

Towards Effective Communication through Attention-Calling Materials: A Pragma-Semiotic Analysis of Career and Counseling Leaflets as Multimodal Texts

Susan Akinkurolere¹, Lovie Seru¹

¹Communication and Study Skills Unit, University of Botswana, Gaborone, Botswana

Correspondence: Susan Akinkurolere, Communication and Study Skills Unit, Pvt.Bag UB 0022, University of Botswana, Gaborone, Botswana.

Received: January 30, 2026

Accepted: April 2, 2026

Online Published: April 12, 2026

doi:10.11114/smc.v14i2.8691

URL: <https://doi.org/10.11114/smc.v14i2.8691>

Abstract

Multimodal leaflets as ‘attention-grabbing materials’ are often used to convey messages to target audiences. Business organizations utilize them to market their products, services, and events. Ostensibly owing to their effectiveness and impeccability in disseminating information, they have been adopted and are popularly used by the Career and Counseling Center in a public university in Botswana to communicate with students. Given their widespread use of visual text, a pragma-semiotic analysis of a selected few was done to unearth the significance of their linguistic and visual texts and their pragmatic and social-semiotic interactions. It was envisaged that understanding the relationship, representation, and implications of the selected leaflets would reveal the extent to which they effectively disseminate information and are replete with intentional linguistic and visual elements that would attract students’ attention. Five (5) leaflets were purposively selected and analyzed through pragmatic and social-semiotic lenses to unravel their themes, implications, and effectiveness in conveying messages to students. The results have shown the pragma-semiotic implications of the leaflets by highlighting how they construct meanings in social realities.

Keywords: leaflets, messages, pragmatics, semiotics, communication

1. Introduction

Human communication primarily aims to achieve mutual understanding (Wijana, 2021), which may occur through linguistic or visual modes. Visual communication, such as posters, leaflets, brochures, blog posts, guidebooks, tattoos, and Artificial Intelligence (AI)-generated images, constitutes a powerful medium for conveying culturally and socially embedded meanings (Peng, 2022; Akinkurolere & Masereka, 2019; de Bernardi, 2022; Ghazvineh, 2024). These meanings are best conveyed using both lexical items and visual images to highlight key meanings intended by producers of printed, written, and digital texts (O’Halloran, 2008). Evidence abounds on the relevance of visual images in communication across different spheres of human endeavors.

In most educational institutions, guidance and counseling services are essential for promoting students’ holistic development, even though academic success often remains the primary institutional focus. The creation of a center for career and counseling is a step to address both academic and non-academic issues of students. Literacy extends beyond interpreting alphabets to include charts, graphs, pictures, and maps (Clapp et al., 2020). It is for this reason that different institutions deploy oral and written communication skills and strategies, which range from face-to-face sessions to the distribution of materials. Common challenges that affect students’ behaviors include social media addictions, drug addiction, and alcoholism, which affect students’ mental health (Sujarwoto et al., 2023; Chen et al., 2019).

The career and counseling leaflets are written materials produced for the reading consumption of students on academic and non-academic matters. The well-being of the students is the major concern of the Career and Counseling Unit. Awareness of issues that lead to mental distress is raised based on the required understanding and the need to solve mental issues that affect the students (Campbell et al., 2022). Thus, produced leaflets serve dual purposes of awareness and information with some elements of enticement (de Bernardi, 2022). These leaflets are usually available in strategic locations for easy access without necessarily booking a session with the counseling team. Moral education is also disseminated to counseling students because it enhances moral stability and progress (Rehren & Sauer, 2024; Balg,

2024). These leaflets are usually available for quick access by the student community, and they provide information on an array of social ills and career development, such as alcohol abuse, job interviews, sexual harassment, anger management, and academic stress, among others.

Despite the growing body of research on the visual analysis of images, limited attention has been paid to examining the relationship between pragmatic meanings and visual representation in multimodal communication. Therefore, a semiotic analysis of leaflets' structural elements, without neglecting the pragmatic dimensions that allow for deeper understanding and comprehension, deserves scholarly attention (Munir & Yavuz, 2024).

In this study, the term "context" refers to both linguistic and physical contexts (Yule, 1996). Thus, the overarching question for this study was "Do the Career and Counseling Center leaflets satisfy the basic pragma-semiotic requirements?" Premised on this broad research question were the following subsidiary questions: How do the leaflets utilize linguistic features to convey messages relevant to the context? Do the visual elements of the leaflets enhance or complement the lexical content? What are the pragmatic implications of the messages presented in the leaflets?

It was envisaged that if the analysis unearthed the ineffectiveness of the leaflets in the utilization of proper linguistic features and enhancement of the lexical items by the visual elements, this study would provide some insights into proper pragma-semiotic strategies to use when developing future leaflets. The main interest of this study was to enhance the effectiveness of future leaflets in communicating messages to the clientele.

1.1 Pragma-Semiotic Approach

It must be noted that the creation of meaning is the major function of a language, as there is a strong link between representation, communication, and meaning making (Thellefsen et al., 2013). Social semiotic theory, developed by Kress and van Leeuwen (1996/2006) and grounded in Halliday's functional grammar, provides a framework for analyzing how different communicative modes contribute to meaning making (Gualberto & Kress, 2018; Flewitt et al., 2019).

Semiotics is an interdisciplinary sublinguistic field that provides adept comprehension and delivery of meanings through different modes (Husain et al., 2020; Ghazvineh, 2024). It extends beyond lexical features to include the intonation system (Shah, 2024). The adoption of the theory was to explore how linguistic and visual features interrelate in creating meanings that are relevant to themes in the leaflets' discourse. Also, the suitability of lexical items to images or otherwise was highlighted to provide implications and insights for future leaflets in academic settings, suggesting that careful consideration of language and visuals can enhance the effectiveness of communication in educational materials.

Culture is the worldview and way of life of its speakers. Culture is therefore a determinant of the symbols, signs, context, and meanings of language (Ademola & Okunola, 2013), just as other social factors such as demographics, attitudes, beliefs, skills, and education contribute to the design of messages communicated through media (Moola & Cilliers, 2019). This evidence implies that for the career and counseling leaflets to be effective in communicating messages, they should exude meanings in the form of expressed ideas, emotions, and desires, and such should resonate with the culture, context, and situations within which they are expressed.

Pragmatics, a branch of linguistics, examines how context influences the interpretation of meaning in communication (Onipede, 2022). Emike et al. (2022) characterize pragmatics as a study of language processing for communicative objectives. This involves studying factors that determine the choice of a language, such as sounds, words, and sentence constructions, and the effects of that choice on people involved in social interactions (Emike et al., 2022). Mabawinku (2022) asserts that the pragmatic theory views truth as a function of the practices people engage in when they tackle problems and make assertions. This theory becomes very effective when it determines how the truth about the statement aligns with people's experiences, cultures, and contexts. More so, the focus on principles rather than rigid rules of language usage highlights the flexibility in pragmatics (Munir & Yavuz, 2024).

Along this reasoning, communicative contexts portray connections between "pragmatics, society, and cognition," thereby enabling semiotic modes to provide insights into pragmatics, especially intercultural pragmatics (Guo & Dong, 2023). To achieve the efficacy of the leaflets, language competence and cultural understanding are crucial (Haktanir, 2022). In a pragmatic study of a semiotic resource like the tattoo, meanings were analyzed based on the contexts. For instance, the cultural context of Uganda was analyzed in relation to the appropriateness of the tattoos (Akinkurolere & Masereka, 2019). Just as the pragmatic theory of relevance was applied to Arabic religious posts on Facebook (Zaki, 2017), the pragmatic semiotic perspective was employed in the study of information needs for knowledge organization (Thellefsen, 2013). This paper portrays the different ways of applying the pragmatic approach to studying meanings in texts.

Pragmatic studies are usually concerned with the context of language. Leaflets' usage serves different purposes in different contexts, just like tattoos. The major concern of this study was the context of a public university and the prevalent academic culture of the students. Engagement of pragmatics with other disciplines such as discourse analysis, lexicology, and stylistics is a trend in linguistics (Lara, 2016; Clark, 2013b; Akinkurolere, 2014; Akinkurolere,

2020; Bischetti, Ceccato, Lecce, Cavanilli, & Bambini, 2023; Schlöder & Altshuler, 2023). In Lara's (2016) work, aphorization, as an utterance enhanced in a printed text, was analyzed and situated in both pragmatics and discourse analysis.

Proponents of pragmatics believe that the meanings of words can only be determined by the understanding that an individual has about the situation (Austin, 1962; Searle, 1967). Onipede (2022) succinctly argues that pragmatic acts consider not only what is said but also what is unsaid. In other words, messages should be crafted to co-opt the target recipients, set them up, and influence them.

Semiotics provides adept comprehension and delivery of meanings through different modes (Husain, Dj, & Musfirah, 2020; Ghazvinch, 2024). It is, therefore, concerned with how meanings are communicated through signs, symbols, signification, and other forms of communication (Onipede, 2022). Emike et al. (2022) also assert that semiotics involves the interpretation of texts, signs, symbols, and icons, which have socio-cultural relevance to the people involved. Semiotic features could indicate modal density, intersemiosis, design ideology, and affective semiosis. Putland (2024) argues that gaze and setting could indicate emotional distance in AI-generated images. Other examples include gestures, clothing, hairstyles, perfume, accent, and social context. As explicated by the explanation above, semiotics extends beyond lexical features to include paralinguistic features (Shah, 2024). The adoption of this theory was, therefore, to explore how linguistic and visual features interrelate in creating meanings that are relevant to the themes of the leaflets' discourse. This study, therefore, served to demonstrate the suitability of lexical items and the images in the career and counseling leaflets and to use the analysis to highlight the implications and insights for future leaflets. Although semiotics encompasses several subfields (cognitive, sociocultural, computational, and visual), this study focused specifically on visual semiotics. It therefore enabled the analysis of pictorial and graphic representations in the leaflets.

The decision to analyze pictorial and graphic illustrations in the Career and Counseling Center leaflets in the manner that is portrayed above was informed by Shah's (2024) pronouncement that semiotic analysis could be applied to both textual and visual communication. According to Shah (2024), ample evidence shows that semiotics applies to literary texts, analyzing features such as metaphor, imagery, and symbolism. Another guide ensued from the multimodal discourse analysis of Argentina's Humor Magazine in exploring the role of cartoons using social semiotics and semiology (Prendergast, 2017). The exploration of semiotic resources in emotional advertisements of Morocco during COVID-19 is a further testament to how visual and lexical features are combined to convey connotative meanings such as fear, appeals, and safety (Chirig, Bouziane, & Zakhir, 2023). These examples clearly show that analyzing graphic illustrations, lexical items, and pictures in the career and counseling center leaflets is appropriate, as it indicates the appropriateness of analyzing graphic illustrations, lexical items, and pictures in the career and counseling center leaflets.

The separated analysis and discussions show that the pragma-semiotic framework is simply a combination of subfields of language study –pragmatics and semiotics. It therefore focuses on studying verbal and non-verbal signs and how their interpretations can impact society (Griffin 2009). Thus, a conceptual framework for the pragma-semiotic analysis of the leaflets was developed based on the Communicative Principle of Relevance (Sperber & Wilson, 2024) and the social semiotics theory of multimodal discourse analysis (Kress & Van Leeuwen, 2006) as follows:

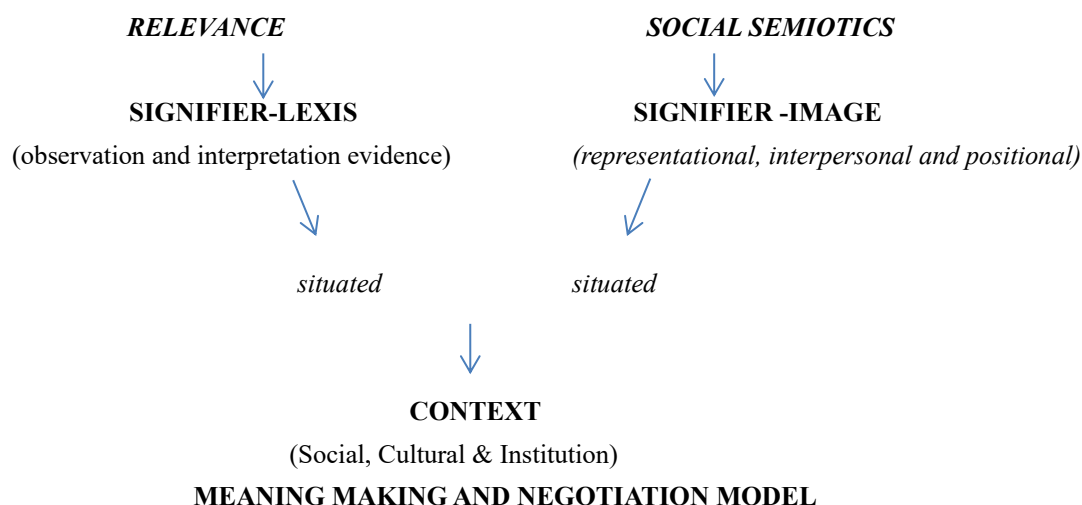


Figure 1. Conceptual Model for Pragma-Semiotic Analysis

2. Method

2.1 Research Design

This research adopted a qualitative approach to analyze leaflets from the Career and Counseling Center of a public university in Botswana. A purposive sampling method was applied to enable intentional selection of two career-specific leaflets, two counseling-specific leaflets, and one general leaflet. The data were public materials available to all students. They were accessible to all students at the university because they could be found at open locations. A dual framework, based on the pragma-semiotic theory, was applied in the analysis of the data. The cover pages served as the data for the content analysis of semiotic resources, while the lexical contents were analyzed for relevance. Content analysis was used in an inductive way to validate the dual theories of semiotic multimodal discourse analysis (Kress & Van Leeuwen, 2006; Gualberto & Kress, 2018) and the communicative principle for relevance (Sperber & Wilson, 2024; Clark, 2013a).

2.2 Sampling Procedures

Five leaflets were purposively selected from a total of fifteen available materials based on three criteria. First, the thematic diversity was applied based on psychological counseling and career guidance; second, inclusion of textual and visual elements; and third, general students' support in the ratio 2:2:1.

2.3 Method of Analysis

The content analysis followed the qualitative approach, whereby words and images were extracted from documents and analyzed descriptively rather than statistically (Elo & Kynga, 2008). For proper identification, the leaflets were labeled as Data A–E. All subthemes in each data set were numbered, and tables were created to illustrate the interactions of the lexical content with the visual images on the cover pages. The subtitles and subthemes in the lexical part of the leaflets were discussed in relation to the semiotic resources.

The pragmatic analysis of each leaflet was based on the relevance of the content to the semiotic modes on the cover pages of the leaflets, while the semiotic modes were analyzed socially, culturally, and institutionally guided by the visual features following Kress and Leeuwen's (2006) visual modality, and Sperber and Wilson's (2024) communicative principle of relevance. The visual modality provides real and social representations of people, things, and places (Olowu & Akinkurolere, 2015). Semiotic features included color, representational detail, depth, tonal shades, salience, and so on, which allowed for the exploration of modal density, intersemiosis, design ideology, and affective semiotics. Kress' and van Leeuwen's (2006) visual modality combines the extent to which images represent reality as it pertains to the interpretations of the social context. The interest of context in this study makes the conceptual framework appropriate for the study.

Leaflets are demonstrative communication materials that are meant to communicate "specific informational content" (Sperber & Wilson, 2024). Thus, in this study, the selected leaflets were pragmatically analyzed following the communication principle of relevance as espoused by Sperber and Wilson's observational evidence and interpretational evidence to arrive at the intended messages. In this paper, the images served as observational messages while the lexical components represented interpretational evidence. It is on this premise that features such as color, eye contact, stimulus, position, and direction were pragmatically significant in the images.

2.4 Reliability and Validity

For reliability testing, inter-coder and intra-coder reliability were applied as two researchers interpreted the codes initially, and this was repeated to check for consistency in the same researcher's interpretation and was compared with that of the second researcher. This approach is evidenced in O'Connor & Joffe (2020). Furthermore, grounding the analysis in the theories of social semiotics and the communicative principle of relevance provided theoretical validity (Kress & van Leeuwen, 2020; Sperber & Wilson, 2024), which was supported by triangulation in the two analyses. The effectiveness of the leaflets was assessed qualitatively through the degree of alignment between textual content and visual representation, following the communicative principle of relevance (Sperber & Wilson, 2024) and the representational, interpersonal, and compositional metafunctions of visual grammar (Kress & van Leeuwen, 2006). While the study did not include audience reception data, the analysis evaluated whether visual and textual modes coherently reinforced intended meanings.

3. Results

This section presents the pragmatic and social semiotic analysis and discussion of the five leaflets. The discussion is based on the pragma-semiotic findings and implications. As alluded to in the Methods and Materials section, the five leaflets are labeled Data A-E for ease of identification, discussion, and analysis.

Data A: Interview Tips for Success

The Pragmatic Analysis of Data A Content

Table 1. Overarching Themes

Job Interview	
Interview sessions	Preparation for interviews
• Individual interviews • Panel interviews • Sequential interviews	• Organizational visits • Psychometric assessments • Job interview questions • Interview tips

‘Job interview’ is the central theme in the above data, and the point of view is analyzed for relevance. Pragmatically, individual interviews, panel interviews, sequential interviews, organizational visits, psychometric assessments, job interview questions, and interview tips are identified as subthemes in the content. The major image depicts an interview session and preparation for interviews. Even though the image does not portray the three types of interviews, it provides an insight into the setting of an interview session, while organizational visits, psychometric assessments, knowledge of possible job interview questions, and interview tips are all preparatory activities for job interviews. The image, further, highlights the essence of point of view, as postulated in Maier’s & Bimpikou’s (2019) work, for investigating relevance in a pragmatic study.

The second image shows a group of people sitting and one member of the group with a laptop. This image indicates that preparation for a job interview could be done through the internet, group discussion, or personal study. The image clearly aims to educate viewers about digital reliance on information. The picture demonstrates that technology has penetrated the world of employment, which is exhibited through online interviews. Curiously, this piece of information is not represented in the content of the leaflet, and the result shows an imbalance in information presentation, a case that is aptly captured by Husain et al. (2020), as they noted that semiotic presentations often result in representation imbalance.

Social Semiotic Features of Data A

Ijadimine (2020) posits that images exhibit more meanings than texts. Here, the focus is basically on meanings that are based on visuals because visual modes make meanings out of images (Vezovnik & Kamin, 2016). The identified visual modes on the cover page of Data A are colors, pictures, distance, background, gaze, facial expressions, and posture. The picture of the four women, comprising three interviewers and one interviewee is up front while six other individuals in the background are meant to depict preparations for interviews. The picture of the interview session is replete with gender imbalance and insensitivity, unlike the other group in the background. The gaze, posture, and distance between the interviewers are appropriate, but the posture of the interviewee is inappropriate. It is inappropriate for the interviewee to sit with their right hand raised to support their jaw.

These pronouncements feature prominently in Sindoni’s (2020) idea of multimodality specifically in respect to connecting distance in images to identity. The black color in their dresses shows formality and strength, while the light brown background portrays warmth, approachability, and sincerity. The white color in the dress of the first interviewer symbolizes honesty. The identified colors imply that the interview session is meant to be a formal process of sincerity and honesty without any threat or intimidation. The facial expressions of the three interviewers show that they are into serious business.

Data B: Career Decision Making

The Pragmatic Analysis of Data B Content

Table 2. Overarching Themes

Career planning		
Self-awareness	Knowledge	Resources
• Values • interests • personality • skills • abilities	• job title • job description • training requirements • working conditions • place of work • job benefits and rewards • future prospects • job security • job market • surroundings	• libraries • career resource rooms • newspapers • magazines • television and radio • career fairs • cultural and sport events • visit to workplaces • internet • attachment

‘Career planning’ is identified as the overarching theme of the Data B content. This is synonymous with the theme of ‘career decision making’ as captured on the cover page image. There are three (3) subthemes that represent crucial factors for career planning. Through the leaflets, students are enlightened on key concepts of career decisions. ‘Self-awareness’ is premised on five concepts, ‘knowledge’ is premised on nine factors, and ‘resources’ is premised on ten categories. This aligns with Shah’s (2024) pronouncement that theme identification is necessary for semiotic analysis. It is thus fitting to suggest that the world of work is a “digital space.” This resonates with the insights in Huang and Yan’s (2016) work on how pragmatics helps in identifying deeper meanings through context-based information, particularly in understanding how digital spaces influence communication and interpretation.

Social Semiotic Features in Data B

The movement of background colors is displayed from dark to light maroon. The sentence is incomplete and requires revision. These are associated with wisdom, depth, and passion. The image shows one of the girls seated, and the other one standing and leaning forward to read what is displayed on the computer screen. The gaze and posture indicate collaborative learning and passion. The facial expressions demonstrate interest and team spirit. This correlates with O’Halloran’s (2008) acknowledgment of semiotic means for characters’ relations and message reinforcement in a visual image. The interpersonal relationship between the two girls stands out in the image. Also, a book is held in the image to highlight that a traditional resource complements an online resource in career planning. Despite the appropriateness of the semiotic modes, there is gender imbalance in the image, as enrollment in higher institutions cuts across the different genders.

Data C: Test Taking Anxiety

The Pragmatic Analysis of Data C Content

Table 3. Overarching Themes

Test Taking anxiety			
Causes of Test-taking anxiety	Symptoms of anxiety	Anxiety quiz	Dealing with anxiety
• too much focus on success • much pressure on oneself • unpreparedness • fear of failure	• physical symptoms • psychological symptoms	• loss of appetite • lack of sleep • headaches • vomiting • no concentration • boredom • much worrying • mental block • no feelings • guilt feelings • stressful view	• dealing with physical symptoms • dealing with psychological symptoms

Test-taking is a significant activity in the lives of university students. Emotional issues could appropriately be illustrated through multimodality or semiotics as demonstrated in the analysis of emotional appeal (Chirig et al., 2023). Test-taking anxiety is a key theme in the leaflet with subthemes of test-taking anxiety, symptoms of anxiety, quiz anxiety, and dealing with anxiety. Each of these subthemes has some components, as listed in the table.

Pragmatically, loss of appetite, lack of sleep, headaches, and vomiting cannot possibly be discerned from the image. As such, these themes are not relevant to meanings disseminated through the image. Anxiety is both a mental and health issue. It could therefore be addressed through multimodal materials. This image is less supported by Ijadimine’s (2020) view that an image could convey more messages than words. This position cannot be generalized as content and image designs are key to such a comparison. For clarity, university students’ leaflets require more lexical items, as illustrated in the Data B leaflet, because intended messages can hardly be merged in a single image. Otherwise, it becomes complicated. The image in Data C is relevant but not sufficient to illustrate the symptoms of test-taking anxiety.

Social Semiotic Features of Data C

The posture, position, facial expressions, and color are the main visual components of Data C. A female student is wearing a white blouse. Also, there is a white wall background. White signifies perfection, and the quest for it could lead to anxiety. The heading ‘TEST TAKING ANXIETY’ is written in a dark brown color on a white background. By implication, test-taking anxiety may blur the desired perfection, which students desire. Indeed, the girl’s posture indicates anxiety as she is expected to accomplish an independent task. This image aptly captures the symptoms of test-taking anxiety using

semiotic features to convey intended meanings. These assist in interpreting academic life as a social context (Flewitt et al., 2019).

Data D: Adjusting to University Life

The Pragmatic Analysis of Data D Content

Table 4. Overarching Themes

University Life	
Tips for adjustment	University resources/services
• Time management • Assertiveness • Interpersonal relationships • Avoiding alcohol and substance use • Managing your finances • Teaching and learning	• Careers and counseling center • Health and wellness center • Protection services • Health services • Culture, sports, and relocation • Disability support services • Library

The subthemes and divisions, under the central theme of “adjusting to university life,” are pragmatically relevant. University students experience changes when they begin their studies at universities, which could be challenging for them to adjust to. As illustrated, a profound interrogation of the images and content is observed, which Scott-Phillips (2024) refers to as a cognitive science of human communication.

The subthemes of orderliness and banking services are conspicuous in the image, even though they are not explicitly stated in the content. The sub-theme of ‘managing your finances’ is the most relevant to the image. The tips for adjusting to university life, such as time management, assertiveness, international relationships, avoiding alcohol and substance use, and teaching and learning, are foregrounded in the verbal anchorage of the image. The image presents a gender-balanced representation of students, as evidenced by the picture showing four girls and one boy. Thus, the intended meanings are derived from the interpretational evidence more than the observational evidence. This buttresses the argument of Sperber and Wilson (2024) that observational evidence could be limited, whereas interpretational evidence is limitless.

Social Semiotic Features of Data D

‘ADJUSTING TO UNIVERSITY LIFE’ is written in a white color below the image on the cover page, which represents light and positivity on a maroon background. The maroon color represents the complexity of university life. The students’ picture on a queue highlights the financial demands of university education. Showcasing a part of the students’ center building hints at students’ services and resources. This aligns with de Bernardi’s (2022) submission that multimodal materials help to portray practices, culture, and their implications. The different colors of students’ dresses, such as black, blue, and peach, represent diversity, while the differing postures of students are common behavioral features of students in a university. The leaflets reflect university life and its representations in Data D.

Data E: Time Management

The Pragmatic Analysis of Data E Content

Table 5. Overarching Themes

Time management techniques	Benefits of time management
• Planning • Organisation • Setting goals • Evaluate your schedule • Recognise flexibility • Avoid procrastination	• Increased academic performance • Healthy study-life balance • Increased efficiency

Time management is the theme of the fifth leaflet. The identified points in the table show that time management demands certain strategies for students’ benefits. More so, time management is also applicable to students’ academic and social lives. Indeed, the subthemes are in tandem with the requirements of students’ academic and professional lives. Specifically, evaluating, planning, and organizing schedules, setting goals and recognising flexibility, and avoiding procrastination are key to managing time to achieve increased academic performance, a healthy work-life balance, and increased efficiency.

The hand clock demonstrates the theme and subthemes. This image echoes students’ focus, attention, and attitudes to time. These connect with planning, organization, evaluation, and recognition as subthemes, which also buttress the position of

Munir and Yavuz (2024) on pragmatic interpretation in meaning making. The maintenance of a common ground between lexical content and image provides the basis for contextual understanding of the messages (Fried et al., 2022).

Social Semiotic Features of Data E

The image of a clock of white and black colors represents time. The hand on the clock indicates human control and focus, which corresponds with the lexical content of Data E. The two significant visual elements are the hand and clock. This is intentional, as time management requires minimal distraction. The image does not involve any participant but just a part of a hand to portray the human role in time management. Capitalization of 'TIME MANAGEMENT' written in white color further contributes to the importance of managing time for productivity. The portrayal of time without a contextual background of a university implies the universality of time.

Pragma-Semiotic Implications of the Analysis

Before delving into the pragma-semiotic implications of the analyzed data, suffice it to say that both relevance, based on observational and interpretive evidence, and social semiotics, based on representational, interpersonal, and compositional metafunctions of images, provide adept insights in the analysis of the table below.

Table 6. Pragma-Semiotic of Data A-E

Data	Modal Density	Intersemiosis	Design Ideology	Affective Semiotics
A	High modal density (visual, spatial, linguistic, and gestural): photos, logos, text, color and layout.	The caption of 'Interview Tips for Success, subtitles, and linguistic text connect and provide adept interpretation of the visuals.	- Professionalism - Meritocracy	- Hope - Warmth
B	High modal density (visual, spatial, linguistic, and gestural)	The caption of Career Decision Making', subtitles, and linguistic texts interact with the visuals.	- Individual Choice - Market Orientation	- Motivation - Ambition
C	Moderate modal density (visual, spatial, linguistic, and gestural)	The caption of 'Test Taking Anxiety,' subtitles, and linguistic text explain and interact with the visuals.	- Performance Culture - Therapeutic Ideology	- Confidence - Motivation
D	High modal density (visual, spatial, linguistic, and gestural)	The caption of 'Adjusting to University Life', subtitles, and linguistic content capture the distinct meanings of the visuals.	- Autonomy - Assimilation	- Aspiration - Optimism - Inclusivity
E	Moderate modal density (visual, spatial, linguistic, and gestural)	The caption of 'Time Management', subtitles, and linguistic content interact with the visuals.	- Productivity - Neoliberal rationalisation	- Attentiveness - Discipline - Control

According to Kress and van Leeuwen's (2020) work, multimodality, which implies how visual, color, linguistic, layout, space, topography, and other modes are used in images or text, determines the density of modes in our analysis. For example, Data A, B, and D reflect high modal density, while Data C and E indicate a moderate modal density. This is premised on the fact that Data C and E have fewer colors and human images compared to the other data.

In addition, the captions, subtitles, and themes in the pragmatic analysis of the five data sets do not only interact but also provide detailed analysis and insights about the visuals. The most interactive aspect is the caption. It is also important to state, as noted in the pragmatic analysis, that the linguistic content of Data A-E provides more meanings than the images. This is understandable because ideas are better implied in images than explicitly represented to avoid a 'complicated' modal density. The captions elaborate, illustrate, and represent the visuals depicted and framed.

4. Discussion

The design of images speaks to critical ideologies; the most relevant ones are selected. In Data A, two scenes are incorporated as one image. The arrangement of the interview session indicates professionalism, considering the sitting position, posture, and eye-level. The design is systematically done to also portray meritocracy as an ideology premised on preparation setting, which is foregrounded in the image. For Data B, individual choice or individuality is highlighted as a design ideology in conjunction with market orientation. The portrayal of online search using a computer device further implies that the two image participants engaged in interpersonal communication to obtain information and make decisions in the career market. There are assumptions that personal choice and efforts influence careers.

Along the same design of reasoning, Data C points at performance culture and therapeutic ideology in the course of writing tests and managing their anxiety. The background of the classroom and gestures of the image participant indicate that the quest for academic success could result in anxiety, but students are encouraged to manage test-related stress through the

leaflet. Data D has a design ideology of autonomy and assimilation, as the queue and participants' gestures imply independence and institutional assimilation. These are strategies for coping and adjusting in a new university environment because students need to grow into self-managing adults. The reliance on the university context provides deeper meanings as illustrated in the image, as Fried et al. (2022) rightly recognize the role of context in meaning making.

The last data set has the design of a clock and hand attached to it. These underpin the ideology of productivity and neoliberal rationalization. The basic assumption here is that time is an important resource to be maximized. Also, self-discipline and control are needed to manage one's use of time effectively, especially when engaging with complex design ideologies and making intentional design decisions in multimodal texts like leaflets. The identified design ideologies in the five data sets demonstrate that the design decisions are intentional and systematic, and they significantly contribute to meaning making in multimodal texts like leaflets. Thus, Halliday's (1994) position that visual grammar (systems) is socially construed and could perform representational, interpersonal, and compositional functions (metafunctions) is strongly supported in our analysis of leaflets.

As shown in Table 6 on critical affective semiotics, the emotions evoked through the images are hope and warmth for Data A, motivation and ambition for Data B, confidence and motivation for Data C, aspiration, optimism, and inclusivity for Data D, and attentiveness, discipline, and control for Data E. The images evoke these emotions through salience, gaze, color, layout, topography, and interpersonal relations because images are usually treated like a language (Kress & van Leeuwen, 2020), as well as sound and music (Polycheva, 2023). No wonder Putland et al. (2024) argue that gaze and setting could create emotional distance in visual communication.

The analysis of the data shows that the theory of relevance in pragmatics could be applied to situate textual content and images separately or as a complementary tool to a visual tool. This is in tandem with Olowu and Akinkulore's (2015) observation that linguistic approaches are applicable to visual analysis. Notably, more scholarly works address the analysis of linguistic-pictorial discourses because only visual tools are limited, as they may not account for distinct modes. Such an approach would imply a restricted image (Schlöder & Altshuler, 2023). In other words, combining relevance with semiotics enables a comparison of textual content and its visual representation to portray the relevance of images to content, and content to context-based images, in line with the framework of Thellefsen et al. (2013). This study proves that representations connect with communication to produce meanings. This is beyond semiotics, as it is restricted to meaning making based on different visual modes.

Based on relevance, technology is portrayed through the image in Data A, but nothing is mentioned about technology in the lexical component of the leaflet. Data B emphasizes both technological and traditional resources as complementary tools. Furthermore, Data C and Data D reiterate the use of leaflets to counsel and guide students in the university, while Data E is applicable to students all through their academic and professional lives, thereby teaching them a management skill that would help them beyond university life. However, specific messages are featured in a powerful mode to convey crucial meanings, rather than relying on visual images, so that students are attracted to the content of the leaflets. In this case, the images primarily serve as attention grabbers.

In the Southern African cultural context, colors such as black and brown are commonly associated with formality, stability, and seriousness in professional environments. However, color symbolism may differ across cultures, and such color interpretations should be understood within an institutional setting like a university (Davies et al., 1994). The content analysis for relevance indicates that comprehensive messages are embedded in the content, as more meanings could be generated from the content rather than the images. For students, especially newcomers, the semiotic interpretations of the visual components may not be clear to them since they are yet to experience them in the social reality. Indeed, the appropriateness of visual communication to context is a concern in social-semiotics and pragmatics.

The analysis of the students' leaflets indicates that little attention is paid to gender in images. A balanced gender representation of students in their leaflets could align with de Bernardi's (2022) argument that multimodal materials should be both informative and enticing, and gender representation in images should reflect the situation. This could shape students' views on career and counseling services. Also, the images do not sufficiently capture all intended messages in the linguistic content, as they only reflected key issues.

This study has shown that pragma-semiotic analysis of visual communication provides insights into the effectiveness of visuals in conveying intended meanings—just like or even more than lexical items. The study has also shown that the success of visual images in communicating meanings depends on how semiotic resources are manipulated, situated, and designed. As demonstrated in the analysis and discussion section, the images in the leaflets play complementary roles because they call students' attention to the leaflets' content, and they contain selective messages based on what the Career and Counseling Center prioritized.

Premised on the observations discussed above, this study makes the following propositions:

- Students' leaflet designers should be gender sensitive. The analysis of the images indicated that little attention was paid to gender balance. Gender inclusivity is a critical social issue at the university. Students, whether male or female, are supposed to see themselves in the different representations so that they can connect to and with the meanings intended.
- Students should be encouraged to read the content of the Career and Counseling Center's leaflets because the images on the cover pages are mainly to draw attention, as they have less information than the content of these leaflets. This statement implies that unlike other multimodal resources such as books, magazines, or posters, leaflets are limited in image production.
- Semiotists and pragmatists are needed to work with graphic designers to create students' leaflets. While the involvement of semiotists is critical at the design stage, pragmatists are needed to assess the appropriateness of the images to the content and the ideas that are intended for the target audience. Further studies should focus on students' views on the leaflets and their semiotic modes.

Acknowledgments

The authors gratefully acknowledge the Career and Counseling Center at the University of Botswana for creating and easing access to the multimodal leaflets that formed the basis of this study. Their gesture of making these materials available for academic analysis is sincerely appreciated.

Author contributions

Dr. Susan Akinkurolere and Dr. Lovie Seru contributed equally to this work. Both authors were jointly responsible for data curation, formal analysis, methodology development, drafting of the original manuscript, and provision of resources. Dr. Akinkurolere solely conceptualized the study and supervised the project. Dr. Seru was solely responsible for manuscript review and editing, as well as validation of the study. All authors have read and approved the final version of the manuscript.

Funding

This research received no external funding. The authors independently provided all resources required for the execution of the study.

Competing interests

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Informed consent

Obtained.

Ethics approval

The Publication Ethics Committee of the Redfame Publishing.

The journal's policies adhere to the Core Practices established by the Committee on Publication Ethics (COPE).

Provenance and peer review

Not commissioned; externally double-blind peer reviewed.

Data availability statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

Data sharing statement

No additional data are available.

Open access

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>).

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

References

Ademola, E. O., & Okunola, R. A. (2013). Peoples, culture and mass media as agent of cultural imperialism. *Covenant*

University Journal of Politics and Internal Affairs, 1(1), 179-191.

- Akinkulore, S. O. (2014). A pragmatist analysis of Chinua Achebe's *Arrow of God*. *Humanities and Social Sciences Review*, 03(03), 363-370.
- Akinkulore, S. O. (2020). A lexico-pragmatic analysis of the inaugural speech of Nigerian speaker of house of representatives. *KIU Interdisciplinary Journal of Humanities and Social Sciences*, 1(2), 143-159. <https://doi.org/10.59568/KIJHUS-2020-1-2-10>
- Akinkulore, S. O., & Masereka, D. (2019). A Cultural-pragmatic investigation of tattoos among the youth in Kampala. *AGATHOS*, 10(1), 191-200. https://www.agathos-international-review.com/issue10_1.html
- Austin, J. L. (1962). *How to do Things with Words*. Oxford University Press.
- Balg, D. (2024). Moral disagreement and moral education: What's the problem? *Ethic Theory Moral Prac.*, 27, 5–24. <https://doi.org/10.1007/s10677-023-10399-9>
- Bischetti, L., Ceccato, I., Lecce, S., Cavanilli, E., & Bambini, V. (2023). Pragmatics and theory of mind in older adults' humor comprehension. *Curr Psychol.*, 42, 16191–16207. <https://doi.org/10.1007/s12144-019-00295-w>
- Bo, X. (2018). Multimodal discourse analysis of the movie "Argo". *English Language Teaching*, 11(4), 132-137. <https://doi.org/10.5539/elt.v11n4p132>
- Campbell, F., Blank, L., Cantrell, A., Baxter, S., Blackmore, C., Dixon, J., & Goyder, E. (2022). Factors that influence mental health of university and college students in the UK: a systematic review. *BMC Public Health*, 22, 1778. <https://doi.org/10.1186/s12889-022-13943-x>
- Chen, W., Zheng, Q., Liang, C., Xie, Y., & Gu, D. (2019). Factors influencing college students' mental health promotion: The mediating effect of online mental health information seeking. *International Journal of Environmental Research and Public Health*, 17(13), 4783. <https://doi.org/10.3390/ijerph17134783>
- Chirig, A., Bouziane, K., & Zakhir, M. (2023). Emotional advertising in Morocco during the COVID-19 pandemic: A semiotic analysis. *Social Science Information*, 62(2), 184-202. <https://doi.org/10.1177/05390184231180377>
- Clapp, J., DeCoursey, M., Sarah Lee, S. W., & Li, K. (2020). "Something fruitful for all of us": Social annotation as a signature pedagogy for literature education. *Arts and Humanities in Higher Education*, 20(3), 295-319. <https://doi.org/10.1177/1474022220915128>
- Clark, B. (2013a). Principles of relevance. *Relevance Theory*. Cambridge University Press: 90–122. <https://doi.org/10.1017/CBO9781139034104.006>
- Clark, B. (2013b). Lexical pragmatics. *Relevance Theory*. Cambridge University Press. 240–252. <https://doi.org/10.1017/CBO9781139034104.012>
- Davies, I., Davies, C., & Corbett, G. (1994). The basic color terms of Ndebele. *African Languages and Cultures*, 7(1), 36–48. <https://doi.org/10.1080/09544169408717774>
- de Bernardi, C. (2022). Sámi tourism in marketing material: a multimodal discourse analysis. *Acta Borealia*, 39(2), 115–137. <https://doi.org/10.1080/08003831.2022.2104544>
- Di Tullio, P., Valentinetti, D., Nielsen, C., & Rea, M. A. (2020). In search of legitimacy: a semiotic analysis of business model disclosure practices. *Meditari Accountancy Research*, 28(5), 863-887. <https://doi.org/10.1108/MEDAR-02-2019-0449>
- Elo, S., & Kyngäs, H. (2008). The qualitative content analysis process. *Journal of Advanced Nursing*, 62(1), 107-115. <https://doi.org/10.1111/j.1365-2648.2007.04569.x>
- Emike, A. J., Sani, A., Umar, M. A., & Wara, U. A. (2022). Pedagogical communication in Nigerian children literature: A Pragma-semiotic study of Akintayo Oluyinka's *The Greatest Mistake*, 4(2), 16-33. <https://doi.org/10.22158/eltls.v4n2p16>
- Ernawati, I., Fandinata, S. S., & Permatasari, S. N. (2020). The effect of leaflet on hypertension knowledge in hypertensive patients in community health center in Surabaya City. *Open Acces Maced J Med Sci.*, 8(E), 558-565. <https://doi.org/10.3889/oamjms.2020.5327>
- Flewitt, R., Price, S., & Korkiakangas, T. (2019). Multimodality: Methodological explorations. *Qualitative Research*, 19(1), 3-6. <https://doi.org/10.1177/1468794118817414>
- Fried, D., Tomlin, N., Hu, J., Patel, R., & Nematzadeh, A. (2022). Pragmatics in language grounding: phenomena, tasks, and modeling approaches. *Findings of the Association for Computational Linguistics: EMNLP*, 12619–12640

ArXiv. <https://doi.org/10.18653/v1/2023.findings-emnlp.840>

- Ghazvineh, A. (2024). An inter-semiotic analysis of ideational meaning in text-prompted AI-generated images. *Language and Semiotic Studies*, 10(1), 17-42. <https://doi.org/10.1515/lass-2023-0030>
- Gualberto, C., & Kress, G. (2018). Social semiotics. *The International Encyclopedia of Media Literacy*, edited by Renee Hobbs and Paul Mihailidis, NY: Wiley-Blackwell. <https://doi.org/10.1002/9781118978238.ieml0226>
- Guo, J., & Dong, X. (2023). *The Cambridge Handbook of Intercultural Pragmatics*: edited by Istvan Kecskes, Cambridge, Cambridge University Press, 875. <https://doi.org/10.1080/03623319.2023.2213498>
- Haktanir, A. (2022). A comparison of counseling self-efficacy among international and domestic counseling students. *Journal of Psychologists and Counsellors in Schools*, 32(1), 124-133. <https://doi.org/10.1017/jgc.2020.19>
- Halliday, M. A. K. (1994). *An Introduction to Functional Grammar* (2nd ed). London.
- Hu, S. C. (2003). A wholesome ECE education. *IEEE Transactions on Education*, 46(4), 444-451. <https://doi.org/10.1109/TE.2003.818753>
- Huang, Y., & Yan, M. (2016). Pragmatics. In K. Allan (Ed.), *The Routledge Handbook of Linguistics*. Oxford, 415-430.
- Husain, N. F., Zuhri Dj., M., & Musfirah, M. (2020). Semiotic analysis to the cultural content in the EFL textbook. *International Journal of Research on English Teaching and Applied Linguistics*, 1(2), 65-82. <https://doi.org/10.30863/ijretal.v1i2.1230>
- Ijadimine, O. D. (2020). *A Semiotic Analysis of Herbal Drinks' Labels*. An Unpublished Dissertation Submitted for the Award of Master of Arts in English Language, Joseph Ayo Babalola University, Ikeji, Arakeji, Nigeria
- Kenalemang-Palm, L. M. (2023). The beautification of men within skincare advertisements: A multimodal critical discourse analysis. *Journal of Aging Studies*, 66, 101153. <https://doi.org/10.1016/j.jaging.2023.101153>
- Kress, G. R., & Van Leeuwen, T. (2006). *Reading Images: The Grammar of Visual Design*. Routledge. <https://doi.org/10.4324/9780203619728>
- Kress, G., & Leeuwen, T.V. (2020). *Reading Images: The Grammar of Visual Design* (3rd ed.). Routledge. <https://doi.org/10.4324/9781003099857>
- Kumar, T. (2022). Semiotic analysis of train in Jhumpa Lahiri's "The Namesake". *World Journal of English Language*, 12(2), 169-176. <https://doi.org/10.5430/wjel.v12n2p169>
- Lara, G. M. P. (2016). Pragmatics and discourse analysis: A dialogue on the concept of aphorization in media texts. *Pragmatics*, 26(1), 93-109. <https://doi.org/10.1075/prag.26.1.05lar>
- Mabawinku, O. (2022). Pragma-semiotic analysis of equivocality in Tess Onwueme's Drama; *EJOTMAS: Ekpoma Journal of Theatre and Media Arts*, 2(21), 374-391. <https://dx.doi.org/10.4314/ejotmas.v8i1-2.21>
- Maier, E., & Bimpikou, S. (2019). Shifting perspectives in pictorial narratives. *Proceedings of Sinn und Bedeutung*, 23(2), 91-105. <https://doi.org/10.18148/sub/2019.v23i2.600>
- Moola, S., & Cilliers, C. P. (2019). A multimodal semiotic analysis of social factors in tuberculosis campaigns in South Africa, the United Kingdom and India. *Communicatio*, 45(2), 81-98. <https://doi.org/10.1080/02500167.2019.1639784>
- Munir, E., & Yavuz, M. A. (2024). Study of pragmatic analysis of literature on the development of ELT students' receptive and productive skills: A case of North Cyprus. *Heliyon*, 10(21), e39558. <https://doi.org/10.1016/j.heliyon.2024.e39558>
- O'Connor, C., & Joffe, H. (2020). Intercoder reliability in qualitative research: debates and practical guidelines. *International Journal of Qualitative Methods*, 19. <https://doi.org/10.1177/1609406919899220>
- O'Halloran, K. L., (2008). Systemic functional-multimodal discourse analysis (SF-MDA): Constructing ideational meaning using language and visual imagery. *Visual Communication*, 7(4), 443-475. <https://doi.org/10.1177/1470357208096210>
- Olowu, A., & Akinkurolere, S. O. (2015). A multimodal discourse analysis of selected advertisement of malaria drugs. *English Review: Journal of English Education*, 3(2), 166-173. <https://journal.uniku.ac.id/index.php/ERJEE/article/view/205/162>
- Onipede, F. M. (2022). Yoruba and their symbolic means of communication: a pragma-semiotic analysis of Aale. *Al-Lisan Jurnal Bahasa (e-journal)*, 7(2), 145-160. <https://doi.org/10.30603/al.v7i2.2639>
- Peng, Z. (2022). A Multimodal discourse analysis of movie posters from the perspective of visual grammar—A case

- study of "Hi, Mom". *Theory and Practice in Language Studies*, 12(3), 605-609. <https://doi.org/10.17507/tpls.1203.22>
- Polycheva, Y., & Vetokhin, V. (2023). Multimodal approach to the study of specialized texts in technical discourse. *Alfred Nobel University Journal of Philology*, 2(26/2), 45-58. <https://doi.org/10.32342/2523-4463-2023-2-26/2-3>
- Prendergast, M. (2017). Political cartoons as *carnavalesque*: a multimodal discourse analysis of Argentina's *Humor Registrado* magazine. *Social Semiotics*, 29(1), 45-67. <https://doi.org/10.1080/10350330.2017.1406587>
- Putland, E., Chikodzore-Paterson, C., & Brookes, G. (2023). Artificial intelligence and visual discourse: a multimodal critical discourse analysis of AI-generated images of "Dementia." *Social Semiotics*, 35(2), 228-253. <https://doi.org/10.1080/10350330.2023.2290555>
- Rehren, P., & Sauer, H. (2024) Another brick in the wall? Moral education, social learning, and moral progress. *Ethic Theory Moral Prac.*, 27, 25-40. <https://doi.org/10.1007/s10677-022-10351-3>
- Schlöder, J. J., & Altshuler, D. (2023). Super pragmatics of (linguistic-)pictorial discourse. *Linguist and Philos*, 46, 693-746. <https://doi.org/10.1007/s10988-022-09374-x>
- Scott-Phillips, T. (2024). The communicative principle of relevance. *Current Directions in Psychological Science*.33(6), 371-377. <https://doi.org/10.1177/09637214241284937>
- Searle, J. R. (1969). *Speech Acts: An Essay in the Philosophy of Language*. Cambridge University Publisher. <https://doi.org/10.1017/CBO9781139173438>
- Shah, A. H. (2024). Mapping the cultural landscape of the homeland: A semiotic analysis of Agha Shahid Ali's poetry collection. *Theory and Practice in Language Studies*, 14(1), 279-284. <https://doi.org/10.17507/tpls.1401.33>
- Sihite, J., Muchtar, M., & Rangkuti, R. (2021). A visual semiotic analysis on the Spongebob Movie. *LingPoet: Journal of Linguistics and Literary Research*, 2(1), 86-93. <https://doi.org/10.32734/lingpoet.v2i1.5007>
- Sindoni, M. G. (2020). #YouCanTalk: A multimodal discourse analysis of suicide prevention and peer support in the Australian BeyondBlue platform. *Discourse & Communication*, 14(2), 202-221. <https://doi.org/10.1177/1750481319890386>
- Sperber, D., & Wilson, D. (2024). Rethinking ostensive communication in an evolutionary, comparative, and developmental perspective. *PsyArXiv*. <https://doi.org/10.31234/osf.io/zp3fx>
- Sujarwoto, Saputri, R. A. M., & Yumarni, T. (2023). Social media addiction and mental health among University students during the COVID-19 pandemic in Indonesia. *Int J Ment Health Addiction*, 21, 96-110. <https://doi.org/10.1007/s11469-021-00582-3>
- Syafitri, S. E., Sinar, T. S., Mulyadi, & Lubis, M. (2023). How do the brochures speak? Systemic functional linguistics analysis in online parenting brochures. *Language Literacy: Journal of Linguistics, Literature, and Language Teaching*, 7(2), 337-345. <https://doi.org/10.30743/ll.v7i2.7053>
- Thellefsen, M., Thellefsen, T., & Sørensen, B. (2013). A pragmatic semeiotic perspective on the concept of information need and its relevance for knowledge organization. *Knowledge Organization*, 40(4), 213-224. <https://doi.org/10.5771/0943-7444-2013-4-213>
- Vezovnik A., & Kamin T., (2016). Constructing class, gender and nationality in socialism: A multimodal analysis of food advertisements in the Slovenian magazine *Naša žena*. *Teorija in Praksa*, 53(6), 1327-1343.1509. <https://www.proquest.com/scholarly-journals/constructing-class-gender-nationality-socialism/docview/186519476/5/se-2>
- Wearing, C. J. (2015). Relevance theory: Pragmatics and cognition. *WIREs Cognitive Science*, 6, 87-95. <https://doi.org/10.1002/wcs.1331>
- Wijana, I. (2021). On speech acts. *Journal of Pragmatics Research*, 3(1), 14-27. <https://doi.org/10.18326/jopr.v3i1.14-27>
- Yule, G. (1996). *Pragmatics*. Oxford University Press.
- Zaki, M. (2017). The pragmatics of Arabic religious posts on Facebook: A Relevance-theoretic Account. *Research in Language*, 15(1), 37-60. <https://doi.org/10.1515/rela-2017-0002>