive linguistic, explaining how cognition could transform the physical pain resulting from the feeling of anger into universal linguistic patterns. Physiological and cultural variables influence the expression of anger, potentially producing similar expressions of anger across cultures. Thus, the physical impact of anger controls the expression of anger's language, not cultural differences. Maalej<sup>[13]</sup> contended that the expressions of anger in Tunisian Arabic are more closely associated with cultural factors than with physiological ones. This contribution is essential to our research, as the current study will evaluate the hypothesis regarding the manner in which classical Arabic depicts anger and determine whether it is rooted in cultural or physical concepts

### 3. Research Questions

After reviewing the previous studies having to do with the subject of the study, it has become important to answer the following questions:

- What is the correspondence between Arabic expressions of wrath and English metaphors of anger?
- How relevant are English metaphors of wrath to Arabic expressions?
- Have all forms of wrath been addressed in the Arabic language?
- Are there unique metaphors for anger in Arabic distinct from those in English culture?

### 4. The Approach of the Study

The study's theoretical framework integrates Kövecses' approach<sup>[10]</sup> which looks at anger expressions from a cultural and physiological point of view, with Lakoff and Kövecses' model<sup>[4]</sup>, which explains that anger expressions

in American English have a clear conceptual structure that is mostly made up of metaphors and metonymies. Lakoff and Kövecses<sup>[4]</sup> developed a shared cultural paradigm for the physiological impacts of anger.

Lakoff and Kövecses<sup>[4]</sup> assert that individuals' experience of anger is influenced by physiological responses, prompting them to either express or conceal their anger. Consequently, individuals inadvertently utilize the overarching metaphorical principle

The culture might provide a general framework for expressing linguistically the metaphors of anger. However, such framework is inefficient without integrating it with the physiological aspect that shapes and reframes the cultural, contextual and social aspects. To illustrate, the physiological impact of anger, particularly the aspect highlighting HEAT, constitutes the foundation of the predominant metaphor of anger in the English psyche. This metaphor has two variations: one involving the application of heat to fluids and the other to solids. When applied to fluids, it might be stated: anger is the thermal energy of a fluid in a container. The precise impetus for this conceptual metaphor includes heat, internal pressure, and agitation, representing the components of the cultural model. When "anger is heat" is applied to solids, it transforms into "anger is fire," turning into red color, which is a marker of the physiological impact. The body serves as a vessel for emotions.

### 5. Methodology

In this study, the corpus linguistic methodology involves analyzing a diverse range of texts to understand expressions of anger in Arabic. corpus includes Classical Arabic texts, which are considered representative because they encompass a wide variety of contexts and expressions of anger. These texts include classical traditions, prose, and religious texts such as the sayings of the Prophet Muhammad (Hadith). By selecting texts from different genres and time periods, the study captures a broad spectrum of how anger is expressed in Arabic. - Classical traditions might include poetry and historical narratives, while prose could involve essays or stories. Religious texts provide insights into moral and ethical perspectives on anger The focus is on how anger is articulated linguistically in these texts, examining vocabulary, phrases, and rhetorical devices used to convey

anger. This involves analyzing both explicit expressions (direct mentions of anger) and implicit ones (metaphors or euphemism) - Classical Arabic texts offer a rich source of cultural and historical insights, showing how expressions of anger have evolved and how they were perceived in different eras - This can reveal societal norms, values, and attitudes towards anger and its expressions. Using corpus linguistics ensures a systematic and comprehensive analysis, allowing for the identification of patterns and variations in the language of anger across different texts. Overall, this approach provides a nuanced understanding of anger expressions in Arabic, highlighting linguistic, cultural, and historical dimensions.

### 5.1. The Criteria for Selection of the Corpus

When selecting English metaphors to align with their Arabic counterparts, the following criteria can be considered:

1. Cultural Relevance: the selection of metaphors that have cultural significance in both Arabic and English. This guarantees that the metaphors align with the values, beliefs, and experiences of speakers in both languages.

2. Semantic Similarity: using metaphors that express related ideas or meanings. Finding metaphors that convey similar concepts or feelings in both languages is necessary to enable a clearer comparison.

3. Use Frequency: emphasis on metaphors that are often employed in both languages. Speakers are more able to comprehend and identify high-frequency metaphors, which makes them appropriate for analysis.

4. Contextual Application: Considering the usual circumstances in which you utilize the metaphors. Metaphors that emerge in analogous contexts (e.g., literature, quotidian discourse, or particular genres) can yield profound insights on their roles and significations.

5. Figurative Language: Confirming that the chosen metaphors illustrate figurative language, since this facilitates a more profound examination of the representation of abstract concepts in both languages.

6. Linguistic Structure: Analyzing the linguistic framework of the metaphors to identify structural similarities in both languages. This can elucidate how each language conceptualizes analogous concepts.

7. Historical and Literary Significance: Incorporate metaphors of historical or literary relevance from both cul-

tures. This can augment the analytical depth by associating metaphors with overarching cultural narratives. Utilizing these criteria, the selected English metaphors may be accurately aligned with their Arabic equivalents. This facilitates a significant comparative analysis that illustrates the usage of metaphors in English and Arabic, highlighting their similarities and differences.

### 5.2. Data Analysis

Essentially composed of ontological and epistemic variables, it provides a universal framework for analyzing the metaphor of anger. Anger is associated with a container in the ontological variable; specifically, the human body functions as the vessel for blood<sup>[4]</sup>. It correlates anger with heat, fire, madness, and resistance. The variable connection exists between a source and a target. In the ontological framework, the body serves as the container, while the heat fluid represents the fury that permeates it. The objective of communication is invariably anger. The epistemological variable relies significantly on the conceptual metaphor that emphasizes the metaphorical and metonymic link between a container and rage. People consistently represent the body as a vessel that can contain heat, liquid, or flame. The heated fluid or fire circulating within the container is volatile. English culture has generated and conveyed several expressions of anger within the framework of this metaphor. We can examine the metaphor of fury in English culture through ontological and epistemological correlations. The ontological element of the rage metaphor encapsulates the physiological dimension, while the epistemological facet signifies the cultural dimensions. The subsequent items in English culture symbolize the metaphors of anger: Anger is akin to heat; wrath resembles fire; anger embodies insanity; anger serves as an adversary. This primary metaphor of anger has generated several expressions of anger in the English language. This English model of analyzing the expressions of anger is used to analyze the language and the expressions of anger.

### 5.3. Procedures

- The present study has collected a range of lexical elements and conventional language phrases that articulate the idea of anger to answer these questions.
- It next contrasts these instances with English

metaphors of rage to ascertain any parallels or discrepancies between them and their English cultural counterparts.

- The study’s corpus mostly originates from the classical literature, whereby conceptual systems remain unaffected by external influences from various languages.
- The research seeks to examine the representation of anger in Classical Arabic via conceptual analogies and colloquial language. This indicates that the study’s content must align with that objective.
- The research has thoroughly analysed a substantial collection of Classical Arabic literature to identify indications of anger in the language.
- The research examined a collection of sayings attributed to the Prophet, Hadith, traditional texts, various cultural and social literature, classical Arabic lexicons, and select phrases from classical poetry.
- The study addressed the expressions of anger in Arabic and English in relation to the following model with its sub-models:
  - a The body as a vessel for human emotions.  
Anger is the thermal energy of a liquid within a vessel.
  - b SUB MODEL- 1: ANGER IS HEAT applied to liquid → Internal pressure and disturbance
  - c SUB MODEL-2: ANGER IS FIRE, → facial redness is the distinguishing marker

## 6. Results

### 6.1. Sub Model: Fire Is Anger

The metaphor of anger in the Arabic language is examined by learning about the change in body pigment, such as the redness of the face, in the following Arabic corpus:

A- Ibn Hanbil<sup>[14]</sup> recounts that Prophet Muhammad’s visage appears to be pierced by pomegranates when he is furious

B- With a crimson visage, he stood up in anger<sup>[14]</sup>,

C- The prophet’s forehead becomes crimson<sup>[14]</sup>.

D- I can observe that your face turns a dark red color as a result of your wrath<sup>[14]</sup>.

E- His visage becomes dark red as a result of his wrath<sup>[15]</sup>.

F- His expression becomes menacing<sup>[15]</sup>.

G- His visage becomes exceedingly somber<sup>[15]</sup>.

H- His wrath is exacerbated and his eyes turn crimson when he preaches<sup>[16]</sup>.

I- Omaran’s anger culminates in the coloration of his irises<sup>[14]</sup>.

J- His irises turn a shade of crimson<sup>[15]</sup>.

The explanation of the preceding expressions of anger:

Before discussing the existential origins of the language of anger in Arabic language, it is crucial to point out that the Arabic examples provided above refer to anger as “fire,” and it is intuitively understood as such without the need to reevaluate the contextual realities of the text as a whole.

### 6.2. The Existential Aspect of the Language of Anger Is Comprised of the Following

Fire is the source.

Anger is the intended target.

FIRE IS ANGER.

The visage of the enraged individual is the object that turns red.

The anger is the cause of the discoloration.

The redness of the face, which appears to be dyed with pomegranates, is a metonym for wrath. When an individual is angry, their blood is physiologically suppressed, and their complexion turns a red color.

#### Epistemological Correspondence:

SOURCE: Substances may endure prolonged periods of low intensity before erupting into flames.

Target: Individuals may experience periods of low-level anger that abruptly escalate into a state of rage.

Source: Fires pose a threat to the safety of adjacent objects.

Target: Individuals are incapable of functioning properly when their wrath reaches the maximum point on the anger scale.

### 6.3. The Nose as a Metaphor Anger

In ancient Arabic, the nose was frequently employed to convey rage, and its metaphor of anger can be perceived in the context of “ANGER IS HEAT,” a phrase that is rarely employed to convey the expressions of anger in English. Despite the fact that the physical impact effects of rage can

affect the nostrils, the nose is not frequently employed as a metaphor for anger in English. In this regard, the nose's association with rage is associated with the physical effects of fury, such as tachycardia, elevated body temperature, and nasal swelling. In contrast to English culture, Arabic language extensively employed the nostrils to convey wrath.

#### 6.4. The Ontological Basis of Wrath in the Arabic Language Is as Follows

- a- His nose is punctured, indicating that he becomes calm after being furious<sup>[17]</sup>,
- b- His nostrils overheated<sup>[18]</sup>,
- c- His nose swelling indicates that he is experiencing anger<sup>[15]</sup>.
- d- The proverb "His fury is palpable." is a description of an angry individual<sup>[19]</sup>.

#### 6.5. The Ontological Basis of Anger Is as Follows

Source: The heat of the fluid in the container.

Anger is the intended target.

The nose and body are the containers.

The anger scale is represented by the heat of the fluid.

The internal pressure of inhaling through the nostrils is represented by the pressure container.

Agitation is a physical sensation.

Epistemological Correspondence:

SOURCE: The impact of rate respiration is agitation, internal pressure, and container heat.

Target: the impact of intense anger.

Source: The sensation of anger is characterized by the expansion of the nostrils and the sensation of body heat.

Target: the individual's ability to maintain control is compromised when fury surpasses a predetermined threshold.

#### 6.6. The Lips and Jaws as Metaphor of Anger

In ancient Arabic, the terms for lips and jaws are employed to convey fury, and the metaphor of anger may be understood in the context of "ANGER IS HEAT," paralleling the metaphorical representation of rage in English. Bagasheva<sup>[20]</sup>, asserts that the mouth, encompassing the lips, tongue, and teeth, serves as a metaphor for rage in both Bulgarian and English languages. Lips serve as a metaphor for

fury in English, characterized by the rapid movement of lips while seeking the appropriate words to articulate. When a someone experiences anger, their lips get swollen and froth may accumulate around their jaws. Al-Tanoukhi<sup>[21]</sup>, a classical Arab poet, articulated the metaphorical expression of fury in Arabic culture as follows: "And if his eyes turned in his face, and foam emerged from his jaws, he became like an enraged camel." In a fit of rage, his eyes rolled back, froth escaped from his lips, and he resembled an agitated camel, *Wādḥā huwa qad anqlbt 'ynāh fī wajhihi, wakharraja al-Zubad min ashdāqh, wṣār kāljml alhā'j* الهائج هو قد انقلبت عيناه في وجهه, وخرج الزبد من أشداقه, وصار كالجمل إذا. In the aforementioned example, the emotion of rage is metonymically conveyed through the act of expelling froth from the lips. The Arabic language employs froth and lips to communicate fury, as seen in the below examples:

- a-The man exhibited frothing at the lips<sup>[15]</sup>
- b-When he becomes enraged, his mouth foams<sup>[15]</sup>
- c-His lips have swollen<sup>[15]</sup>

These idioms serve as direct manifestations of rage, wherein metaphorical language has been converted into conventional lexical items synonymous with anger. A notable characteristic of expressions and terms of rage in Arabic is that the metaphorical meaning has historically evolved to be supplanted by a primary meaning.

#### 6.7. The Teeth as a Metaphor of Anger

In traditional Arabic, teeth symbolize rage, and this metaphor may be understood in the context of the expression "ANGER IS HEAT," which is similarly utilized in the English to convey wrath. In English, the expression is "having one's canines exposed"

The metaphor of rage is medically represented by clenched or grinding teeth, which serve as a response to fury; in this context, anger is akin to heat that induces nervousness and physiological reactions.

- a- He's been gnawing his canine teeth since I left<sup>[16]</sup>,
- b- He strikes with a powerful bite<sup>[22]</sup>,
- c- He grinds vigorously<sup>[15]</sup>
- d- He grinds his canine<sup>[18]</sup>.

#### 6.8. The Eyes as a Metaphor of Anger

In traditional Arabic, eyes symbolize fury, and the metaphor of anger might be understood as "ANGER IS fire,"

paralleling the metaphorical statement of rage in the English. The English employs the eye as a metaphor for conveying wrath, shown by phrases such as tightness in the eyes, blazing, bulging eyes, and eyes that are cold, hard, and flinty. The metaphor of rage is physically represented by the notion that fury is a fluid within a container, whose physiological effects cause the eyes to redden. Arabic culture is replete with instances of reddened eyes as an indicator of anger, regarded as a universal manifestation of this emotion. The metaphor that compares anger to fire is linked to the redness of the eyes. As demonstrated by the Prophet Muhammad's rhetorical portrayal of anger in his hadith, "Anger is akin to a smoldering ember in the heart of the son of Adam, evident in the reddening of the eyes"; thus, whoever experiences such emotions should remain grounded<sup>[14]</sup>. The Islamic tradition seems to share Western culture's understanding of anger as a volatile substance. The metaphor of rage linked to the eyes includes additional physiological elements, such as gaze intensity and eye orientation.

## 6.9. The Cheekbones as a Metaphor of Anger

In Classical Arabic, the cheekbones, chin, and forehead serve as physical indicators of wrath, a notion that is similarly recognized in English culture. Physical manifestations of rage may include a sheen of sweat on the cheeks, chin, and forehead. Additionally, they encompass facial reddening, frowning, labored respiration, muscular tremors, accelerated heart rate, and bodily tension. The subsequent examples are derived from classical Arabic culture:

- a. Eyebrows are furrowed<sup>[23]</sup>.
- b. I observed him furrowing his eyebrows and bringing them together<sup>[24]</sup>.

### 6.9.1. The Hair as a Metaphor of Anger

In Classical Arabic, hair signifies the physical manifestation of rage, analogous to its use in English to convey the same emotion. In English, the term "hair trigger" denotes an individual's intense reaction while experiencing anger. In classical Arabic, it is said, "he becomes enraged to the point that his hair is disheveled." In ancient Arabic, the phrase *Ahrmfsh al-rajul*, احرنفش الرجل, translates to "hair trigger<sup>[15]</sup>".

### 6.9.2. The Throat As a Metaphor of Anger

The throat serves as a medium for articulating rage in both Arabic and English. In English speakers, when individuals experience anger, they often exhibit throat-clearing and excessive usage of verbal hesitations such as "ums" and "ahs." Furthermore, the phrase "making odd noise in the throat" serves as a metaphor for fury in English. The traditional Arabic language offers a comparable expression of fury related to the throat. In Arabic, the phrase, *Akzm ghyzā* غيظا كظم translates to "repressing his anger<sup>[14]</sup>". The concept of suppressing rage results in throat-clearing noises, such as excessive use of "ums," "ahs," and other vocal hesitations.

### 6.9.3. The Heart as a Metaphor of Anger

The Classical Arabic language used the heart as a metaphor for rage, a usage that is rarely found in English. Although the English language rarely use the term "heart" to convey fury, in contrast to Arabic culture, the heart symbolizes a vessel that harbors rage. In the Arabic language, the heart can be utilized as a container to convey rage in the following manner:

- a-His heart is replete with wrath<sup>[25]</sup>."
- b-His heart is inundated with wrath<sup>[26]</sup>
- c-Avoid excessive anger, as its intensity corrupts the heart of the wise<sup>[27]</sup>.

## 7. Discussion

The metaphor of anger encompasses existential and epistemological aspects, along with its expressive potential. Conveying feelings and emotions of anger involves a multifaceted process that consists of two major phases: the first is based on the existence of the feeling of anger itself, and the second is the medium through which such feeling can be linguistically expressed. Since anger typically manifests physically before linguistic expression, the existential elements are always physiologically based. For example, when one feels angry, his face might be red, and his forehead might be frowned, and his body language might be tense, whereas the epistemological elements are the cultural effects that contribute to the metaphor of anger and convert the physical effect into linguistic expressions. Therefore, the external causes of anger, specifically the ontological aspects of anger, explain the metaphor of anger. The anger scale, which is above zero and has a limit, measures this emotion. This onto-

logical aspect of anger is reflected in the physical appearance of the frustrated man, the results of which range from a high-pitched, threatening tone to an explosion to a fight. Anger can manifest in both physical and linguistic forms, creating a unique state of correspondence between the physiological aspects and the linguistic patterns of expressing the harsh feelings of rage, and they are framed through a psychological framework that combines craftily both linguistic and physical aspects, namely the epistemological mode of the metaphor of anger.

### Cultural Differences and Language of Anger

The metaphorical use of the nose to represent anger in ancient Arabic highlights significant cultural differences in how emotions are conceptualized and expressed. In Arabic, the metaphor “ANGER IS HEAT” is vividly illustrated through references to the nose, a body part directly affected by the physiological responses to anger, such as increased heart rate, elevated body temperature, and nasal swelling. These physical manifestations are integral to understanding how anger is perceived and articulated within this cultural context. Expressions like “his nose is punctured,” which suggests a return to calmness after anger, and “his nostrils overheated,” which denotes intense rage, underscore the connection between physical sensations and emotional states. These idioms reflect a cultural understanding that emotions are deeply intertwined with bodily experiences, offering a holistic view of how anger is experienced and communicated. In contrast, English metaphors for anger rarely involve the nose, focusing instead on imagery related to fire or explosions, which emphasize intensity and volatility rather than physiological changes. This difference suggests that cultural narratives and linguistic traditions shape how emotions are metaphorically represented, with each culture drawing from its unique set of symbols and experiences. The Arabic use of the nose as a metaphor for anger enriches our understanding of emotional expression by highlighting the diversity of metaphorical language across cultures. It invites further exploration into how different societies interpret and articulate emotions, providing valuable insights into the interplay between language, culture, and human experience. This understanding can enhance cross-cultural communication and deepen our appreciation of the varied ways emotions are understood globally.

Both Arabic and English cultures employ lips and jaws as metaphors for wrath, which underscores the noteworthy similarities and differences in the manner in which emotions are articulated through language. The physical manifestations associated with the mouth, including the lips and mandible, vividly illustrate the metaphor “ANGER IS HEAT” in ancient Arabic. This metaphor is consistent with the frequent representation of wrath in English, where the mouth is also a powerful symbol of passion.

In English, the struggle to articulate intense emotions is reflected in the rapid movement of lips during anger, and swollen lips or froth around the mandible can be physical indicators of wrath. It has been observed that the lips, tongue, and teeth collectively symbolize rage in Bulgarian and English, which is consistent with the metaphorical use of the mouth.

The physical changes in the mouth that occur during rage are employed as a metaphorical device in both cultures, indicating a universal recognition of the mouth’s role in expressing emotions. This cross-cultural similarity emphasizes the interconnectedness of language and physical expression in the communication of intricate emotional states. By analyzing these metaphors, we can obtain a deeper understanding of the various ways in which different cultures interpret and express rage, thereby enhancing our understanding of the global expression and comprehension of emotions.

The cultural effect on shaping the expressions of anger has been clearly articulated in Arabic language rather than English. To illustrate, the Arabic language uses the liver and gallbladder as metaphors for anger, a concept not utilized in the English language to convey the emotion of rage. Arabic Classical medicine posits that the liver supplies the gallbladder with a yellow fluid essential for digestion. Ancient civilizations claimed that an individual’s capacity to regulate emotions and moods is predominantly influenced by the quantity of yellow fluid within the body. According to the Arabic Encyclopedia, an excess of blood over yellow liquid results in increased physical strength and emotional equilibrium. Nevertheless, when the yellow liquid prevails, one experiences anger and forfeits self-control.

Ibn Kutaybiya<sup>[28]</sup> asserted that the liver regulates anger, just as the brain governs the thinking and the kidneys manage hunger. The liver and gallbladder are frequently utilized in Arabic culture as metaphors for wrath as follows:

a. He has sustained an injury to his liver<sup>[29]</sup>.



b. His inner self is despondent; his heart is wounded; his liver has aged, become impotent, and his misfortune has grown intolerable<sup>[16]</sup>

c. His gallbladder gets ruptured due of his fury<sup>[26]</sup>.

d. Bitterness has compromised their livers<sup>[23]</sup>.

Arabic used metaphorical language to express angry emotions in denotative terms, which enabled Arabic speakers to understand their meanings immediately. For instance, in the Arabic language, phrases such as *Sf'h min Ghadab, trbd lwnh, tm'r, mhm al-Wajh, tfq' fi wajhihi hubb al-rummān, and Ghaḍbān qāṭbā* were historically employed to convey the concept of wrath. Nonetheless, Modern Standard Arabic regards these phrases as established words that signify the concept of fury. They are manifestations of fury. Furthermore, lexical words such as *Brṭm, 'Abs, ḍirs, mkfhr, mzmhr, Anf, and Quṭb, ahrnfsh*, which were historically employed to metonymically convey the language of anger, have lately lost their metonymic associations and have become firmly established vocabulary signifying rage. The study's corpus reveals a common use of the terms nose, heart, face, and eyes. The Arabic language employs these terms to convey the emotion of anger. Meanwhile, the words for liver and gallbladder aren't used very often in Arabic. This could be proof of how universal angry words are and how much they are alike in both English and Arabic. The metaphor of anger is almost the same in Arabic and English. The phrase "Anger is Both cultures" employ "heat" similarly. The Arabic language is abundant with examples that refer to "ANGER IS HEAT." Prophet Muhammad asserts that fury is akin to a smoldering fire within the heart of humanity. In another Hadith, the Prophet asserts: "Anger emanates from the Devil, who is created from fire, and fire is subdued by water; therefore, if one feels anger, he should perform ablution<sup>[30]</sup>." Arabic ancient thinkers regularly describe fury as a manifestation of heat. Ibn Masqyya<sup>[31]</sup> argues that anger manifests itself as follows: anger surges within the mind, where emotions reside, amplifying the need for vengeance. Al-Ghazali<sup>[32]</sup> posits that "God has created anger from fire and embedded it within human beings, interweaving it with their essence." Thus, when a man transgresses against God or neglects His intentions, wrath erupts inside his heart and veins<sup>[30]</sup>. Arabic culture seems to stem from the notion that the human body functions as a vessel harboring the flames of anger.

Furthermore, "Anger is Fire" represent cognitive

metaphor across different language and different cultures including Arabic and English languages. The metaphor of rage as fire is deeply embedded in Arabic culture for two reasons: physical, and cultural, shown in the intrinsic connection between fire and heat. That is to say, when one feels angry, his face turns into red color, which is the physiological change occurring to the angry man, and this physical feeling is related to the cultural heritage, which frames it and produces in expressive language. Arabic culture is replete with metaphors depicting wrath as fire. "It is preferable to withstand the flames of anger than to extinguish them through profanity and invective<sup>[32]</sup>. Refrain from punishing him until you have quelled your anger; thereafter, you may act as you wish once your fury has subsided<sup>[33]</sup>."

"He attained tranquility and quelled the flames of his anger<sup>[33]</sup>"

"Politeness extinguishes the divine fervor<sup>[34]</sup>"

Charitable donations extinguish divine wrath<sup>[34]</sup>

Despite the mental analogy of anger as fire—culturally specific—it possesses universal characteristics and is rooted in several global civilizations, a conclusion that may be substantiated by the physiological impact of fire. Numerous Arabic literatures employ the conceptual metaphor of fire to convey fury. The Arabic dictionaries employ several vocabulary words associated with fire to articulate the language of rage. These vocabulary terms are fundamentally metaphorical since they rely significantly on the conceptual metaphor of fire representing rage. Instances of these lexical elements are as follows (**Tables 1 and 2**):

"Anger is heat" is a prevalent conceptual metaphor in Arabic that articulates the expression of fury. Heat is regarded as a metaphorical expression for fury due to its physiological impact on the human body, which is associated with the experience of rage. Arabic culture differentiates between "Anger is heat" and "Anger is boiling." "Anger is heat" pertains to heat produced by fire or the sun; conversely, "anger is boiling" specifically refers to heat resulting from the elevation of a liquid's temperature. The Arabic language is rich with expressions such as "Anger is heat" and "Anger is boiling<sup>[34]</sup>". For example: "An angry man is scorched by his anger and boiled by rage, becoming reckless with a trembling body".

b. the manifestation of your intense anger and the fervor of your heart is reflected in the vigor of your actions

Table 1. Examples of metaphor of anger.

Metaphor of Anger in Classical Arabic	Metaphor of Anger in English	Cognitive Source
ضرم عليه وتضرم Ḍrm ‘alayhi wtḍrm	To become enraged.	To get to fire in anger, It is employed metaphorically to convey an individual’s sentiment of fury.
احتدم صدر فلان غيظا Iḥtadama Ṣadr fulān ghyzā	Choking voice	Fire rages
حمداً فلان عليّ حمداً Ḥmida ‘lyya fulā ḥmadan	He gets angry.	the crackling fire
فلان يأتكل من الغضب Fulān y’tkl min al-ghaḍab	One’s temper flare	Erupted into flare
تحطم عليه غض Tuḥaṭṭimu ‘alayhi ghḍbā	Raged on like a burning fire	الحطمة the Ravaging Fire is a name of the hell in Arabic.

Table 2. Examples of these lexical items.

Metaphor of Anger in Classical Arabic	Metaphor of Anger in English	Cognitive Source
حميت عليه Ḥmyt ‘alayhi	To get furious at someone.	The temperature of the sun is increasing.
الومد Alwmd	Anger	sweltering heat and windy quiet.
ويد عليه Wbd ‘alayhi	To get furious at someone	Sweltering heat and windy quiet
الوغر Alwghr	exceedingly enraged,	Excessively high temperatures
المرض Almrz	become burning,scorching,intensely hot	The intense heat of rocks and sand.

He is consumed with wrath.

## 8. Conclusions

The Arabic language employs nearly identical expressions of anger as those utilized in the English language. The mental metaphor of rage appears to be consistent in both English and Arabic. The findings from the Arabic corpora indicate that the metaphor of rage is considered universal, as it originates from physiological effects. Arabic rage expressions primarily relate to the human body and its components. Physiological elements, universal and relevant across all civilizations globally, predominantly influence expressions of anger. In ancient Arabic, the lips and jaws of the mouth symbolize fury, which may be translated through the metaphor “ANGER IS HEAT,” paralleling the metaphorical representation of rage in English culture. In Classical Arabic, teeth symbolize rage, which may be understood through the metaphor “ANGER IS HEAT,” a concept also present in the English

language to convey wrath. The throat serves as a conduit for expressing rage in both Arabic and English. In English, individuals experiencing anger often exhibit throat-clearing and excessive usage of verbal hesitations such as “ums” and “ahs.” Furthermore, the phrase “making odd noise in the throat” serves as a metaphor for fury in English. Notably, the manifestations of rage appear to be identical in both English and Arabic, with cultural differences having little effect on these emotions. In traditional Arabic, eyes symbolize fury, and the metaphor of anger might be understood as “ANGER IS fire,” paralleling the metaphorical statement of rage in the English language. The English language employs the eye as a metaphor for conveying wrath, shown by phrases such as tightness in the eyes, staring with the eyes, and bulging eyes. In Classical Arabic, the cheekbones, chin, and forehead serve as physical indicators of wrath, a phenomenon also seen in the English language. In the Arabic language, the bodily parts associated with the expression of rage extend beyond visible features such as the face, eyes, lips, forehead, and

hair, encompassing internal organs like the heart, liver, and gallbladder as well. The Arabic language uses bodily parts to convey anger more frequently than the English language. In Classical Arabic culture, the nose typically symbolizes anger, with the metaphor “ANGER IS HEAT” being a less common expression of rage in English culture. English rarely uses the heart as a metaphor for rage, unlike Classical Arabic. In summary, the expressions of rage are universal across many languages and diverse world civilizations.

The Limitations of the study:

While the limitations of the study are acknowledged, there are several reasons why they might be considered acceptable:

Qualitative research often relies on subjective interpretations, which can lead to bias. Researchers’ perspectives and interpretations might influence the analysis, potentially affecting the objectivity of the findings. Qualitative studies typically involve smaller, non-random samples, which can limit the ability to generalize findings to larger populations. However, this approach focuses on depth rather than breadth, which can restrict the applicability of results to broader contexts. However, the choice of qualitative is intentionally done because of the samples of study were known for their complexity. Qualitative data often involve complex narratives and linguistic expressions that can be challenging to analyze systematically. Extracting meaningful patterns from such data requires skilled interpretation and can be prone to oversight. Qualitative research provides rich, detailed insights.

The second limitation of the study is that it focusses on Universal Physiological Responses: The study’s primary aim is to explore universal physiological responses to anger, which are likely consistent across cultures. This focus allows for a foundational understanding that can be built upon with further research into cultural specifics. In addition, by identifying similarities in anger expressions across languages, the study provides a baseline for future research. Subsequent studies can delve deeper into cultural nuances and language variability.

The third aspect of limitation is that the present study was restricted to the traditional Arabic texts and expressions of anger. However, this study’s limitations might be due to practical constraints, and the findings still contribute valuable insights within those boundaries. In addition, using ancient and classical Arabic provides a historical foundation for un-

derstanding the evolution of language and emotion. This can be a useful starting point for comparing how expressions have changed over time.

The fourth, one aspect of limitation is that the study employed general Patterns over specifics. However, this limitation can be accounted for the idea that one of the main goals of the present study is to identify general patterns of anger expression rather than exhaustive details. Recognizing broad similarities can be valuable, even if it doesn’t capture every cultural or linguistic variation.

Overall, while the study has limitations, it serves as a valuable contribution to the field by identifying foundational similarities and encouraging further exploration of its complexities.

## Author Contributions

This research is written by A.I.A., S.M.I. and M.A.S.K.; Conceptualization, A.I.A.; methodology, S.M.I.; validation, S.M.I.; formal analysis, S.M.I.; investigation, A.I.A.; writing—original draft preparation, A.I.A. and S.M.I.; writing—review and editing, A.I.A., S.M.I. and M.A.S.K. All authors have read and agreed to the published version of the manuscript.

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## Conflicts of Interest

There is no conflict of interest.

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