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Abstract
The aim of the present paper is examining the mental representations activated by semantic networks in media discourse. It studies the cognitive frames that are mentally constructed and activated about illegal immigrants, in general, and Syrian refugees in particular. Any word class can evoke frames, but to limit the scope of analysis, Fairclough's socio-cultural approach is implemented to work out the experiential, relational and expressive values of only nouns and adjectives in media discourse. The corpus consists of articles released by The Guardian newspaper during and after the Syrian refugee crisis between 2015 and 2019. The results of the research show that cognitive frames are used to enhance the stereotypical categorizations of refugees as dislocated, uprooted and oppressed communities. This paper focuses on the mental mapping of such disadvantaged people and how they are categorized and presented in media discourse. It also analyses nouns and adjectives as generators or builders of cognitive frames in the human mind via discourse. This study is original because it relates semantic networks, mental lexicon and cognitive frames to analyze media discourse.

Keywords: Categorization, cognitive frames, media discourse, mental lexicon, mental mapping, semantic networks

1. Introduction
Cognitive representations activated in text and talk are alluring linguistic phenomena that invite analysts to investigate the kind of mental constructs that some linguistic or lexical features trigger in discourse. Media discourse seems to be a fruitful area of research because it influences the public opinion. As such, analyzing the mental representations built in The Guardian articles, regarding a critical issue in the last few years in Europe and the Middle East, may reflect how Syrian refugees are mentally represented and shed light on the cognitive frames related to them in discourse. This will be examined via Fairclough's socio-cultural approach to answer the following questions:

a) What experiential, relational and expressive values do nouns and adjectives have in the corpus?  
b) How do these value-laden lexical features build semantic networks in discourse?  
c) What kinds of cognitive frames are they evoked in media discourse with regard to the Syrian refugee crisis between 2015 and 2019?

2. Literature review
2.1 Frame
Frame semantics is a theory of linguistic meaning developed by Charles J. Fillmore that connects linguistic semantics to encyclopedic knowledge. The main idea is that one cannot understand the meaning of a single word unless s/he has access to all the essential knowledge that relates to that word. For example, one cannot understand the word "restaurant" without knowing anything about the situation of eating in a restaurant, which also involves, among other things, food, a menu, the relation between the waiter and the client. Thus, a word activates, or evokes, a frame of semantic knowledge relating to the specific concept to which it refers (Fillmore & Baker, 2001).

More specifically, a frame is “a mental knowledge structure, which captures the typical features of the world units organized ‘around’ a certain concept” (van Dijk, 1977, p. 215). This includes the typical necessary information related to this concept. A frame is a mental model of the world located in the human memory. It can be saved and retrieved when such models are stimulated. As such, a frame is a cognitive phenomenon and a structure that is stored in the human mind (Bednarek, 2005). According to Werth (1990), it can also be defined as an area of experience in a culture (as cited in Chilton, 2004, p. 51). In short, a frame is a mental construct that shares a number of features.

Frames are organized in a hierarchical structure. In the human memory, knowledge is stored in a form of several related frames (Bednarek, 2005). Each frame is characterized by specific typical features. Since a frame consists of cognitive components and their related elements, these features may supply ‘prototypes’ or central and typical instances that represent a category. A frame is thus built upon categories and their interrelations (Bednarek, 2005). Retrieving mental or cognitive representations consists of finding the stored traces in memory and using the schemata to reconstruct the original interpretation or representation (Bower & Cirilo, 1985). In other words, these frames can be organized in a hierarchy and inherit properties from super-ordinate frames.
2.2 Semantic networks and mental lexicon
Words are organized in an interconnected system of lexical items. This lexicon establishes a mental network that is similar to drawing a reasonably reliable ‘map’ of a person’s ‘word web’ (Aitchison, 2003, p. 85). These word webs are clusters of words that relate to the same topic. Individuals often select items from the original word’s semantic field where words of similar meanings are stored together. These semantic fields are also referred to as semantic networks. According to Aitchison (2003, p. 86), there are different types of link between a ‘stimulus word’ and its ‘response’. The four most important links are the following:

1. **Coordination**: response involves coordinates, like salt and pepper, butterfly and moth, and opposites, like left and right, hot and cold.
2. **Collocation**: a word that is likely to be collocated (found together) with the stimulus in connected speech, like salt water, butterfly net, bright red.
3. **Subordination**: the cover term, which includes the stimulus word, like insect is elicited by ‘butterfly’, or color by the word ‘red’.
4. **Synonymy**: a word with the same meaning as the original word, like ‘starve’ beside ‘hungry’.

As such, people do not deal with words as isolated entities. They have to establish or find connections between them and relate these words to each other in the mental lexicon. As Aitchison (2003, p. 75) states, ‘words are stitched together in one’s mind like pieces on a patchwork quilt’. This means that words are interdependent, and each word activates many related similar words that belong to the same semantic network (See also Reed, 1982, p. 217). Frames, generated by such semantic networks or mental lexicon, may categorize entities or events in media discourse based on some common features.

Notions like frames, semantic networks and mental lexicon may be closely interrelated in discourse. Analyzing the links between these concepts may uncover the mental mapping of Syrian refugees in media discourse, and hence the interconnections between such linguistic features.

3. Methodology

3.1 Corpus
The corpus of the present research consists of randomly selected articles from the British daily newspaper, *The Guardian*. These articles are downloaded from the following website: [https://www.theguardian.com/uk](https://www.theguardian.com/uk). They cover the Syrian refugee crisis between 2015 and 2019 in Europe. For each year, three articles are randomly selected to be analyzed; hence the corpus involves fifteen separate texts.

3.2 Data Collection
The focus will be on nouns and adjectives because they encode the attitudes of the journalists and reflect the categorization of Syrian refugees in media discourse. These lexical features build a mental lexicon related to refugees and demystify how they are cognitively framed and mentally mapped by the *Guardian* newspaper.
3.3 Research method
Fairclough’s socio-cultural approach is selected to analyze media discourse on the Syrian refugee crisis. Since Fairclough’s (1989) model is a three-dimensional approach, it involves three levels of analysis, namely textual description, interpretation of the connection between the discursive processes of production and interpretation of the text, and ultimately explanation of the link between the discursive processes and social processes. Only the first stage of analysis, which corresponds to description, will be implemented in the current research. It is concerned with the identification and description of the linguistic features that are relevant to the present study.

This choice can be explained by the fact that the main focus of the present study is on textual features, semantic connections between words and the cognitive representations they activate in the human mind. These textual features will be analyzed in terms of their experiential, relational and expressive values. The first stage of analysis of Fairclough's model is illustrated in table 1.

### Table 1. Formal Features: Experiential, Relational and Expressive Values

<table>
<thead>
<tr>
<th>Dimensions of meaning</th>
<th>Values of features</th>
<th>Structural effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contents</td>
<td>Experiential</td>
<td>Knowledge/beliefs</td>
</tr>
<tr>
<td>Relations</td>
<td>Relational</td>
<td>Social relations</td>
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<tr>
<td>Subjects</td>
<td>Expressive</td>
<td>Social identities</td>
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</tbody>
</table>

Source: Fairclough, (1989, p 112)

The focus will be on the lexical features that build evaluative mental representations about Syrian immigrants. The aim is uncovering the mental frames generated by mass media during and after the crisis as well as the journalists' attitudes towards such a human drama.

4. Results
As stated before, the values of the collected data will be examined via three stages. First, experiential values deal with the way the writer or the speaker experiences the world. Second, relational values show how social relations are enacted in the text. Third, expressive values indicate how subjects are positioned in the text and how their social identities are referred to.

4.1 What experiential values do nouns and adjectives have in the text?
To answer this question, the focus will be on how nouns and adjectives are distributed in the selected corpus. Only the nouns and adjectives that refer to Syrian refugees and describe their conditions are considered for analysis. Table 2 illustrates the total number of the value-laden nouns and adjectives used by The Guardian journalists in the selected articles.

### Table 2. Frequency of Occurrence of Value-Laden Nouns and Adjectives in the Corpus

<table>
<thead>
<tr>
<th>Nouns</th>
<th>Adjectives</th>
</tr>
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<tbody>
<tr>
<td>Crisis (34), exodus (3), conflict (19), strain (5), sanctuary, poverty (5), desperation (2), asylum (29), risk (15), assistance (3), help (2), shortfall (2), militia, battles, displacement (5), seekers (8), war (14), violence (7), persecution (5), danger (9), flow (5), migration trail, exile (3),</td>
<td>Humanitarian (10), largest (3), forced (6), displaced (15), biggest (6), dire, worsening, fleeing (3), huge (7), vulnerable (7), worse (4), complex, exiled, intractable, stranded (2), upsetting, stringent, higher, bad (2), nervous, harder, untenable (2), underfunded, damming, unable,</td>
</tr>
</tbody>
</table>
problem(s) (7), respite, shelter (3), support (4), smuggler(s) (9), penny-pinching, brunt, fire (3), rescue, victim(s) (3), escalation (3), catastrophe, imbalance, repatriation, threat (6), instability, clampdown, failure, fear(s) (3), sympathy, difficulty (2), unhappiness, uncertainty, pressure(s) (2), non-refoulement, influx (6), wave(s) (2), unfortunates, burden (3), relocation (2), flood(s) (2), refugee “tap”, depression, self-harm, suicide, surge (3), misery, rape, plight (2), dismay, despair, detention (3), riots, outbursts, human drama, storm (6), need (5), emergency (5), jeopardy (3), insurgency, revenge, prison, thugs, chaos (2), security (2), forgiveness, hostility, deportation, toll, barrel bombs, besiegement, starvation, death (7), torture, arrests, vandals, vengeance, offensive, stream, peak, tensions, invasion, vetting, rage, trauma, aggressor, (formidable) obstacles, disaster, smuggling, conditions (4), shortages (2), fighting (5), fighters, urgency, teargas, scars (2), casualties, food scarcity (2), regime (3), pro-regime forces, attacks (2), airstrikes, abuse(s) (2), checkpoints, outbreak of violence, harassment, bombs, gunfire, explosions, soldiers (2), gun, burn-out cars, burns, an offensive, lack of adequate nutrition, rain(s) (3), winds, snow, flooding, damage (3), spread of disease, outbreak of disease, race hate, outsider, compassion, tolerance (2), empathy (2), mercy (2), torrent of emotion, hope (2), terrorists, restrictions
greatest, uprooted (3), involuntary, homeless, disastrous, difficult (3), awful (2), desperate (3), aggressive, restrictive, failed, enormous, divided (2), marooned (4), racist, xenophobic, problematic (2), dramatic (2), deplorable, rising, tortured, worrying, treacherous (2), troubling, growing, overstretched, violent, worst (2), increasing (3), devastating, heavy (2), arbitrary, paralyzed, high (2), extreme, cancerous, looming, ruthless, squeezed, hopeless, trapped (2), endangered, escalating, brutal, destabilized, critical, terrifying (2), sick, exhausted, grave, intransigent, deadliest, psychological ruin, hardest hit, lethal, besieged population, malnourished, deprived, wounded, neglected, stigmatized, minimal access to health or education, freezing (3), torrential, overcrowded camps, poor health, fragile, tense situation, extreme weather, cold, worried, negative stereotypes (2), overwhelming, unsure (2), lengthy arduous journey, the worst of odds, homeless (2), irritable man, a traditional alien, moving stories, arbitrary process, fearful and less kind,

Table 2 shows the distribution of nouns and adjectives in the corpus. In the noun category, one can note the predominance of the nouns ‘crisis’ (34 times), ‘asylum’ (29), ‘conflict’ (19), ‘war’ (14), ‘smugglers’ (9), ‘seekers’ (8), ‘problem(s), ‘death’ and ‘violence’ (7), ‘influx’ (6) and ‘persecution’ (5). In the adjective category, ‘displaced’ is the most frequently used adjective (15 occurrences), followed by the adjective ‘humanitarian’ (10 times). After sorting out the distribution of nouns and adjectives in the corpus, one has to examine their relational and expressive values in the following sub-sections.

4.2 What relational values do nouns and adjectives have in the corpus?
At this level, the collected lexical items will be examined in terms of their relational values in the corpus. The focus will be on the kind of relations established between Syrian refugees, European countries and Bashar Al Assad’s regime in Syria. The main concern will be demonstrating how these lexical features reveal relations between the agents or entities mentioned in the corpus.
The lexical items in table 2 not only unveil the relationship between words but also the relationships between agents or referees in discourse, in this case Syrian refugees, Assad's regime and European countries. One can note a dual set of relationships based on ENMITY (Assad vs. Syrian refugees and Assad vs. European countries) vs. FRIENDSHIP (Syrian refugees and European countries). Assad's regime is portrayed as a 'VIOLENT' and 'AGGRESSIVE' regime. It is a 'DANGER' and a 'THREAT' for Syrians who are presented as 'VICTIMS'. European countries, on the contrary, are depicted as a 'REFUGE' or 'SHELTER'. Hosting countries are also described as supportive nations that provide 'ASSISTANCE' and offer 'SECURITY', 'RESCUE' and 'HELP'.

Figure 1. Relational Values of Nouns and Adjectives in the Selected Corpus

Assad’s regime is depicted as a common threat. It is not only the enemy of Syrian refugees, but also the enemy of democracies in Europe. After demystifying the kind of relations established between the entities referred to by nouns and adjectives in the corpus, one can shed light on the expressive values of these lexical features in the Guardian discourse.

4.3 What expressive values do these features have in the corpus?

At this stage of Fairclough’s model, one has to investigate the meanings expressed by the lexical features, how subjects are positioned in the text and how their social identities are conveyed.

Figure 2. CRISIS Lexical Items in the Corpus
The ‘CRISIS’ frame consists of sub-frames that involve ‘conflict’, ‘chaos’, ‘tensions’, ‘problems’ and ‘outbursts’. These sub-frames are mental representations triggered via discourse. In this context, the noun ‘crisis’ means an extremely difficult or dangerous situation¹. The word ‘conflict’ encompasses the idea of ‘war’, disagreement or fighting between two or more parties. As for the noun ‘persecution’, it refers to cruel or unfair treatment because of religion, race or political beliefs. The noun ‘strain’ expresses the idea of putting pressure on someone or something. 'Tension' is a noun that refers to a feeling of anger between different groups. It is close in meaning to the noun ‘outburst’, but this latter is a stronger feeling that leads to a sudden and forceful expression of emotions. ‘Outbursts’ may lead to ‘riots’ which are noisy and violent gatherings in public. The noun ‘emergency’ refers to something dangerous or serious. A ‘problem’ is, however, a less serious or urgent situation. All these words have some features in common that relate them together under the umbrella of one semantic network.

The superlative forms ‘the biggest’, ‘the largest’, ‘the worst’ and ‘the greatest’ magnify the Syrian refugee crisis. The adjectives ‘huge’, ‘bad’, ‘harder’, ‘worsening’, ‘increasing’, ‘higher’, ‘worse’ and ‘damning’ portray the dilemma of an uprooted population. The words ‘escalation’, ‘overstretched’ and ‘overwhelming’ reveal the huge obstacles and problems that Syrians face after fleeing war in their country. All the previous words may lead to ‘devastating’ or 'looming' results if problems reach a ‘peak’. Semantically, the adjective 'devastating' describes something that causes damage or destruction. ‘War’ is one devastating factor, and it is a kind of ‘crisis’, ‘emergency’ and ‘conflict’. 'Stringent' is an adjective that refers to something severe or grave, like 'war'. As one can notice, these words create a mental map based on interrelated mental frames. Every word activates a set of semantically related words. Cognitively, every frame constructs sub-frames with mental connections activated in the discourse emitter's memory.

As for RISK-FRAME, the nouns ‘risk’, ‘danger’ and 'threat' are semantically interconnected words. Similarly, 'death', 'barrel bombs', 'fear', 'deadliest' ‘lethal’, ‘grave' and 'cancerous' evoke the idea of danger and threat. The general lexical town can be divided into frames and sub-frames. For instance, the frame 'plight' triggers sub-frames, like difficulty, hardship, dangerous or unpleasant situations etc. Based on this semantic network, Syrian refugees are depicted as a community at risk. They are threatened by Assad’s regime as well as the insecure living conditions inside and outside their home country.
The third semantic field highlights the HARDSHIP-FRAME in the Syrian crisis. The nouns ‘homeless’, ‘pressure’, ‘plight’, ‘poor’ and ‘burden’ portray the ‘problematic’ situation of this community. Moreover, the nouns ‘persecution’, ‘starvation’, ‘misery’, ‘poverty’ demystify the 'human drama' of Syrians fleeing death in Syria. The words 'difficulty', 'difficult', 'harder', 'worsening', 'rising', 'awful', 'disastrous', 'besiegement' and 'clampdown' convey the inhuman and catastrophic conditions that these innocent Syrian refugees have endured since they escaped war and persecution in their home land. It is worth noting that HARDSHIP-FRAME is dominant in the selected corpus (86 items). This reflects the sufferings of these refugees and the tough conditions they have been facing. The mental lexicon highlights the huge problems and hardships that Syrian refugees encounter in their search for a better life. It also describes the difficult mission of some European countries to deal with the refugees’ mass immigration to Europe.

The fourth frame that we notice while reading the articles is INFLUX-FRAME. The arrival of a big number of refugees all together is portrayed as a 'stream', or a 'flow'. This recalls the idea of flowing water and fluidity. This idea is also triggered by the nouns 'waves', 'refugee tap' and 'flood' that enhance the INFLUX-FRAME. These words stimulate mental representations or knowledge constructs that are saved in our memories and activate them to be used in discourse.
production and comprehension. The cluster of such mental knots depict Syrian arrivals as massive waves or continuous streams of immigrants. This highlights the huge number of refugees that continuously enter Europe.

Figure 6. VIOLENCE Lexical Items in the Corpus

VIOLENCE-FRAME is dominant in the selected corpus. The lexical items 'forced', 'fighting', 'damage', 'fire', 'regime', 'attacks' and 'abuses' portray the picture of oppressed, persecuted, tortured and endangered refugees. Moreover, the lexical items 'thugs', 'vandals', 'aggressive', 'revenge' and 'vengeance' refer to the 'militia' of Bashar Al Assad. The noun 'jeopardy' summarizes the dilemma of the Syrian refugees who are escaping the atrocities of war in Syria, facing death in the Mediterranean Sea and expecting better life conditions in hosting countries. These words reveal the atrocity of the Syrian war and depict refugees as a community in peril. This idea is supported by the words 'detention', 'arrests', 'prison', 'brutal' and 'aggressor' since they all include negative connotations.

Figure 7. EMOTIONAL TRAUMA Lexical Items in the Corpus

The semantic network 'EMOTIONAL TRAUMA' reveals the sufferings of Syrian refugees. The words 'vulnerable', 'desperate', 'desperation', 'instability', 'shock', 'upsetting', 'racing', 'dismay', 'hostility', 'brutal', 'torture', 'terrorists', 'outsider', 'negative stereotypes', 'psychological ruin', 'respite', 'terrifying', 'exhausted', 'sick', 'fragile' and 'worried' unveil the emotional state of these refugees. The climax of such an emotional trauma led to 'self-harm' and 'suicide' cases in refugee camps. Syrian refugees had high expectations about better life conditions in hosting countries, but they found themselves trapped in some 'racist' communities. Some of them were victims of 'xenophobic' treatments, like Hungary that refused to accept any Syrian refugee on its territory. The word 'toll' expresses suffering, death or damage. The noun 'hostility' describes the attitude of some European institutions towards Syrian refugees.
countries towards Syrian asylum seekers. Semantically, this semantic network involves NEGATIVE connotations. Consequently, only NEGATIVE mental representations are retrieved and activated to frame their depressing conditions.

Figure 8. RELOCATION Lexical Items in the Corpus

Another semantic field, noticed in the corpus of the present research, is 'RELOCATION'. This frame is triggered by the words 'displacement', 'displaced', 'relocation', 'exiled' and 'uprooted'. It stresses the idea of changing someone's place or location. One can also note the SHELTER-FRAME triggered by the nouns 'asylum', 'exile' and 'sanctuary'. This shelter is, however, temporary because the countries that host refugees think about sending them back to their home country. The lexical features 'repatriation', 'refoulement' and 'deportation' enhance this idea. It is important to note in this context that the word 'shelter' encodes the idea of a voluntary movement for safety and security reasons, but the noun 'exile' means that the movement is forced or imposed on the subject. These sub-frames have weaker or stronger links with the general frame 'RELOCATION'.

Figure 9. HELP Lexical Items in the Corpus

The last mental frame found in the corpus is 'HELP'. It is supported by sub-frames, like 'assistance', 'support' and 'rescue'. These mental constructs highlight the feeling of 'sympathy' on the part of some European communities. These frames create a mental map where Syrian refugees are depicted as endangered people who look for 'security'. They generate feelings of compassion and solidarity with these unprivileged and unfortunate people.
One can synthesize that Syrians are collocated with NEGATIVE frames in media discourse, more specifically in *The Guardian* newspaper. The ‘CRISIS’, ‘RISK’, ‘HARDSHIP’, ‘VIOLENCE’, ‘EMOTIONAL TRAUMA’ frames display the disastrous and atrocious situation of this community. ‘INFLUX’ and 'RELOCATION' themes have one common feature, mainly 'movement'. ‘HELP’ frame, however, ignites POSITIVE frames that reveal the ‘humanitarian’ side of European countries. As one can notice, these frames and sub-frames build lexical towns that are semantically and cognitively interconnected and interrelated. This idea will be elaborated further in section 5.

Let us expand the analysis to focus on some propositions and how nominal and adjectival phrases produce cognitive frames in media discourse. These cognitive frames will be discussed starting from the most dominant to the least dominant mental construct. The most recurrent cognitive frame is **CRISIS** with 155 items. The following are two extracts from the corpus:

“*We are experiencing the biggest refugee crisis since the second world war,*” he told Greek Star TV. (01/03/2016)  
*People have already weathered four years of brutal conflict; a fifth is too much.* (09/09/2015)

The superlative form of the adjective ‘big’, collocated with the noun ‘crisis’, as well as the collocation of the adjective ‘brutal’ with the noun ‘conflict’ stress the complexity of the Syrian refugee crisis in Europe. The nouns ‘crisis’ and ‘conflict’ are categorized, evaluated and classified as ‘big’ and ‘brutal’ respectively. These adjectives activate knowledge slots in the receiver’s brain that are already stored in episodic memory. The superlative form magnifies the refugee crisis, which is cognitively represented as huge, bad, great, hard etc. in other parts of the corpus. The word ‘biggest’ recalls other related mental lexicon in the brain and activates them to understand entities and events in discourse. These cognitively related words highlight the extent, scale or intensity of the Syrian refugee crisis. The conflict in Syria is described as ‘brutal’, which encodes a stronger meaning than the adjective ‘violent’. It recalls similar cognitive frames, like ‘aggressive’, ‘tough’, ‘harsh’, ‘hard’, ‘difficult’, ‘bloody’, ‘deadly’ etc. The common feature between these words is that they trigger mental representations related to war, fighting, conflict, enmity, struggle and tension. Such mental lexicon builds a general semantic network that connects them together, namely CRISIS-FRAME.

**RELOCATION** is the second most recurrent cognitive frame in the selected articles with 92 lexical items.  
*It is now the greatest movement of the uprooted that the world has ever known. Some 65 million people have been displaced from their homes, 21.3 million of them refugees for whom flight is virtually compulsory – involuntary victims of politics, war or natural catastrophe.* (17/09/2017) 
RELOCATION-FRAME can be divided into sub-frames, expressed by the lexical items ‘the greatest movement’, ‘the uprooted’ and ‘displaced’ (here used as a verb, not an adjective). These words highlight the forced movement of Syrians from their country to a safer place. The adjective ‘uprooted’ activates the ideas of a displaced entity that is pulled up from the ground, or from native or habitual surroundings. The superlative form of the adjective ‘great’ enhances the fact that the relocation of Syrian refugees is a huge problem. It is qualified as ‘the greatest movement’ that ‘the world has ever known’. Such displacement is presented as ‘compulsory’ and ‘involuntary’ which
enhances the ideas of forced relocation and imposed escape from conflicts and natural disasters, like extreme weather in 2019 in Europe and parts of Asia.

**HARDSHIP** is the third most frequently generated frame with 86 words. Others who spoke to the Guardian say they have heard constant reports from inside Syria that those who had returned faced extreme vetting from security agencies and a high risk of detention, especially if they come from opposition-held areas. (30/08/2018)
The adjectives ‘extreme’ and ‘high’ are qualifiers that modify the noun phrases ‘vetting’ and ‘risk of detention’. They function like intensifiers because they show the huge problems that Syrians may face if they go back to their country. The lexical item ‘extreme’ triggers many related mental representations, like a very large or big amount of, a high degree of something etc. It may also evoke other related frames based on our experiences, like extreme weather, extreme poverty, extreme pain etc. The nouns ‘vetting’, ‘risk’ and ‘detention’ unveil the hardships that Syrians encounter in Syria that is torn between Al Assad regime, ISIS fighters and democratic forces supported by the USA and European Union. The HARDSHIP-FRAME is recurrent in the selected articles from 2015 to 2019. It builds negative mental frames that uncover the extreme sufferings, countless hardships and inhuman conditions of Syrian victims. This mental lexicon generates cognitive frames about Syrian refugees and recalls other related frames, like VIOLENCE-FRAME and CRISIS-FRAME, and sub-frames that are cognitively related to these general frames.

The fourth dominant cognitive frame is **VIOLENCE** with 81 lexical items in the selected newspaper articles. “We must remember why Syrians fled their homes in the first place: barrel bombs, besiegement, starvation, detention and torture. (30/08/2018)
The cluster of the noun phrases ‘barrel bombs’, ‘besiegement’, 'starvation’, ‘detention’ and ‘torture’ generates a negative general frame, mainly VIOLENCE-FRAME. Syrians, in this excerpt, are categorized as besieged, starving and tortured detainees. Lack of freedom, lack of food as well as the violation of human rights are mental frames that emanate from these lexical items. Every noun triggers many related frames and sub-frames. These frames are mental representations that are stored, retrieved, activated and then reproduced to understand discourse. Such mental representations depend on the personal experiences and cognitive skills of the discourse analyst. People may activate different mental constructs about the same entity or event. In this case, Syrian refugees can be categorized as a community that is endangered by barrel bombs and starvation. ‘Torture’ encodes the idea of extreme violence or unbearable treatment. It also generates mental frames based on extreme suffering, emotional trauma, hardship and pain. The noun ‘torture’ embeds a stronger meaning than ‘violence’. It refers to the climax of ill-treatment of Syrians by Assad regime.

As for Assad regime, it is portrayed as a totalitarian, authoritative and bloody regime that chases its Syrian opponents. Bashar Al Assad is presented as a violent, aggressive and brutal ruler. Syrians fleeing the country are depicted as humiliated victims who can no longer endure the regime’s violations of their basic human rights. In short, the above noun phrases stimulate mental representations that locate entities in certain cognitive frames. They are mentally mapped as a community in peril.
**RISK** is the fifth most recurrent mental model in the selected corpus with 77 items. *Aid* workers warn there is a real risk people will simply freeze to death as temperatures have already dropped to -1°C, amid a shortage of blankets and heating fuel. (12/01/2019)
The nominal phrases ‘a real risk’, ‘death’ and ‘a shortage’ build mental constructs that unveil the dangerous conditions of Syrians in detention camps. These mental constructs depend on the reader’s experience, social and political background as well as her knowledge about events, actions, entities and the world in general. Nouns and adjectives in this excerpt enhance the idea of danger that may lead to ‘death’. They reveal the risky, deadly, dangerous and lethal conditions, starting from escaping a bloody war in Syria and facing death in the Mediterranean Sea to going to the unknown to seek shelter. The recurrence of the noun ‘risk’ in the corpus evokes NEGATIVE COGNITIVE FRAMES that locate Syrians in the center or the heart of danger. This noun is mentally connected with death, harm, injury, famine, insecurity, instability and many other frames and sub-frames. These negative mental representations, triggered by the *Guardian* journalists’ words, show their concern about Syrian refugees, especially women and children. The clusters of such representations build the RISK-FRAME and HARDSHIP-FRAME.

**EMOTIONAL TRAUMA** can be classified sixth in terms of the frequency of occurrence of lexical items in the corpus with 67 words.

*Report warns generation faces psychological ruin, with most vulnerable the hardest hit.*
(12/03/2018)
The noun phrase ‘psychological ruin’ encompasses severe emotional or mental distress caused by a bad experience. The brutal war in Syria and the escape of millions of Syrians to Europe and neighboring countries resulted in great disruption and suffering. The noun phrase ‘psychological ruin’ evokes the idea of a psychological shock and its consequences on the body, soul and mind. After fleeing a brutal war in Syria, refugees were traumatized. The adjective ‘vulnerable’ shows that they are susceptible to emotional injury and can be easily hurt.

The superlative form qualifies or modifies the noun ‘hit’ to exaggerate the impact of the Syrian war on people and magnify war results on the emotional and mental health of Syrian refugees. These refugees are categorized as war victims who are exposed to assaults, disasters and attacks. In this context, Syrians are mentally mapped as a community that faces the worst of odds. This shows the support and solidarity of the Guardian journalists who express sympathy and compassion via words. Indeed, the nouns and adjectives used in the corpus express the discourse emitters’ empathy and their understanding of the Syrian refugees’ emotional state.

**HELP** frame is the seventh most frequently generated cognitive frame with 63 mental lexica. *Speaking as the European commission signaled it was putting together an urgent humanitarian aid package for the country after predictions that more than 200,000 men, women and children will be marooned there by summer, the leftwing leader said Brussels had promised “support and solidarity”.* (01/03/2016)
The use of the adjective ‘humanitarian’ and the nouns ‘aid’, ‘support’ and ‘solidarity’ reflects the POSITIVE side of the European Union. Although some countries refused to accept asylum seekers, the *Guardian* journalists reflect the humanitarian side of host countries and report the need for assistance and cooperation to financially support these unfortunates. HELP-FRAME is
recurrant in the corpus, and it ignites feelings of compassion and solidarity with Syrian refugees, especially with women and children.

The adjective ‘marooned’ describes these people who are abandoned and isolated without food and basic needs. This adjective recalls the HARDSHIP-FRAME as well as EMOTIONAL-TRAUMA-FRAME. As such, there are interconnections or interlinks between the different lexical items found in the corpus. They generate interrelated mental representations that function as cognitive frames and sub-frames that categorize entities in discourse and allocate certain features to them.

The last cognitive frame identified while analyzing the corpus is INFLUX with 21 items. *Largest exodus from a single conflict in a generation places humanitarian system under increasing financial strain* (09/07/2015)

Mass immigration of Syrians is referred to as ‘exodus’. It is also qualified as ‘the largest’ in a generation. This mass movement is also compared to ‘waves’, ‘flow’ and ‘influx’ in other parts of the corpus. The word ‘strain’ evokes mental lexica, like pressure, injury, damage, violence and HARDSHIP. It also has connections with EMOTIONAL TRAUMA-FRAME. As such, the noun ‘strain’ has common features with these two frames. This enhances the idea that one category has strong and weak bonds with other categories and sub-categories. These frames are interconnected in a mental network based on mental lexicon.

To highlight the idea of mental networks, we can examine the following example:

*Those most at risk face escalating threats of being permanently maimed by fighting, or emotionally scarred by a litany of abuses including forced labor, marriages, food scarcity and minimal access to health or education.* (12/03/2018)

In this excerpt, one can notice the eclectic use of RISK-FRAME, VIOLENCE-FRAME, EMOTIONAL TRAUMA-FRAME and HARDSHIP-FRAME. The adjective ‘maimed’ refers to the severely injured victims of the Syrian war. The nouns ‘fighting’ and ‘abuses’ evoke mental constructs related to violence. The nominal phrases ‘forced labor, marriages’, ‘food scarcity’ and ‘minimal access to health and education’ generate cognitive frames that mentally represent deprivation, hardship, difficulties, obstacles, tough living conditions etc. The eclectic analysis of the present example is based on combining these frames and their related sub-frames to build mental lexicon. Interconnected mental lexicon establishes a semantic or mental network.

5. Discussion

After analyzing some excerpts from the corpus, one has to discuss the general mental representations built via the lexicon used in media discourse, and more specifically the mental mapping of Syrian refugees in *The Guardian* between 2015 and 2019. The semantic networks analyzed in the previous section correspond to cognitive frames in the human mind. These mental representations are structurally classified into general and specific elements. In the selected corpus, we have noticed eight general cognitive frames. These general categories or frames are divided into sub-categories, which are in their turn divided into minor sub-categories. Inspired by Aitchison’s (2012, p. 228) lexical network and Reed’s (1982) semantic network,
figure 10 illustrates how the mental lexicon is organized as a network of linked frames and sub-frames in the corpus.

![Network of Mental Lexicon in the Selected Corpus](image)

**Figure 10.** Network of Mental Lexicon in the Selected Corpus

Words in figure 10 build lexical towns in the form of a mental network. Every lexical town involves several clumps of words that are strongly interrelated. These words have other weaker relations, semantic connections or common aspects with other groups. As such, the mental lexicon has strong and weak bonds with other words depending on the topic.

Cognitive frames are schematically presented as knowledge constructs or slots about stereotypical events or entities. The lexical network is organized in terms of semantic fields or mental towns that are structured in terms of categorical relations. Such a mental network consists of cognitive representations, or a mental mapping of Syrian asylum seekers and their living conditions in some countries. More specifically, the lexicon, as a mental construct, is schematically generates or activates different frames that take into account the typical features of the world units that surround a given entity, in this case Syrian refugees, and given events, in this case their mass immigration to Europe. The general frames are divided into smaller frames which are in their turn divided into sub-frames. The network consists of the interrelations between the frames that are built upon these categories or prototypical features.

These prototypical frames reflect how The Guardian journalists perceive the refugee crisis. For instance, the typical features allocated to Syrian refugees are a 'displaced', 'relocated', 'homeless', 'tortured', 'persecuted', 'maimed' and 'marooned' community. Some of these common features are clear in these examples: "At the end of 2014, one in every five displaced people worldwide was Syrian," and "In the last few months our clinics have seen more people who have suffered violence, who are victims of rape, who have been tortured, than ever before". These lexical items determine the discourse emitter's construal of the Syrian refugee crisis and her attitude towards these war victims.
Apart from the classification of these mental frames in hierarchical structures, ranging from general to specific, these frames can be classified in terms of dominance from the most dominant to the least dominant features in *The Guardian* discourse. The most dominant frames are ‘CRISIS-FRAME’ (155 items), ‘RELOCATION-FRAME’ (92 words), ‘HARDSHIP-FRAME’ (86) and ‘VIOLENCE-FRAME (81). Figure 11 illustrates the different semantic networks or frames found in the corpus and orders them according to their dominance in the selected articles.

![Dominant Mental Frames in the Corpus](image)

*Figure 11. Dominant Mental Frames in the Selected Corpus*

'These cognitive frames prototypically describe Syrian refugees as people under pressure who face tensions. They are also depicted as 'asylum' seekers who look for a refuge in other countries. Similarly, they are portrayed as a community that is living in conflicts and problems. As such, cognitive frames reflect realities because the mental representations constructed by the selected discourse activate real mental frames about the hardships, sufferings, persecutions and atrocities experienced by this community. While reading the articles, the analyst's mind creates cognitive relations or mental connections between her mental models and the real world.

We can thus confirm that semantic networks activate cognitive frames in the selected corpus that reveal the media's mental mapping of Syrian refugees and their categorization depending on NEGATIVE frames or mental networks. Since there is no direct link between text and social context, we need a cognitive interface in the form of evaluative mental representations that are activated by the participants of a given communicative event.

6. Conclusion

To conclude, one can state that after examining the experiential value of nouns and adjectives in the corpus, the results have shown the prevalence of the nouns 'crisis' (34), 'asylum' (29), 'conflict' (19), 'displaced' (15) and 'risk' (15). Studying the relational values has demonstrated how nouns and adjectives reflect the kind of relationships between Syrian refugees, European countries and Al Assad regime. While examining the expressive value of these lexical features, we have found out that these nouns and adjectives are classified according to semantic networks where words are
interconnected semantically and cognitively in a form of a mental network or a mental map, hence cognitive frames.

The implication of this research is that it studies cognitive frames as mental constructs activated by semantic networks in media discourse and explains how nouns and adjectives, as builders or generators of mental representations, build a mental lexicon and evoke cognitive frames in discourse. This study demystifies the mental mapping of entities and events in discourse from sociocultural and cognitive perspectives.

7. Notes
1 The definitions are taken from Cambridge Dictionary, retrieved from https://dictionary.cambridge.org/.

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8. References