ARTICLE

Cross-Cultural Persuasive Strategies in Saudi and British Anti-Smoking Advertisements: A Multimodal Discourse Analysis

Darene Almalki [1,2] ⓘ

[1] *Department of English, Faculty of Languages and Translation, King Khalid University, Abha 61421, Saudi Arabia*

[2] *Department of English, College of Language Sciences, King Saud University, Riyadh 11451, Saudi Arabia*

ABSTRACT

Smoking is a major cause of preventable death globally despite decades of tobacco control efforts, including anti-smoking campaigns. While interest in the cross-cultural dynamics of public health discourse has grown, only few studies have systematically compared multimodal strategies across different cultural contexts. This study contributes to this under-researched area by investigating how Saudi and British anti-smoking advertisements differ in their persuasive strategies and what these differences reveal about their cultural contexts. This study employs a qualitative, multimodal discourse analysis approach to examine anti-smoking advertisements by applying Kress and van Leeuwen's framework to the visual mode and the textual level of Fairclough's framework to the verbal mode. The aim is to interpret culturally embedded persuasive strategies through a comparative lens. The corpus was purposively sampled, consisting of six anti-smoking advertisements: three produced by the Saudi Ministry of Health and three by the British National Health Service, all published between 2018 and 2023. The advertisements were paired based on similarity in three shared themes: (i) respiratory system, (ii) smoker's experience, and (iii) pregnancy. The analysis revealed a consistent pattern: Saudi advertisements relied heavily on fear-based, loss-framed appeals conveyed through an authoritative verbal tone. British advertisements, by contrast, favoured hope-based, gain-framed messaging, using inclusive language to construct viewer engagement. These findings suggest that the effectiveness of public health communication lies not only in content but also in its resonance with cultural values. This study highlights the importance of culture in shaping the multimodal construction of persuasion. It extends the

*CORRESPONDING AUTHOR:

Darene Almalki, Department of English, Faculty of Languages and Translation, King Khalid University, Abha 61421, Saudi Arabia; Department of English, College of Language Sciences, King Saud University, Riyadh 11451, Saudi Arabia; Email: dalmalki@ksu.edu.sa

application of multimodal discourse analysis to understudied cultural domains and invites future research on culturally sensitive health communication.

Highlights:

- The study offers a systematic comparative multimodal analysis of Saudi and British anti-smoking advertisements using Kress and van Leeuwen's (2021) framework.
- It identifies culturally different persuasive strategies: Saudi advertisements rely on fear-based, loss-framed appeals; British ones favour hope-based, gain-framed messaging.
- The paper contributes to the underexplored area of Arabic visual discourse within public health communication.
- The findings illustrate how visual and verbal resources are mobilised differently across collectivist and individualist cultures to convey health messages.

Keywords: Multimodal Discourse Analysis; Visual Grammar; Message Framing; Anti-Smoking Advertisements; Public Health Discourse; Persuasive Strategies

1. Introduction

The use of tobacco causes more than seven million deaths every year globally[1], with millions more living with tobacco-related illnesses. Such an epidemic demands ongoing efforts in public health communication, primarily through mass media. In this digital era, advertisements remain a key medium through which health authorities disseminate anti-smoking messages to a broad audience, utilising a combination of visual and verbal resources for a more persuasive delivery.

Across the world, anti-smoking advertisements often draw on rational or emotional appeals or a combination of both. However, it is the cultural context that considerably shapes their content and decides their effectiveness. According to Miller et al.[2], advertisements that focus on the personal consequences of smoking tend to be more effective in individualist cultures. In contrast, advertisements that highlight the harm caused to others may be more persuasive in collectivist cultures. For instance, Laroche et al.[3] found that physical-threat advertisements resonated more with Canadian (individualist) than with Chinese (collectivist) participants. As some anti-smoking advertisements employ fear appeals, others take an encouraging stance. These differences often reflect culturally shaped expectations about health, mortality, and social responsibility. Yet, despite the increasing interest in the cross-cultural dynamics of public health discourse, few studies provide a systematic multimodal comparison of visual and verbal strategies across nations and cultures, particularly between the Arab world and Western contexts.

This paper addresses the scarcity of research in this area by contributing an analysis of six anti-smoking advertisements: three produced by the Saudi Ministry of Health (MoH) and three by the British National Health Service (NHS), focusing on three shared thematic areas, namely (i) respiratory system, (ii) smoker's experience, and (iii) pregnancy. The visual analysis is grounded in Kress and van Leeuwen's[4] framework, while the linguistic component of the advertisements is analysed through verbal discourse analysis, drawing on Fairclough's[5] textual level. The research questions of this study are: How do Saudi and British anti-smoking advertisements differ in their use of persuasive strategies, and what do these differences reveal about their cultural contexts? The urgency of such research is reinforced by the limited application of multimodal discourse analysis in Arabic public health contexts, where anti-smoking advertisements remain under-analysed. Previous works employing Kress and van Leeuwen's framework have either focused exclusively on Western campaigns[6] or investigated tobacco promotion rather than prevention[7,8]. Although Kress and van Leeuwen's[4] framework is highly influential, its reliance on Western semiotics raises questions about cultural generalisability. This highlights the importance of testing the framework in new cultural settings.

By conducting a comparative cross-cultural multimodal analysis of anti-smoking advertisements, this paper aims to shed light on how public health messaging is adapted to the norms and values of different cultures while address-

ing the same global health issue. Hence, it contributes to cross-cultural multimodal discourse analysis by demonstrating how a national context shapes health persuasion through visual grammar. The findings offer insights into cross-cultural meaning-making, as well as into the ideological orientations that inform the persuasive strategies employed in each context.

2. Literature Review

2.1. Theoretical Framework

This study adopts Kress and van Leeuwen's [4] framework of visual grammar, which is grounded in social semiotics and is inspired by Michael Halliday's perspective on how grammar conveys meaning and "enables human beings to build a mental picture of reality"[9]. Assuming that visuals have grammar just like language does, the framework applies Halliday's three metafunctions—the ideational, interpersonal, and textual—to visual analysis, where they become the representational, interactive, and compositional meanings, respectively[10]. The following is a summary of the framework as explicated in Kress and van Leeuwen's *Reading Images: The Grammar of Visual Design*[4].

The first metafunction is the representational meaning. It examines how the real world is represented through participants in visual texts. This is realised through two types of structures: narrative and conceptual. These visual structures often operate much like clauses in a sentence and can even be embedded within one another.

Narrative structures are those in which something is happening. They involve at least one vector that indicates an action or reaction. The vector usually emanates from a participant (an actor), and can be realised in various ways, like an extended hand (action) or a gaze (reaction). When a vector is aimed at a participant, it becomes a goal. Narrative processes can be transactional (actor and goal) or non-transactional with a vector aimed at no receiver.

On the other hand, conceptual structures do not represent actions. Instead, they describe, define, or analyse states at their generalised or timeless essences. These include classification, analytical, and symbolic structures. In classification structures, participants are decontextualised and organised into superordinate-subordinate relations. Analytical structures involve a carrier (a whole) and its parts (possessive attributes). Whether all parts are shown (exhaustive) or only some (inclusive) depends on the producer's communicative interest. In symbolic structures, participants are identified by what they mean or represent. They can be attributive when there are two participants: carrier and symbolic attributes, or suggestive when there is a carrier only. The meaning may be easily recognisable or more disguised and requires cultural knowledge. What matters is that symbolic structures point to identity, whether derived from outside or from within.

The second metafunction is the interactive meaning, which deals with the relationships established between participants in a visual text. These include both represented participants (those shown in the image) and interactive participants (producers and viewers). The interactive meaning is realised through contact, distance, and perspective.

Contact is established primarily through gaze. When a represented participant looks directly at the viewer, a demand is made. It may ask for attention, emotional connection, or simply recognition. In contrast, the absence of eye contact constitutes an offer, where the viewer is not addressed directly but is invited to observe the represented participant as an object of contemplation.

Distance refers to how much of a participant is portrayed. The size of the frame, whether close-up, medium, or long, acts as the visual equivalent of interpersonal distance in face-to-face interaction. Close-up shots show no more than the head and shoulders and are suggestive of a close personal relationship. Medium shots, which go beyond the chest and show no more than the knees, are suggestive of a social relationship. Long shots reveal the whole figure with space around, suggesting an impersonal relationship. As for non-humans, distance can portray objects within or out of the audience's reach.

Perspective plays a major role in establishing relationships between the image and the viewer. Horizontally, frontal angles suggest involvement, while oblique ones imply detachment. Vertically, the angle can suggest power dynamics. A high angle gives power to the viewer, while a low angle makes the represented participant superior. However, an eye-level angle suggests equality between both sides.

Modality is defined as the "truth" value of an image: how closely a visual representation of an object aligns with its perceived reality. Therefore, visual modality is culturally determined based on what is considered true or real in the culture to which it is intended. Kress and van Leeuwen[4]

propose replacing the term *modality* with *validity* to avoid privileging a specific type of truth at the expense of other articulations of truth across the different semiotic modes (e.g., verbal mode). In the visual mode, validity, then, refers to the degree to which a representation is accepted as truthful or reliable within a particular cultural context, realised across a continuum of truth values ranging from observational realism to abstract symbolism. The authors[4] identify eight gradable validity markers (formerly known as modality markers) to describe validity, namely: colour saturation, differentiation, modulation, contextualisation, representation of detail, depth, illumination, and brightness.

The third metafunction is the compositional meaning, which is concerned with how the representational and interactive meanings are combined into a cohesive visual whole. This is realised through three key principles: information value, framing, and salience.

Information value refers to how meaning is shaped by the positioning of elements within a composition. In left-right structures, elements on the left are seen as the "Given" (what is already known or assumed), while those on the right are the "New," carrying unfamiliar or problematised content. In top-bottom structures, elements in the top are the "Ideal," which is more abstract or emotionally driven. Elements positioned at the bottom present the "Real," which is more practical and detailed. In centre-margin arrangements, the centre functions as the core message, while surrounding elements support or elaborate on it.

Framing deals with the degree of connection or separation between elements in a visual. Elements that are strongly framed by lines, colour contrast, or spacing are visually separated from others, suggesting individuality. In contrast, the absence of framing devices signals connection and cohesion. This can be achieved through overlapping, visual rhyme, or integration within the same background space.

Salience refers to how certain elements are made to stand out in the composition. It may be achieved through size, sharpness of focus, colour contrast, or positioning in the foreground. Cultural associations and symbolic figures can also add salience. The way salience is achieved, and not just what is made salient, contributes to meaning.

Although Kress and van Leeuwen's visual grammar is described as the dominant model within SFL-based multimodality[11] and is developed by leading scholars in the field[12], it has received some criticism. The framework is grounded in Western semiotics, which raises concerns about cultural bias. Forceville[13] criticised its generalisations and the absence of attention to authorial intent. Similarly, Yong and Rao[14] argued that the framework neglects the motives behind visual choices. Ledin and Machin[11] deemed overlooking the expectations of image consumers a key limitation of the framework.

2.2. Application of the Framework

Kress and van Leeuwen's theory has become one of the most influential frameworks in multimodal discourse analysis. As noted by Liu et al.[15], the authors have received the highest number of citations in multimodal studies indexed in the Web of Science database from 1997 to 2023. By offering a systematic way to analyse representational, interactive, and compositional meanings, it has proved to be effective across a wide range of genres and research contexts.

However, few studies addressing anti-smoking advertisements employed this framework. Ibrahim[6] analysed twenty English anti-smoking advertisements drawn from American, Canadian, and British sources. Her analysis revealed that the indicative mood was dominant in the verbal mode and that close-up shots were used to support fear-based appeals, which were present in 19 out of the 20 advertisements. Nonetheless, the cultural scope of the study was limited, and the timeframe of the corpus was not clearly defined. Although the study examines anti-smoking advertisements from a multimodal perspective, it remains situated within Western semiotics. Another study by Siregar and Sinar[7] investigated how an Indonesian cigarette brand employed multimodal strategies to influence viewers. The authors analysed three billboard advertisements, focusing on the three visual metafunctions. Their analysis revealed that transactional narrative processes were employed to reinforce the brand's slogan, while symbolic structures were incorporated to associate the product with freedom and nonconformity. Similarly, Ananda et al.[8] studied six billboard advertisements produced by a major Indonesian tobacco company. Their analysis was limited to the representational meaning for the visual mode and the ideational metafunction of the verbal mode. They found that narrative and conceptual processes were exploited to persuade the audience into purchasing the product, while the verbal elements were implicit and mini-

mal. Although both studies offer insight into how cigarette advertisements draw on visual grammar to persuade, they differ from Ibrahim's[6] in that they focus on product promotion rather than public health messaging.

While research on anti-smoking advertisements employing this framework is limited, the framework has been more widely applied in studies that analyse political discourse. Friedman and Ron[16] compared two visual grammar theories in their analysis of political advertisements during the 2016 US election. They applied Kress and van Leeuwen's framework to examine viewer positioning, modality, and composition. Although they found the framework more effective, their application remained limited to the main categories, leaving out several subcategories that could have added more depth to the analysis. In addition, Lennon and Kilby[17] focused on metaphors found in Brexit cartoons. They employed the framework to uncover how the tropes of "boundedness" and "uncertain waters" were used to construct national identity. They concluded that the potential for ambiguity in the visual mode led to more flexible interpretations by text consumers and remained unresolved. In a later study, Kilby and Lennon[18] developed an approach to multimodal critical discourse analysis informed by visual grammar, critical discourse analysis, and discursive psychology. Their model focuses on composition, colour, gaze, and perspective, aiming to uncover the ideological functions of multimodal texts.

In health-related communication, the framework has been used to analyse how the visual and verbal modes interact to persuade audiences. Zhang et al.[19] examined TED Talks related to healthcare and applied visual grammar alongside systemic functional linguistics. They found that inclusive pronouns and material processes were commonly used in the verbal mode to engage the audience, while direct gaze and close and medium shots were used to reduce social distance. In a different context, Hussein and Aljamili[20] analysed a corpus of 20 Arabic memes circulated during the COVID-19 pandemic in Jordan. Their analysis focused on the representational meaning and revealed that humour was used as a coping mechanism to address public fear and stress. Khalil[21] also analysed seven COVID-19 comics and cartoons, focusing on the elements that help highlight the coping strategies implied and the attitudes of the people. His analysis revealed that authoritative gazes and the imperative mood were used to reinforce public health instructions. Although these studies do not directly address anti-smoking campaigns, they show how persuasive strategies are often constructed through the combination of verbal and visual resources.

While language has been regarded as the basic element of social semiotics[22], the analysis of the verbal mode alone is unequivocally no longer adequate[23–25]. Although multimodal approaches to discourse have gained considerable attention over the past two decades[26], the review of the literature undertaken here reveals that the outcomes of a comparative multimodal analysis of Arabic and English texts remain largely unexplored. Despite the increasing application of visual grammar in health communication, no study to date has systematically compared Arabic and English anti-smoking advertisements. This marks the novelty of this study as it combines Kress and van Leeuwen's framework with Fairclough's critical tradition to analyse a cross-cultural corpus, investigating Saudi and British contexts.

3. Methodology

3.1. Research Design, Corpus, and Sampling Procedures

This study adopts a qualitative comparative design, aiming to examine how persuasive strategies are constructed in anti-smoking advertisements produced by public health authorities in two distinct cultural settings: Saudi Arabia and the United Kingdom. The corpus comprises six anti-smoking advertisements, collected through purposive sampling[27] and validated by expert judgement. Each Saudi advertisement is paired with a British counterpart based on similarity and thematic focus. As a result, the analysis is organised around three pairs: S1–B1, S2–B2, and S3–B3, where "S" refers to the Saudi advertisement and B to the British one. The numbering corresponds to the following themes: respiratory system, smoker's experience, and pregnancy. As for the selection criteria, each advertisement had to be:

1. Issued by an official government entity: the MoH for Saudi advertisements and the NHS for British ones.
2. Categorised under one of the three themes.
3. Published between 2018 and 2023.
4. Available online on the MoH or NHS official websites or their social media platforms (X/Twitter and Instagram).

3.2. Analytical Framework

The analysis adopts a qualitative approach, relying on Multimodal Discourse Analysis (MDA) as the overarching framework. Within this framework, the visual mode is examined through visual grammar, which provides a detailed reading of how meaning is constructed by visual elements, influenced by the sociocultural contexts in which they are produced[4]. The verbal mode is analysed drawing on Fairclough's[5] textual level, to explore how language encodes agency, stance, and interpersonal relationships within texts. While previous studies analysed anti-smoking campaigns using different multimodal approaches (e.g., Sadallah and Halawachy[28], Zhao et al.[29]), these works did not draw on Kress and van Leeuwen's visual grammar.

3.2.1. Analysis of Visual Mode

Each advertisement was analysed in terms of the representational, interactive, and compositional meanings. Since the first two pairs (S1–B1 and S2–B2) share similar coding orientations, only the third pair (S3–B3) was analysed for modality difference (validity), as it was the only pair to present a clear visual contrast.

3.2.2. Analysis of Verbal Mode

The verbal dimension focused on how language constructs persuasive meaning through mood, pronoun usage (personal and impersonal address), agency, and tone. These linguistic choices play a central role in how the viewer is engaged, persuaded, and socially positioned within the message.

3.3. Ethical Considerations

Since the project uses public government-issued advertisements, there are no human subjects involved and no concerns regarding participant consent. All data sources are publicly accessible and properly attributed.

4. Analysis and Discussion

4.1. The Respiratory System (S1–B1)

4.1.1. Representational Meaning

Both S1 and B1 in **Figure 1** use conceptual symbolic attributive structures to represent respiratory health. The respiratory system is the carrier, and the windpipe and lungs are the symbolic attributes due to their unnatural appearance[4]. Both advertisements emphasise a comparison between healthy and damaged lungs but invoke different metaphors. In S1, the representation resembles textbook illustrations: the healthy lung is unmarked, but the damaged lung is metaphorically turned into an ashtray, representing smoking as self-harm. Hence, the identity of the carrier is redefined in terms of the accumulated damage of tobacco shown in the scarred lung. The sense of continuity is reinforced by a narrative structure, where the cigarette, functioning as an actor, emits a vector through the smoke, aiming at no goal, and performs a non-transactional action[4]. This narrative structure remains secondary to the conceptual one but still distinguishes S1 as more dynamic than B1, which is purely stative. The verbal text, "90% of lung cancer deaths are caused by smoking", is in the passive voice, foregrounding the grammatical subject "90% of lung cancer deaths" to evoke fear and highlight loss. The agent "smoking" comes last in a prepositional phrase as a "redundant" verbal transduction. The clause is in the indicative (declarative) mood, conveying a factual tone, with no use of pronouns, rendering it impersonal. Conversely, B1 deviates from the typically perceived old-fashioned way of portraying the carrier, the respiratory system, by turning its symbolic attributes into a striking visual metaphor. It redefines the carrier as part of the body's ecosystem: the windpipe is depicted as a branch of a tree that ceases to prosper on the left side but blossoms on the right side. A dichotomy of decay and rejuvenation is emphasised: the wrecked lung signifies despair and lifelessness, whereas the blooming lung symbolises hope and vitality. The verbal text guides the interpretation of the visual one with a transduction of the way each lung is: "QUIT SMOKING" placed on the dried-out lung and "AND BREATHE" positioned on the blooming one. The clauses have a minimalist structure that has a slogan-like impact, celebrating the benefits of smoking cessation. The use of directives in the imperative mood is intended to promote engagement, as also evident in the use of the first-person plural in "Let's Do This", deeming the advertisement's producer and the viewer a team for solidarity, as noted by Zhang et al.[19].

4.1.2. Interactive Meaning

Contact. In both advertisements, no contact is made with the viewer. A lack of direct gaze classifies the image as an offer[4]. Viewers are expected to dispassionately contem-

plate the harmful and beneficial outcomes depicted.

Distance. In S1, the respiratory system is shown from a long distance for the viewers to reflect on, rather than engage with[4]. The "typical" depiction of the lungs maintains distance, potentially evoking a sense of medical authority. This distance renders the respiratory system out of the viewers' reach, as they should stay away from such harm. By contrast, B1 portrays the respiratory system from a middle distance, suggesting that smoking cessation is within the viewer's reach[4]. The prominence of the vibrant lung soft-

ens the sight of the dull one. This "artistic" representation of the lungs, using plant materials, reduces the "clinical" feel.

Perspective. Both advertisements show their visuals subjectively. Horizontally, both S1 and B1 are depicted from a frontal angle to assume viewer involvement and promote engagement. Vertically, the respiratory system is portrayed at an eye-level angle in both advertisements, indicating an absence of power dynamics to stress that the choice to quit or smoke is a personal decision.

Figure 1. Saudi and British anti-smoking advertisements depicting the theme of the respiratory system (S1–B1).

4.1.3. Compositional Meaning

Information Value. S1 reverses the Given-New layout due to Arabic's right-to-left script. The verbal warning appears on the right as Given (familiar and self-evident)[4], while the visual appears on the left as New (problematic and worthy of attention)[4]. The healthy lung on the right normalises non-smoking, whereas the scarred lung on the left disrupts this norm, enhancing fear appeal. However, in B1, the decayed lung appears on the left (past)[4], and the blooming lung on the right (future)[4], supporting a temporal shift from damage to recovery. The textual placement mirrors this logic: "QUIT SMOKING" is given, and "AND BREATHE" is New, reinforcing a message of transformation.

Framing. In S1, a sense of connectedness is employed, stressing the unified identity of the advertisement, unlike in B1, where the windpipe works as a barricade to stop "SMOKING", and therefore highlights the distinct identities each

lung has.

Salience. In S1, the lung image and the "90%" statistic are given nearly equal prominence, with the latter slightly more centralised. This suggests a focus on visual evidence and authoritative data. In B1, the respiratory system is the most eye-catching element not only due to its size but also because it is placed in the foreground, where it partially obscures the edges of the nearby verbal texts, emphasising its visual dominance.

In summary, S1 adopts a loss-framed, fear-based strategy grounded in medical authority. This is consistent with the culturally embedded respect for institutional credibility in Saudi health communication. It relies on facts and negative outcomes to instil caution. In contrast, B1 employs a gain-framed, hope-based strategy to appeal to aspiration. The NHS advertisement embodies a motivational tone that aligns with Western communication values, which favour individualism.

4.2. The Smoker's Experience (S2–B2)

4.2.1. Representational Meaning

Both S2 and B2 in **Figure 2** utilise conceptual structures to define the reality of smokers' experiences through symbolic suggestive structures, with the details of the images de-emphasised in favour of the "mood" each conveys[4]. In S1, the main participant is a man whose face is concealed in the shadow, while light is literally shed on his head, foregrounding his baldness and redefining his identity as a distressed, remorseful smoker. The carrier's symbolic attributes emerge from within: chest pain, shortness of breath, and hair loss, symbolising the prolonged effects of smoking. The image carries funeral undertones: the white abstract scribbles at the top right margin resemble Arabic calligraphy, reminiscent of the style used for Quranic verses in obituaries. His white thobe, the official garment for men in Saudi Arabia, symbolically mirrors the white shroud used in Islamic burial rituals. The gloomy mood is transducted in the verbal text, "The years of smoking have passed by as if they were seconds", which is a declarative clause (indicative mood), structured in the passive voice to emphasise lack of agency or control. The nominalisation of "The years of smoking" frames smoking as a lived experience rather than a recurring action, while the metaphor of the years passing suggests a subjective experience of time, which aligns with the reflective tone of the message. Conversely, B2 has a different take on representing the smoker's experience while utilising the same conceptual, symbolic suggestive structure. The carrier is depicted with a subtle smile, slightly squinted eyes, and a tilted head to symbolise her contentment. Unlike the participant in S2, whose face is obscured and remains nameless to accentuate his anonymity and isolation, Cathy's face is fully visible in a well-lit setting to redefine her identity as an ex-smoker and cancer survivor. She holds her left hand to her chest, a gesture that can signify relief or gratitude for her recovery, compared to S2, where the man has his right hand, typically the dominant one, in a gesture of pain or breathlessness. The choice of left hand may imply that Cathy remains single at this stage of her life, possibly reflecting the struggles she endured due to smoking. She is depicted seated comfortably in a bright, homey setting, dressed in regular clothing, which conveys calmness and normality if contrasted with a moment of her past as a hospitalised cancer patient. This inferred identity shift evokes a sense of hope and resilience, symbolising her transformation from a smoker and cancer-stricken to smoke- and cancer-free, illustrating how quitting smoking leads to "a better life". The clause "I don't think I'd be here if I still smoked" is a euphemism that indirectly suggests smoking causes death to mitigate the severity of the message. The first-person subject "I" assumes agency and individualises the experience, while the hedging in "don't think" enhances the message's relatability.

Figure 2. Saudi and British anti-smoking advertisements depicting the theme of the smoker's experience (S2–B2).

4.2.2. Interactive Meaning

Contact. S2 avoids eye contact, creating an offer of information, which positions the man as an object for contemplation, serving as a cautionary figure to urge viewers to reflect on the consequences of smoking. In contrast, B2 features direct eye contact, performing an image act of demand to quit smoking. Cathy's gaze is modified by a smile to create a sense of engagement, making the viewers feel involved in her experience.

Distance. S2 portrays the man in a medium shot, showing no more than his knees to increase social distance between the man and the viewer[4]. This is supported by the authoritative tone in the direct directive "Call MoH on 937 and book an appointment". However, the inclusion of a hashtag "#HavePassedByAsIfTheyWereSeconds" adds a slightly informal conversational tone to appeal to younger audiences. By contrast, B2 presents Cathy in a medium close shot with a cut-off at the waist[4] to reduce distance and build rapport. This is supported by using the first-person pronoun and contracted forms in "I don't think I'd be here if I smoked". The direct directive in "Put smoking behind you" has a motivational tone that blends in with the overall message.

Perspective. Horizontally, both S2 and B2 are depicted from a frontal angle to involve the viewers in the experiences. Vertically, the man in S2 is shown from a slightly higher angle, placing the viewers in a position of power to look down on his vulnerability. In B2, Cathy is portrayed at an eye-level angle to introduce her as a relatable figure.

4.2.3. Compositional Meaning

Information Value. S1 has a centre-margin composition in which the darkness surrounding the man and the verbal text lamenting the years extinguished by smoking derive their meaning from his grim reality. On the other hand, B2 is structured in a left-right composition. The verbal text on the left acts as the "Given": a self-evident fact that smoking has fatal consequences, while Cathy is introduced as the "New": the potential positive outcome of smoking cessation in person.

Framing. S2 is strongly framed; the stark contrast between the surrounding darkness and the man's white garment visually isolates him, highlighting his separation from the world. In contrast, B2 is weakly framed; Cathy's placement on the right against a blurred background creates a sense of continuity, alluding to her survival.

Salience. In both advertisements, the main participants, the man and Cathy, are the most salient elements in the designs, drawing attention to their experiences as a smoker and an ex-smoker, respectively.

In summary, S2 makes use of fear appeal with an authoritative tone, whereas B2 utilises hope appeal with a motivational tone. These persuasive strategies are strongly reflected in the choice of the main participants who embody the experience of tobacco use: a smoker imprisoned by the habit versus an ex-smoker who has broken free. Through these contrasting representations, S2 provides a loss-framed message focusing on despair, suffering, and the passage of time, while B2 offers a gain-framed message emphasising hope, recovery, and the future with its positive outcomes. Moreover, the choice of a male figure in S2 can be attributed to the higher prevalence of smoking among men in Saudi Arabia; 27.5% compared to just 3.7% among women[30]. It may also imply a cultural reluctance to depict women as the main participants in such inclusive anti-smoking advertisements, given that smoking is socially more frowned upon for women and may carry additional stigmatisation. Perhaps this could explain why women's representation in such advertisements is often limited to specific topics such as pregnancy, breastfeeding, and the impact of smoking on women's appearance. This begs the question: if a female figure were the main participant in S2, would men feel addressed, and would the message resonate effectively, or does the cultural context demand a male figure to appeal to both genders, given that Ainiwaer et al.[31] found no significant difference in the effectiveness of loss-framed and gain-framed health messages?

4.3. Pregnancy (S3–B3)

4.3.1. Representational Meaning

In **Figure 3**, S3 has two equally important structures: narrative and conceptual. The narrative structure is realised through an action process, in which the silhouette functions as an actor and the ultrasound image serves as the goal[4]. The vector extends the risk posed by smoking to the unborn child to emphasise its persistence, illustrating the direct transfer of harm from the smoking mother to the

unborn child. While the goal is represented in a realistic ultrasound image, the actor is essentialised to a cigarette and an enlarged abdomen in a semi-abstract silhouette with a detached head. This representation conveys a symbolic, suggestive structure, where the stylisation of the carrier, the silhouette, reduces its identity to a type, pregnant smokers, de-emphasising detail for broader applicability. The verbal text, "Smoking during pregnancy may expose you to miscarriage", employs a hedged language using the modal verb "may", which is typical of scientific discourse. Though "smoking" is grammatically the agent, the use of the second-person pronoun, "you", implicates the addressee, the pregnant smoker, as an indirect agent responsible for the consequence. By contrast, B3 relies on a conceptual structure with a secondary narrative component. The naturalistic photograph of the pregnant woman is the carrier of a symbolic attributive structure, with her enlarged abdomen, dark under-eye circles, stretched arm resting on the belly, and her serious facial expression serving as symbolic attributes defining her as a nurturing, determined mother. The dark under-eye circles not only depict physical exhaustion or lack of sleep but also function as a disguised symbol[4] that connotes emotional stress, perhaps due to her struggle to quit smoking. Her stretched arm creates a vector towards her belly, constituting a secondary narrative structure: an

action process[4] with the pregnant woman as the actor, and her enlarged abdomen and, by extension, the foetus as the goal. As in S3, this is a unidirectional transactional process, but its meaning shifts from ongoing harm to protection in progress. However, while the theme of pregnancy is visually articulated, the verbal text "Breaking a routine is hard. But you have the power to change" offers no mention of pregnancy or smoking. Instead, the viewer is invited to infer what routines are especially harmful during pregnancy. Even though B3 does not explicitly depict smoking, neither visually nor verbally, the "routine" in question strongly suggests smoking rather than alcohol or drug use. Smoking is known as a repetitive daily behaviour, whereas alcohol and drug use are often less framed as daily habits in health messages. This verbal mitigation, along with the visually disguised symbol of the under-eye dark circles, constitutes a visual and verbal euphemism of smoking, perhaps due to the existence of an unborn child that functions as a moral force for censorship. In addition, the use of the indicative mood further softens the command to quit smoking. The second-person pronoun "you" personalises the message to promote relatability. Unlike the transduction between the verbal and visual modes in S3, B3 has a complementary image-text relation, as each mode conveys a distinct message.

Figure 3. Saudi and British anti-smoking advertisements depicting the theme of pregnancy (S3–B3).

4.3.2. Interactive Meaning

Contact. In S3, the absence of facial features establishes the image as an offer. This impersonal approach encourages detached reflection rather than emotional involvement, aligning with health messaging strategies that minimise distraction to highlight the main message[32,33]. In contrast, B3 establishes a demand through the direct gaze, aiming to elicit a response, whether empathetic (promoting solidarity) or behavioural (encouraging smoking cessation).

Distance. The main participant in S3 is depicted in a very long shot[4], which embodies a public distance, typically associated with interactions between strangers. Hence, the distance between the viewer and the pregnant smoker is intensified, rendering the latter estranged, reflecting anonymity and, perhaps, social rejection. In B3, the pregnant woman is depicted in a medium close shot with a cut-off at the waist[4], which places her in a personal distance, which increases solidarity.

Perspective. Horizontally, both S3 and B3 use oblique angles to highlight the theme of pregnancy. The sense of detachment is accentuated in S3 due to the absence of facial expressions, whereas in B3, it is mitigated by the turned head facing the frontal plane of the viewer and the direct eye contact, which encourages involvement despite the oblique body orientation. Vertically, S3 employs an eye-level angle to maintain emotional neutrality, whereas B3 uses a slightly high angle to position the pregnant woman as vulnerable, inviting empathy.

4.3.3. Compositional Meaning

Information Value. Both advertisements employ a left-right structure, but S3, following Arabic's right-to-left reading path, reverses the Given-New layout. The ultrasound and warning verbal text appear on the right as the given: "medically authoritative facts", while the pregnant smoker on the left represents the New, highlighting a socially problematic act. In B3, the pregnant woman on the left is the Given, familiar and relatable, while the motivational text on the right introduces "New" information framing change as achievable.

Framing. S3 uses strong framing through tonal and modality contrasts between the stylised silhouette and the realistic ultrasound to create visual separation. This fragmentation symbolises the disconnection between the pregnant smoker and the unborn child. In contrast, B3 employs weak framing by integrating image and text within the same visual space, creating cohesion.

Salience. In S3, the tonal contrast within the ultrasound image, its size, and its placement leaning towards the centre all render it the primary focal point[4]. Though the agency is assigned to the silhouette as the main participant engaging in the act of smoking, the unborn child is made the most eye-catching component in the composition to highlight its victimhood. In B3, the pregnant woman is the most eye-catching element due to her size[4] as her figure occupies almost the full height of the composition.

Validity. S3 adopts high abstract validity, using minimal colour, detail, and depth to universalise the pregnant smoker. This abstraction reflects the advertisement's cautionary and impersonal tone, which aligns with its aim of presenting smoking as socially condemned. In contrast, B3 displays high naturalistic validity, with detailed depiction of the pregnant woman's facial features, skin tone, and clothing textures, to emphasise individuality. The use of shallow depth and plain background also introduces a sensory coding orientation, focusing on affective engagement. Thus, the two advertisements construct different "truths": S3 abstracts to generalise the harm, while B3 humanises to personalise the struggle.

In summary, though both advertisements use profile views to highlight pregnancy, they diverge in their persuasive strategies. S3 adopts a fear-based, loss-framed message and an authoritative tone through abstraction, presenting a generic pregnant smoker to highlight risk with no reference to personal identity. B3, by contrast, uses a hope-based approach with a motivational tone, depicting an identifiable woman to foster empathy. The advertisements' coding orientations differ most significantly: S3's abstraction avoids cultural confrontation in a morally sensitive Saudi context, while B3's realism encourages emotional connection in a Western culture. However, a non-gendered figure could be interpreted as inclusive. In light of this, S3 may be seen as semiotically open to multiple readings, not only culturally sensitive but also ideologically elastic, which aligns with Lennon and Kilby's[17] finding that ambiguity in the visual mode allows for flexible viewer interpretations shaped by ethical, ideological, and personal factors. Kress and van Leeuwen[4] attribute this to the affordances of semiotic re-

sources; the more abstract a resource is, the broader the range of potential meanings it has.

Appeals are employed in advertising as a persuasive strategy to influence the decisions and attitudes of the intended audience [34–36]. While the three paired advertisements employ emotional appeals, the analysis confirms that the Saudi and British anti-smoking advertisements are informed by fundamentally different persuasive strategies. The Saudi MoH adopts a loss-framed approach, employing fear- or guilt-based appeals to highlight the consequences of smoking. The British NHS, in contrast, employs a gain-framed approach, utilising a motivational tone to inspire change and convey hope. These strategies are not arbitrary but culturally situated. The Saudi advertisements reflect a preference for caution, anonymity, and universalisation in public messaging, particularly when addressing gendered topics. The British advertisements prioritise relatability, hope appeal, and personal agency. This aligns with Adebare and Nash [37], who note a dramatic shift in the UK's anti-smoking advertising strategies: loss-framed messages, inducing fear and guilt, dominated the 1990s, while gain-framed messages, highlighting the benefits of smoking cessation, prevail in the 2020s.

Despite their differences, both sets of advertisements effectively utilise multimodal resources, aligning visual composition, participant framing, and verbal elements to support their persuasive goals. Their divergent strategies support Kress and van Leeuwen's [4] observation that while semiotic systems follow universal principles, their meaning potential is culturally realised and shaped by local communicative practices and social values. Eventually, by applying Kress and van Leeuwen's [4] framework, this study demonstrates how visual grammar can justify the semiotic choices behind public health messaging, revealing how meaning is constructed not only through what is shown but also through how it is presented.

5. Conclusions

The findings reveal that persuasive communication cannot be separated from its cultural context. The success of an advertisement depends more on how well it resonates with the norms, values, and expectations of its intended audience than on the message itself. The analysis reveals the use of different persuasive strategies by the two sets: the Saudi advertisements employ fear-based, loss-framed messages, while the British ones adopt hope-based, gain-framed messages. These differences reflect broader cultural contexts: Saudi Arabia, as a collectivist culture, favours collective responsibility and moral caution, while Britain, as an individualist culture, emphasises personal empowerment and individual agency. This suggests that policymakers, health communicators, and campaign designers should tailor anti-smoking messages to the cultural orientations of their target audiences rather than relying on one-size-fits-all strategies. For researchers, the study underscores the need to expand multimodal discourse analysis to diverse cultural contexts to better understand how persuasion works globally.

Institutional Review Board Statement

Not applicable. This manuscript does not involve human or animal participants. It relies exclusively on publicly available materials produced by government bodies. No institutional review board statement was required.

Informed Consent Statement

Not applicable. This manuscript does not involve human or animal participants. It relies exclusively on publicly available materials produced by government bodies. No informed consent statement was required.

Data Availability Statement

The study is based on publicly available anti-smoking advertisements produced by the Saudi Ministry of Health and the British National Health Service between 2018 and 2023. All advertisements are accessible via the official websites or social media platforms of both health authorities. No private data were used.

pus and for offering clarifications that greatly shaped this analysis.

Conflicts of Interest

The author declares no conflict of interest.

References

[1] World Health Organisation, 2025. Tobacco. Available from: https://www.who.int/news-room/fact-sheets/detail/tobacco (cited 25 June 2025).

[2] Miller, C., Foubert, B., Reardon, J., et al., 2007. Teenagers' response to self- and other-directed anti-smoking messages: A cross-cultural study. International Journal of Market Research. 49(4), 515–538.

[3] Laroche, M., Toffoli, R., Zhang, Q., et al., 2001. A cross-cultural study of the persuasive effect of fear appeal messages in cigarette advertising: China and Canada. International Journal of Advertising. 20(3), 297–317.

[4] Kress, G., Van Leeuwen, T., 2021. Reading Images: The Grammar of Visual Design, 3rd ed. Routledge: London, UK. pp. 1–222.

[5] Fairclough, N., 2001. Language and Power, 2nd ed. Longman: London, UK.

[6] Ibrahim, W., 2020. Persuasion in anti-smoking advertisements: A multimodal approach. Cairo Studies in English. 1, 42–66.

[7] Siregar, M., Sinar, T., 2021. Visual metafunction in cigarette A Mild advertisements: A multimodal analysis. LingPoet: Journal of Linguistics and Literary Research. 2(1). DOI: https://doi.org/10.32734/lingpoet.v2i1.5256

[8] Ananda, R., Fitriani, S.S., Samad, I.A., et al., 2019. Cigarette advertisements: A systemic functional grammar and multimodal analysis. Indonesian Journal of Applied Linguistics. 8(3), 616–626. DOI: https://doi.org/10.17509/ijal.v8i3.15261

[9] Halliday, M.A.K., 1985. An introduction to functional grammar. Edward Arnold: London, UK. p. 101.

[10] Jewitt, C., Oyama, R., 2001. Visual meaning: A social semiotic approach. In: Van Leeuwen, T., Jewitt, C. (Eds.). Handbook of visual analysis. SAGE: London, UK. pp. 134–156.

[11] Ledin, P., Machin, D., 2019. Final reply. Critical Discourse Studies. 16(5), 540–548. DOI: https://doi.org/10.1080/17405904.2019.1614469

[12] Jones, R., 2020. Multimodal discourse analysis. In: Chapelle, C.A. (Ed.). The Concise Encyclopedia of Applied Linguistics. Wiley: Hoboken, NJ, USA. pp. 790–795.

[13] Forceville, C., 1999. Educating the eye? Kress and Van Leeuwen's reading images: The grammar of visual design (1996). Language and Literature. 8(2), 163–178. DOI: https://doi.org/10.1177/096394709900800204

[14] Yong, Q., Rao, X., 2024. Exploring textual–visual strategies in internet-based light food advertising: A study of Taobao advertisements in China. Humanities and Social Sciences Communications. 11(1), Article 27. DOI: https://doi.org/10.1057/s41599-024-03087-1

[15] Liu, H., Liu, L., Li, H., 2024. Multimodal discourse studies in the international academic community (1997–2023): A bibliometric analysis. SAGE Open. 14(4). DOI: https://doi.org/10.1177/21582440241305454

[16] Friedman, A., Ron, S., 2017. Unlocking the power of visual grammar theory: Analyzing social media political advertising messages in the 2016 US election. Journal of Visual Literacy. 36(2), 90–103. DOI: https://doi.org/10.1080/1051144x.2017.1379758

[17] Lennon, H.W., Kilby, L., 2020. A multimodal discourse analysis of 'Brexit': Flagging the nation in political cartoons. In: Demasi, M.A., Burke, S., Tileagă, C. (Eds.). Political Communication. Springer International Publishing: Cham, Switzerland. pp. 115–146. DOI: https://doi.org/10.1007/978-3-030-60223-9_5

[18] Kilby, L., Lennon, H., 2021. When words are not enough: Combined textual and visual multimodal analysis as a critical discursive psychology undertaking. Methods in Psychology. 5. DOI: https://doi.org/10.1016/j.metip.2021.100071

[19] Zhang, W., Jamal, M.B., Mahfoodh, O.H.A., et al., 2022. A multimodal discourse analysis of TED talks in health care. Journal of Commercial Biotechnology. 27(3), 67–78. DOI: https://doi.org/10.5912/jcb1274

[20] Hussein, A., Aljamili, L., 2020. COVID-19 humor in Jordanian social media: A socio-semiotic approach. Heliyon. 6(12), e05696. DOI: https://doi.org/10.1016/j.heliyon.2020.e05696

[21] Khalil, H., 2024. Coping strategies and restrictions during COVID-19 pandemic: A multimodal discourse analysis of some selected cartoons and comics. Journal of the Faculty of Arts Port Said University. 28(28), 1–35.

[22] Hodge, R., Kress, G., 1988. Social Semiotics. Cornell University Press: New York, NY, USA.

[23] Bezemer, J., Kress, G., 2008. Writing in multimodal texts: A social semiotic account of designs for learning. Written Communication. 25(2), 166–195. DOI: https://doi.org/10.1177/0741088307313177

[24] Jewitt, C., 2002. The move from page to screen: The multimodal reshaping of school English. Visual Communication. 1(2), 171–195. DOI: https://doi.org/10.1177/147035720200100203

[25] Lemke, J., 2002. Travels in hypermodality. Visual Communication. 1(3), 299–325. DOI: https://doi.org/10.1177/147035720200100303

[26] Tan, S., O'Halloran, K.L., Wignell, P., et al., 2020.

Images of austerity in the British press and in online media. In: Griebel, T., Evert, S., Heinrich, P. (Eds.). Multimodal approaches to media discourses: Reconstructing the age of austerity in the United Kingdom. Routledge: London, UK.

[27] Patton, M.Q., 2015. Qualitative Research & Evaluation Methods: Integrating Theory and practice, 4th ed. SAGE Publications: Thousand Oaks, CA, USA.

[28] Sadallah, S.H., Halawachy, H., 2025. Multimodal efficacy of health warnings on UK cigarette packages: A cognitive-semiotic analysis. Journal of Ecohumanism. 4(1), 4724–4742. DOI: https://doi.org/10.62754/joe.v4i1.6376

[29] Zhao, M., Lyu, Z., Cheng, Q., et al., 2020. Tobacco control intervention: A comparative multimodal discourse analysis of video advertisements in China and Australia. English Language Teaching. 13(4), 314–323.

[30] Saudi Ministry of Health, 2019. Global adult tobacco survey. Available from: https://www.moh.gov.sa/en/Ministry/Statistics/Population-Health-Indicators/Documents/KSA_GATS_2019_FactSheet.pdf (cited 24 June 2025).

[31] Ainiwaer, A., Zhang, S., Ainiwaer, X., et al., 2021. Effects of message framing on cancer prevention and detection behaviors, intentions, and attitudes: Systematic review and meta-analysis. Journal of Medical Internet Research. 23(9), e27634. DOI: https://doi.org/10.2196/27634

[32] Niederdeppe, J., Bu, Q.L., Borah, P., et al., 2008. Message design strategies to raise public awareness of social determinants of health and population health disparities. Milbank Quarterly. 86(3), 481–513.

[33] Peregrin, T., 2010. Picture this: Visual cues enhance health education messages for people with low literacy skills. Journal of the American Dietetic Association. 110(Suppl. 1), S28–S32.

[34] Guolla, M., Belch, G.E., Belch, M.A., 2017. Advertising and promotion: An integrated marketing communications perspective, 6th ed. McGraw-Hill Education: New York, NY, USA.

[35] Jovanović, P., Vlastelica, T., Cicvarić Kostić, S., et al., 2016. Impact of advertising appeals on purchase intention. Management. 21(2), 33–44. DOI: https://doi.org/10.7595/management.fon.2016.0025

[36] Huang, M., Liu, T., 2021. Subjective or objective? How the style of text in computational advertising influences consumer behaviors. Fundamental Research. 2, 144153. DOI: https://doi.org/10.1016/j.fmre.2021.11.004

[37] Adebare, A., Nash, J., 2025. A comparative analysis of advertising appeals in anti-smoking advertisements (print and online display ads) from the 1990s to 2020s in the U.K. Journal of Applied Marketing Theory. 12(1), 99–123. DOI: http://dx.doi.org/10.20429/jamt.2025.120106