A Transitivity Analysis of Two Political Articles: An Investigation of Gender Variations in Political Media Discourse

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Abstract

The purpose of the present study is to use transitivity analysis to investigate gender variations in political media discourse from the point of view of male and female columnists. To attain this purpose, this paper adopts a critical discourse analysis (CDA) of Halliday's theory of transitivity process types. Literature shows that gender variation is one of the key elements affecting language. However, variation in gender studies, particularly in article writing, has not been recently addressed in relation to transitivity analysis. To scrutinize types of transitivity involving material, mental, relational, verbal, existential, and behavioral processes, qualitative and quantitative methods were deployed to achieve a deep understanding of transitivity process types. Paired Sample T-Test has also been employed to investigate whether there is a significant difference in gender variations pertaining to frequencies of process types of transitivity. The results revealed that the material process has been the most frequent process used by female and male political columnists and has highly dominated the discourse in both articles. In addition, the finding showed that there is no significant difference in gender variations pertaining to the frequencies of process types of transitivity. Analyzing participants' roles and circumstances elements could provide more pertinent data for further research.

Keywords: critical discourse analysis, transitivity analysis, gender variation, political articles

1. Introduction

Language plays a significant role in the media due to its capacity to shape people's perceptions and decisions. Language allows humans to create mental representations of reality and make sense of their experiences, both external and internal (Halliday, 1985). It is "a resource for making meaning, and meaning resides in systemic patterns of choice" (Halliday & Mattheissen, 2014, p. 23). According to Halliday's Systemic Functional Linguistics, humans create meaning not just by selecting words "semantics" but also by making grammatical decisions "lexicogrammar" (Halliday & Mattheissen, 2014, p. 25). Thus, grammar involves meaning that is achieved, based on Halliday's theory, through three meta-functions: ideational, interpersonal, and textual. Regarding the ideational function, it reflects human experience, and meaning is constructed through specific linguistic choices that involve systemic transitivity patterns. It is noteworthy that using systemic transitivity process types in articles written by distinctive female or male writers will help understand the way they convince their readers (Anjarwati et al., 2021).

Research has reported that there are gender variations in language use and making linguistic decisions (Holmes & Meyerhoff, 2003; Lakoff, 1975; Lips, 2020; Yule, 2014). The concept of gender extends beyond the concept of sex. According to Lips (2020), sex could be defined biologically as the physical bodies of men and women, while gender is socially and culturally constructed, and sex is only part of it. Lakoff (1975) is one of the earliest studies to highlight the differences in the use of language between men and women. Her study had controversial results and inspired many scholars to conduct research to explore gender differences in spoken and written discourse (Holmes & Meyerhoff, 2003).

To this end, it is essential to identify similarities and differences in language use and analyze the linguistic choices made by men and women. According to Lips (2020), studying gender variations is crucial due to "its personal and its political implications" (p. 14). Therefore, the aim of the present study is to use the transitivity system to analyze gender variations in a political discourse written by male and female columnists, highlighting their perspectives.

2. Literature Review

2.1 Overview of Discourse Analysis and Critical Discourse Analysis

Discourse is defined as language beyond the level of the sentence, and discourse analysis aims to analyze written and spoken language (Walliman, 2010; Yule, 2014). In other words, Discourse Analysis (DA) entails examining how texts are utilized to achieve specific purposes (Saldanha & O'Brien, 2013; Wodak & Meyer, 2009). According to Mullet (2018), people use language purposefully regardless of their awareness of their discursive choices. Critical Discourse Analysis (CDA), on the other hand, extends beyond DA. It conceptualizes language as a social practice and studies language in its context. According to Baxter (2010), the term "discourse" in CDA

means "social and ideological practices which can govern the way in which people think, speak, interact, write, and behave" (p. 120). Thus, discourse, in CDA, reflects the different ways of making meaning and constructing reality. The CDA is strongly related to Halliday's Systemic Functional Linguistics, in which it explains linguistic choices in terms of the three meta-functions, one of which is the ideational meta-function, which is realized by the transitivity system (Saldanha & O'Brien, 2013; Tenorio, 2011).

2.2 Transitivity System

Discourse in language is organized via three modes of meaning, or "meta-functions," at the clause level: ideational, interpersonal, and textual. The ideational meta-function is regarded as "language as reflection," in which it reflects human experience. The interpersonal meta-function describes "language as action," which indicates that language is interactive and personal. The textual meta-function demonstrates the writer's or speaker's intent to make language meaningful (Halliday & Matthiessen, 2014, p. 30).

Within the ideational meta-function is the transitivity system, which is the experiential element in the grammar of the clause (Halliday & Webster, 2014). According to Halliday and Matthiessen (2014), the meaning of the clause is "a representation of some process in ongoing human experience" (p. 83). The human experience consists of "a flow of events," and the grammar of the clause breaks this sequence of events into "quanta of change," in which each "quanta of change" is modeled as a figure "of happening, doing, sensing, saying, or having" (Halliday & Matthiessen, 2014, p. 213). These figures comprise a process having three components, namely experience processes, participants, and finally circumstances (Halliday & Webster, 2014). In English, the process is represented by the verbal group, participants are represented by the nominal groups, and circumstances are realized by prepositional phrases or adverbial groups (Saldanha & O'Brien, 2013). Thus, the transitivity system "provides the lexicogrammatical resources for construing a quantum of change in the flow of events as a figure—as a configuration of elements centered on a process. Processes are construed into a manageable set of process types" (Halliday & Matthiessen, 2014, p. 213).

Regarding process types, the system of transitivity consists of six processes: material, mental, and relational as main types, with behavioral, verbal, and existential as minor types of process. The first major process is material, which refers to clauses of doing and happening, with the actor and goal as the two primary participants. The second type of process is the mental process, which includes perception (seeing), emotion (feeling), and cognition (thinking) and has two participants: a sensor and a phenomenon. The third is the relational process that relates to clauses of being and having, in which it is classified into attributive and identifying processes. The attributive process is related to clauses of characterization, with the carrier and attribute as the main participants. However, the identifying process refers to an identity that has been assigned to something with two main participants: token and value (Halliday & Matthiessen, 2014).

The minor processes are located between the main processes as follows: "behavioral at the boundary between material and mental, verbal at the boundary between mental and relational, and existential at the boundary between relational and material" (Halliday & Matthiessen, 2014, p. 300). The behavioral process relates to physiological and psychological behaviors such as dreaming and staring, which consist of behavior and process only, as in "Don't breathe!" (Halliday & Matthiessen, 2014, p. 286). The verbal process is associated with verbs of "saying," such as say, tell, and report, in which the sayer and target are the two participants along with the receiver and verbiage. The existential process represents the existence of an entity, which could be identified by "there," as in "there is" or "there are," along with other verbs such as exist, follow, occur, and emerge. Only one participant is involved in this process, which is the existent itself (Halliday & Matthiessen, 2014).

2.3 Related Studies on Transitivity and Political Discourse

The transitivity system has been utilized to analyze both spoken and written political discourse. In regard to the spoken political discourse, most of the studies examined presidents' speeches (Shayegh & Nabifar, 2012; Wang, 2010; Yujie & Fengjie, 2018; Zhao & Zhang, 2017). Wang (2010) investigated Obama's speeches and found the material process to be the most used process in his speeches. Similarly, Shayegh and Nabifar (2012) used transitivity analysis to analyze seven of Obama's interviews. The findings indicate that the material process is the most predominant one in his speeches. In the same line of research, Zhao and Zhang (2017) investigated American president Donald J. Trump's inaugural address via transitivity system. Both quantitative and qualitative data were utilized, and the results showed that the material process is ranked as the most used one, followed by the relational and existential processes. Similar findings were reported in Yujie and Fengjie's (2018) study in their examination of the linguistic features of American President Donald Trump's Inaugural Address. They applied the transitivity system and analyzed the data quantitatively. They found out that the most commonly used process was the material one, followed by the relational and mental processes. The researchers had concluded that presidents mostly use the material process to highlight the government's actions and represent the experience of doing.

Regarding written political discourse, a considerable body of literature examines newspaper headlines and news articles using transitivity analysis. (Abbas & Talaat, 2019; Abdulameer et al., 2019; Alraimi & Abdalla, 2019; EL Fallaki, 2022; Ong'onda, 2016). Abbas and Talaat (2019) investigated the headlines of three newspapers in Pakistan to analyze the news about crimes committed against women. The findings show that the material process predominates heavily, as it was found in 24 of the 25 clauses, with only one clause containing a verbal process. In the same line of research, Ong'onda (2016) conducted a qualitative study to explore how newspaper writers depicted Al-Shabaab's attacks at Westgate Mall in Nairobi, Kenya, in their headlines. The data were collected from two newspapers, resulting in the analysis of 24 headlines. The results demonstrate that material and relational processes were frequently employed to indicate that terrorism is about actions and events. In a more recent study, EL Fallaki (2022) investigated twelve newspaper headlines related to the

Russian attack on Ukraine. The data were collected from international newspapers, and the results show that the material process is the only one found in all the headlines. However, the way the war was presented is different in that seven out of the twelve headlines include the name of the Russian president as the actor to indicate his violent personal desire. The other headlines were found to hide the identity of the doer and mention the name of the country. Thus, the actor was represented differently in that he was portrayed as having the responsibility to maintain the border, leading the readers to think that he is not violent but rather protecting the country's safety and security.

For news articles, Abdulameer et al. (2019) investigated 80 political articles to compare Eastern and Western online news. Data were gathered and qualitatively analyzed from two online newspapers: Al Jazeera and The Guardian. The findings indicate that verbal processes are the most prevalent, followed by relational, mental, and other processes. A similar study is conducted by Alraimi and Abdalla (2019) in order to explore the transitivity processes used by native and non-native English writers. The data was collected from online articles in the Washington Post and Arab News newspapers. The results show that material and relational processes were predominant for both native and non-native writers. These are followed by verbal, mental, and existential processes for Native writers and mental, existential, and verbal processes for non-Native writers.

2.4 Related Studies on Transitivity and Gender Variations

Transitivity analysis has been used to investigate gender differences and similarities in political discourse (Hassan, 2021; Zhang, 2017). For example, Zhang (2017) employed transitivity analysis to compare the processes used by Hillary Clinton and Donald Trump in the first television debate. The results show the material process is dominant for both candidates. In Hillary's speech, it is followed by mental and relational processes, while in Trump's speech, it is followed by relational and existential processes, respectively.

Recently, Hassan (2021) conducted a corpus study to investigate the similarities and differences between political males' and females' speech transcripts. The data were collected from Hillary Clinton, Michael Obama, Halimah Yacop, and Julia Gillard, representing the females' speeches, and Donald Trump, Cyril Ramaphosa, Michael D. Higgins, and Antonia Guterres, representing the males' speeches. The collected data focused on two topics: "nomination acceptance" and "feminine issues and women's role in societies" (p. 26). The results show that both men and women used all six types of transitivity processes, with relational and material processes being the most common. Male speakers tend to use relational processes more than material processes on both topics. However, female speakers tend to mostly use material processes on the first topic and relational processes on the topic related to women's rights. For both genders, relational processes were used to demonstrate a realistic attitude toward the topic. For the material processes, females were found to use more material processes than males on both topics, which indicates females' eagerness and activeness.

As can be seen from the literature reviewed above, transitivity analysis has been used to study political discourse, whether spoken or written. However, there is very little research that aims to examine gender variations in political discourse -writing articles in particular- by using transitivity analysis (Anjarwati et al., 2021). There is a need for more research to fill this gap by examining gender similarities and differences in political newspaper discourse based on the transitivity system. Therefore, the aim of the present study is to use transitivity analysis to investigate gender variations in the political written discourse of female and male columnists from their own perspectives.

The research questions for this paper are as follows:

1- What are the process types of transitivity that have been frequently used in both political articles posted on the Arab News website and written by female and male political columnists?

2- Is there a significant difference in gender variations relating to the frequencies of the process types of transitivity adopted by female and male political columnists?

3. Methodology

3.1 Research Design

This paper employed quantitative and qualitative methods to highlight gender variations in political media discourse from the point of view of male and female columnists. Sutton and Austin (2015) stated that qualitative research methods can help scholars understand the manner and the reason by which human behaviors occur. The same researchers added that quantitative research methods can be deployed to figure out the number of individuals tackling such behaviors (Sutton & Austin, 2015). In this context, the purpose of a qualitative research method is to attain a wide investigation to initiate language structural patterns as well as deliberate meanings adopted in texts (Bartley, 2018). On the other hand, Bartley (2018) confirmed that quantitative research methods can be utilized to find out the number of definite clause types existing in sentences.

It should be noted that the text has been seen as a figure of data utilized for the sake of investigating linguistic attributes. Such traits highlight grammatical awareness by offering marked support on how to analyze and interpret texts (Halliday et al., 2004). The data were gathered from two articles representing political opinions, taken from the official website of Arab News. To examine the significant difference in terms of gender variations pertaining to frequencies of process types of transitivity, SPSS Version 22 has been utilized. It should be indicated that both political articles were written by male and female columnists.

The analysis of data was organized to investigate gender variations in political media discourse from the point of view of male and female columnists through adopting transitivity system (Halliday & Matthiessen, 2014). For the purpose of our analysis, two articles have been

selected. The first political article, written by a female columnist, entitled "Iran protests are changing US calculus on the nuclear deal" has been published on October 18th, 2022. The second political article, written by a male columnist, entitled "Protests must not divert West's attention from Tehran's nuclear defiance" has been published on October 26th, 2022, on the same website of Arab News. The reasons behind choosing the two political articles for the sake of analyzing verb process types involve that both articles were published on the Arab News website. In addition, they both addressed similar issues, such as the Iran protests and the nuclear deal. It is important to note that this research is in compliance with ethical standards and permission has been granted.

To gauge the number of transitivity models adopted, both political articles were divided into clauses for the process of data analysis. In this paper, Halliday and Webster's (2014) transitivity model was adopted to arrange the clauses into their own classifications. Table 1 demonstrates the transitivity system representing by the types of processes, participants' roles, and circumstances. The types of transitivity processes involve material, mental, verbal, relational, existential, and behavioral process types.

Table 1. Types of processes, participants' roles, and circumstances

Process Types	Participants' Roles	Circumstances
Material	Actor + Goal	Extent
Mental	Senser + Phenomenon	Location (time, place)
Verbal	Sayer + Target	Manner
Relational	Carrier + Attribute	Cause
Existential	Existent	Accompaniment
Behavioral	Behaver	Matter

4. Results

4.1 Article 1: "Iran Protests Are Changing US Calculus on the Nuclear Deal".

The first political article entitled "Iran protests are changing US calculus on the nuclear deal" has been posted on October 18th, 2022. It has been found that six transitivity process types are recognized in the first article. These categories encompass material, mental, verbal, relational, behavioral, and existential processes. In this section, the distribution of the six process types is displayed in Table 2.

Table 2. Distribution of process types in the 1st political article

Process types	Frequencies	Percentage
Material	77	65%
Mental	5	4%
Verbal	9	8%
Relational	17	14%
Behavioral	1	1%
Existential	9	8%
Total	118	100%

Table 2 illustrates the distribution of the process types in that the material process type has been substantially deployed when compared to the other process types (65%). The relational process has ranked second (14%), and the behavioral process has gained the least percentage (1%). The mental, verbal, and existential process types have obtained the following percentages respectively (4%, 8%, 8%). It should be noted that the 1st political article has deployed all the process types.

It is worth noting that Table 3 expresses the transitivity analysis of process types deployed in the first political article. It has been found that the most frequent process type utilized is the material process. Furthermore, the results revealed that the least frequent process type is the behavioral process, represented by one verb 'watching' in this pattern type. Additionally, the verbal and existential process types share the same percentage (8%). As for the mental process, it has gained little attention since it represents 4%; it includes five verbs, namely 'known',' believe', 'saw', and 'consider (2)' in this specific process.

Table 3. Transitivity analysis of process types adopted in the 1st political article

Participant	Process	Participant	Circumstance
	Material (returning)	Goal (a nuclear deal)	With Tehran
Actor (the recent anti-government protests)	Material (changing)	Goal (the White House's calculus)	
Actor (The current protest movement)	Material (began)		In mid-September
	Material (following)	Goal (the death of a young woman, Mahsa Amini)	in morality police custody
Actor (Small protests)	Material (evolved into)	Goal (large, widespread demonstrations)	
	Material (present)	Goal (a serious problem)	for the government
Actor (President Joe Biden and his foreign policy officials)	Material (have tried to demonstrate)	Goal (support for the protesters)	
	Material (keeping) Material (open)	Goal (their options)	
Actor (President Barack Obama)	Material (faced)	Goal (criticism)	in 2009

Actor	Material	Goal	
	Material (doing more to support)	Goal (the Green Movement protests)	in Iran
Actor (Biden)	Material (is taking)	Goal (a somewhat different approach)	
	Material (expressing)	Goal (support for the protesters)	
	Material (condemning)	Goal (the government's violent response)	
Actor (the US)	Material (stands with)	Goal (the brave citizens and the brave women of Iran)	At a speech before the UN General Assembly in September
Actor (who)	Material (are demonstrating to secure)	Goal (their basic rights)	
Actor (Biden and senior foreign policy officials)	Material (have expressed)	Goal (support for the protesters)	Since then,
Actor (The administration)	Material (has taken)	Goal (practical steps	
Actor (the US)	Material (imposed)	Goal (sanctions)	In September
Actor (it)	Material (added)	Goal (sanctions)	This month
	Material (deemed)		
Actor (Washington)	Material (took)	Goal (steps)	
	Material (ease)	Goal (the provision of digital services)	
	Material (might have blocked)	Goal (technology companies)	
	Material (encouraging)	Goal (those companies)	
	Material (facilitate)	Goal (greater access)	
	Material (secure)	Goal (online platforms and services.")	
Actor (what the protests)	Material (mean)		for the country
Actor (the protests)	Material (turn into)	Goal (a full revolution)	
Actor (the government)	Material (quashed)		
	Material (align)		with US interests.
Actor (the protests)	Material (provide)	Goal (additional arguments)	in Iran
	Material (returning)		to the agreement
Actor (they)	Material (support)	Goal (a nuclear deal with Iran)	
	Material (pursue)		
Actor (what approach the Biden administration)	Material (take)		
Actor (Biden)	Material (repeated)	Goal (his commitment)	At the UN
	Material (ensuring)		
Actor (Iran)	Material (acquire)	Goal (a nuclear weapon)	
	Material (adding)		
Actor (I)	Material (continue)		
	Material (achieve)	Goal (this outcome)	
	Material (stalled)	Goal (the JCPOA)	
Actor (hopes for an agreement)	Material (rose)	Goal (over the summer)	
Actor (Iran)	Material (made)	Goal (additional demands)	in November.
	Material (leaving)	Goal (the negotiations)	
	Material (move)		
Actor (the protest movement)	Material (is shifting)	Goal (Washington's calculus)	In Iran
Actor (no one)	Material (wants)		in a government
	Material (invest in)		
Actor (Iran)	Material (used)	Goal (uncertainty)	
	Material(succeed)	Goal (Biden)	
Actor (Washington)	Material (demonstrate)	Goal (reluctance)	
	Material (make)	Goal (a deal with an Iranian government in crisis)	
Actor (The US government)	Material (is not pursuing)	Goal (regime change)	In Iran
Actor (it)	Material (want to do)	Goal (Anything)	At the same time
	Material (prop up)	Goal (the current regime)	
	Material (limited and monitored)	Goal (Iran's nuclear program)	
Actor (sanctions relief)	Material (help reintegrate)	Goal (Iran)	into the global economy
	Material (moderate)	Goal (its government)	
	Material (lift)	Goal (sanctions)	
Actor (it)	Material (benefit)	Goal (a government)	
	Material (is responding to)	Goal (protests)	

	Material (calling for)	Goal (an end)	
	Material (make)	Goal (human rights a top priority)	in foreign policy
	Material (has taken)	Goal (a more pragmatic approach)	in office
Actor (he)	Material (welcome)	Goal (the image of signing an agreement)	
	Material (using)	Goal (significant violence)	against people
	Material (calling for)	Goal (basic rights)	
Actor (US presidents and their senior officials)	Material (come into)	Goal (office)	with ambitious foreign policy plans
Actor (events outside of their control)	Material (disrupt)	Goal (those plans)	
Actor (Biden's team)	Material (manage)	Goal (obstacles)	Previously
	Material (created)	Goal (the Iranian government)	
Actor (the Iranian people)	Material (have created)	Goal (unexpected complications)	
Actor (Biden)	Material (willing)		
	Material (take)	Goal (steps)	
	Material (undermine)	Goal (the protest movement)	
	Mental (known)		
	Mental (believe)	Phenomenon (that diplomacy is the best way)	
Senser (Biden and his officials)	Mental (consider)	Phenomenon (as Biden and his officials consider whether and how to approach the stalled nuclear negotiations)	
Senser (The Biden administration)	Mental (saw)	Phenomenon (the JCPOA)	
Senser (Biden)	Mental (consider)	Phenomenon (the domestic political implications of signing a deal with Iran)	in the wake of these protests
Sayer (Biden)	Verbal (said)	Verbiage (that the US stands "with the brave citizens and the brave women of Iran)	
Sayer (Iran experts)	Verbal (are debating)	Verbiage (what the protests)	in Washington
Sayer (A number of experts)	Verbal (have said)	Verbiage (that the revolution is starting)	
Sayer (experts and officials)	Verbal (debate)	Verbiage (the future of Iranian politics)	
Sayer (opponents of the JCPOA)	Verbal (say)	Verbiage (that the protests in Iran provide additional)	
Sayer (some JCPOA advocates)	Verbal (argue)	Verbiage (that returning to the agreement.)	
Sayer (other JCPOA supporters)	Verbal (suggest)	Verbiage (a wait-and-see approach)	
Sayer (Biden)	Verbal (promised)	Verbiage (to make human rights a top priority)	
Sayer (Biden)	Verbal (negotiate)		with the Iranian regime
Identified (Returning to a nuclear deal with Tehran)	Relational (been)	Identifier (a top foreign policy priority)	for the Biden administration
	Relational (including)		
Identified (this protest movement)	Relational (is)	Identifier (a serious development)	
	Relational (is)	Identifier (to be completely quashed)	by the government
Carrier (others)	Relational (are)	Attribute (cautious)	
Carrier (returning to the agreement)	Relational (is)	Attribute (more important)	
Carrier (they)	Relational (are)	Attribute (not sure)	
Carrier (the current moment)	Relational (is)	Attribute (a good time)	
Carrier (It)	Relational (is)	Attribute (not fully clear)	
Carrier (the White House)	Relational (seem)		
Carrier (diplomacy)	Relational (is)	Attribute (the best way)	
Carrier (The protests)	Relational (are)	Attribute (layered)	on top of the previous challenges
	Relational (has)	Possessed (an uncertain future)	
Carrier (the White House)	Relational (is)	Attribute (reluctant)	Now
Carrier (little progress in negotiations)	Relational (is)	Attribute (likely)	before the US elections on Nov. 8.
Identified (Biden's pursuit of a return to the JCPOA)	Relational (is)	Identifier (a good example)	

Carrier (he)	Relational (is)	Attribute (unlikely)	
Behaver (US officials and analysts)	Behavioral (watching)	(Range) the protest movement	in Iran
There	Existential (is)	Existent (a general consensus)	
Existent (the revolution)	Existential (is starting)		
Existent (a revolution)	Existential (occurs)		
There	Existential (are)	Existent (many potential outcomes)	
There	Existential (is)	Existent (is a related discussion about US policy)	toward the Iran nuclear deal
There	Existential (are)	Existent (three competing positions)	
	Existential (began)	Existent (the current protests)	
There	Existential (were)	Existent (hopes)	
	Existential (appear)		

4.2 Article 2: "Protests Must not Divert West's Attention from Tehran's Nuclear Defiance".

The second political article, entitled "Protests must not divert West's attention from Tehran's nuclear defiance" has been issued on October 26th, 2022. Like the transitivity analysis provided in the first political article, there are six transitivity processes identified in this political article. These transitivity models involve material, mental, verbal, relational, behavioral, and existential processes. Table 4 illustrates the distribution of the six process types provided in this article.

Table 4. Distribution of process types in the 2nd political article

Process types	Frequencies	Percentage
Material	60	70 %
Mental	6	7%
Verbal	3	4%
Relational	15	17 %
Behavioral	1	1%
Existential	1	1%
Total	86	100%

As shown in Table 4, the material process type (70%) has been substantially adopted when comparing other process types. The relational process has ranked in the second place with the percentage (17%). It should be noted that behavioral and existential process types share the same percentage (1%); both process types are regarded as the least frequent process types utilized in the second article. It has been found that mental and verbal process types have gained small percentages (7%, 4%) respectively.

To get a clear idea of the transitivity analysis, Table 5 displays the analysis of process types deployed in the second political article. The findings show that the material process types have been recognized as the most frequent process types adopted in the 2nd political article when comparing other process types. It is significant to indicate that the material process type in the second article is akin to the findings attained in the first article. Like the transitivity analysis provided in the first political article concerning the rank of relational process types, the relational process has ranked second (17%) in the second political article. Moreover, the results found that the least frequent process types are behavioral and existential, sharing the same percentage (1%) and represented by one verb 'overlook' and 'been' respectively. As for the mental process, it has ranked third (7%). It should be noted that verbal process type gets small percentage (4%), represented by three verbs namely 'chanting,' 'said,' and 'saying'.

Table 5. Transitivity analysis of process types adopted in the 2nd political article

Participant	Process	Participant	Circumstance
Actor (the West's attention)	Material (focused on)	Goal (the protests)	in Iran
	Material (hit)	Goal (the Iranian regime)	For over a month
Actor (The death of 22-year-old Mahsa Amini)	Material (sparked)	Goal (a global outcry and a national mobilization)	
Actor (Reports)	Material (indicate)		
	Material (removing)		with scenes of women defiantly
	Material (cutting off)		
Actor (the West)	Material (seeks to find	Goal (ways)	
	Material (address)	Goal (the regime's crackdown)	
	Material (disregard)	Goal (Tehran's nuclear defiance)	
Actor (Time)	Material (plays)	Goal (a critical role)	in nuclear negotiations
Actor (It)	Material (affects)	Goal (the basic processes of negotiator cognition and motivation)	
	Material (is constrained)	Goal (negotiating party)	by time
	Material (reach)	Goal (an agreement.)	

Actor	Material	Goal	
Actor (China and other partners)	Material (had crippled)	Goal (Iran's economy)	in 2015, after eight years of coordinated economic sanctions between the US, EU,
	Material (given)	Goal (the Iranian leaders)	
Actor (the Islamic Republic)	Material (agreed to)	Goal (the Joint Comprehensive Plan of Action, or nuclear deal.)	
Actor (the Iranian leadership)	Material (agreed not to develop)	Goal (weapons-grade enriched uranium)	Under the agreement with the permanent members of the UN Security Council (UK, US, France, China and Russia) plus Germany
	Material (reduce)	Goal (its uranium stockpile.)	
	Material (agreed to)	Goal (the deal)	
	Material (faced)		
Actor (Sanctions pressure)	Material (was building)		
	Material (wanted)	Goal (the Iranian government)	
	Material (cut)		
	Material (penalized)	Goal (third-party countries)	
	Material (reduce)	Goal (their purchases of Iranian oil)	
Actor (Iran's domestic economy)	Material (contracted)		significantly
	Material (were designed)	Goal (These curbs)	
Actor (Iran's oil exports)	Material (fell)		
	Material (seen)		
	Material (keeps adding)		
	Material (revive)	Goal (the nuclear deal.)	
Actor (it)	Material (keep buying)	Goal (time)	
	Material (advancing)	Goal (its nuclear program)	
Actor (the US and especially the EU)	Material (find)	Goal (themselves)	
	Material (fighting)	Goal (the clock)	
	Material (imposed)	Goal (the UN Security Council)	
Actor (the US)	Material (withdrew)		in 2018 under the former US administration
Actor (the White House)	Material (attempted to reinstate)	Goal (plurilateral sanctions)	
Actor (this effort)	Material (failed)		
Actor (This)	Material (left)		unilaterally since 2020.
	Material (reimposing)	Goal (sanctions)	
	Material (established)		in the run-up to the JCPOA
Actor (the war in Ukraine, and the sanctions on Russian oil and gas)	Material (left)	Goal (Europe)	
Actor (their oil)	Material (become)	Goal (an increasingly powerful bargaining chip)	
	Material (revive)	Goal (the nuclear deal)	a few weeks ago
Actor (negotiations to revive the nuclear deal)	Material (went back)		in the deep freeze
Actor (Tehran)	Material (doubled)		on some of its conditions
Actor (European powers)	Material (responded)		
Actor (they)	Material (reached)	Goal (the limits of their flexibility)	
Actor (time)	Material (goes on)		
Actor (the West)	Material (act)		
Actor (it)	Material (lose)	Goal (more leverage)	
Actor (the Iranian regime)	Material (inches)		
Actor (The International Atomic Energy Agency)	Material (warned)		
Actor (the information gap	Material (reaching)	Goal (dangerous levels)	

about the country's activities)			
Actor (The IAEA)	Material (added)		for surveillance and monitoring activities in relation to the JCPOA
	Material (remove)	Goal (all of the agency's equipment)	
	Material (provide)	Goal (assurance of the peaceful nature of Iran's nuclear program)	
	Material (hold)	Goal (the Iranian regime)	
Actor (we)	Material (overlook)	Goal (the regime's nuclear advancements and defiance)	
Senser (the Iranian government)	Mental (feel)	Phenomenon (the pain)	
Senser (the Iranian regime)	Mental (feels)	Phenomenon (that it is in a far stronger position)	
Senser (The theocratic establishment of Iran)	Mental (believes)	Phenomenon (it can keep buying time and advancing its nuclear program)	
Senser (Tehran)	Mental (believes)	Phenomenon (that the West is in a far weaker position)	
Senser (The Iranian leaders)	Mental (believe)	Phenomenon (that the war in Ukraine, … precarious position)	
Senser (Iranian leaders)	Mental (believe)	Phenomenon (that their oil is going to become an increasingly powerful bargaining chip.)	
Sayer (crowds)	Verbal (chanting)	Verbiage (death to the dictator.)	
Sayer (former top US diplomat William J. Burns)	Verbal (said)	Verbiage ("Sanctions pressure was building, and we wanted the Iranian government to feel the pain.")	
	Verbal (saying)	Verbiage (they had reached the limits of their flexibility)	
Carrier (it)	Relational (be)	Attribute (careful)	
Carrier (It)	Relational (is)	Attribute (important)	
Carrier (it)	Relational (be)	Attribute (ready)	
Identified (one of the critical reasons)	Relational (was)	Identifier (the financial pressure)	
Identified (it)	Relational (is)		in a far stronger position
Identified (it)	Relational (was)		in 2014
Carrier (One of the reasons current sanctions against the Iranian regime)	Relational (are)	Attribute (effective)	
Identified (the US sanctions)	Relational (are)	Identifier (without impact)	
Carrier (they)	Relational (have been)	Attribute (far less detrimental)	
Identified (they)	Relational (are)		in a stronger position militarily and economically seven years ago,
Identified (they)	Relational (were)		
Identified (the West)	Relational (is)		in a far weaker position
	Relational (being)	Identifier (a threshold nuclear state)	
Possessor (the JCPOA)	Relational (has)	Possessed (detrimental implications)	
Carrier(it)	Relational (is)	Attribute (critical)	
	Behavioral (overlook)	Range (the Iranian regime's nuclear defiance)	
There	Existential (been)		in all 31 of Iran's provinces

4.3 Overall Transitivity Frequencies of Gender Recruitment

As shown in Table 6, there are inconsiderable differences between male and female political articles in terms of the frequencies of transitivity analysis, albeit male political columnist used material, mental, and relational process types with higher percentages than female political columnist. As for verbal and existential process types, they have been used more by female columnist than male columnist' article. There is an equal percentage between male and female columnists with reference to behavioral process type (1%). Table 6 shows the overall transitivity frequencies of gender in both political articles.

Table 6. The overall transitivity frequencies of gender in both articles

Process Type	Female	Male
Materia	65%	70%
Mental	4%	7%
Verbal	8%	4%
Relational	14%	17%
Behavioral	1%	1%
Existential	8%	1%

It is important to note that data were analyzed using the SPSS (Statistical Package for the Social Sciences) (version 22). In order to find out whether there is a significant difference in gender variations pertaining to frequencies of process types of transitivity, Paired Sample T-Test has been employed. Table 7 illustrates Paired Sample T-Test results of six process types of transitivity analysis frequencies adopted by female and male political columnists. As shown in Table 7, there is no significant difference in gender variations relating to frequencies of process types of transitivity (t=1.95, p＜.05).

Table 7. Paired Sample T-Test results of six process types of transitivity analysis frequencies

Process Types	N	Mean	SD	t	p
Six process types provided by female political columnist	6	19.67	28.58	1.95	0.10
Six process types provided by male political columnist	6	14.33	22.97		

5. Discussion

This research has deployed the systemic functional grammar theory adopted by Halliday (1978) to investigate the transitivity process types in two political articles written by male and female columnists, posting their articles on the official website of Arab News. This paper aims at investigating gender variations in political media discourse from the point of view of male and female columnists. To evaluate gender variation on the political media discourse, this research has conducted a comparison of the transitivity process types- i.e., verbs in the clauses- between female and male political columnists, publishing their articles on October 18th and 26th, 2022 respectively. Thus, the analysis process has pinpointed the transitivity process types as expressed by the verbs afforded in both political articles. According to transitivity theory, it is crucial that verbs are essential constituents of a clause (Renkema, 2004). Renkema (2004) added that verbs describe participants' roles in addition to the performance of a situation through which discourse can be undertaken and produced.

Hence, gender variation in political media discourse posted in Arab News website has been accentuated from the perspective of male and female columnists toward a shared theme. For example, female and male political columnists have adopted material processes; this means that actions are required and should be tackled. It is worth noting that both articles share the same percentage in relation to behavioral processes. Halliday et al. (2004) asserted that behavioral processes "represent outer manifestations of inner workings, the acting out of processes of consciousness and physiological states" (p.215). This indicates that action and awareness should be fundamentally emphasized and described in understanding the theme in the political article.

To answer the first research question entitled 'What are the process types of transitivity that have been frequently used in both political articles posted on the Arab News website and written by female and male political columnists?', the findings revealed that six process types, namely material, mental, verbal, relational, behavioral, and existential, have been utilized in both political articles. It is important to note that the material process gained the highest rank in both political articles provided by female and male columnists, respectively (65%, 70%), having a more predominant role over the other process types. This result implies that action should be undertaken with reference to the theme of the two articles. In a word, both political articles have been concerned with actions and events; this will substantially and clearly help render the message via Arab News website. Therefore, this specific process type has been repeatedly deployed in both articles since actions in particular situations are required and urgent (Eggins, 2004).

It should be noted that the mental process occurred in female and male columnists' articles with percentages (4% and 7% respectively) followed by the verbal process with 8% and 4% for the transitivity frequency of female and male columnists' articles, respectively. The use of mental process in both articles accentuated the consciousness and understanding of the theme adopted by both political columnists. The aim of verbal process analysis is to consider the text and its producer and how he/she can affect readers and convince them (Alhumsi et al., 2021). Furthermore, both female and male columnists have deployed relational processes, representing 14% and 17% respectively, to highlight their descriptive political articles in a manner that significantly expresses the theme, which is Iran protests and the nuclear deal. Also, the existential process existed in both articles, with a higher percentage (8%) in favor of the female columnist's article highlighting and proving the existence of the theme than the male columnist's article representing 1%. Notably, the process type that has the same proportion of 1% in both female and male columnists' political articles is the behavioral process.

As for the second research question entitled 'Is there a significant difference in gender variations relating to the frequencies of the process types of transitivity adopted by female and male political columnists?', a Paired Sample T-Test has been conducted. The findings revealed that there is no significant difference in gender variations relating to frequencies of process types of transitivity (t=1.95, p＜.05). This result is consistent with Kassaian (2011), Alhumsi and Awwad (2020), and Wolter et al. (2015). These studies found no significant differences between female and male participants. It is crucial to note that using Paired Sample T-Test in identifying the differences in relation to gender has not yet been adopted, particularly in transitivity analysis research.

In brief, the findings of the current paper accentuate that the material process has been the most frequently used process in the two political articles published on the Arab News website by both male and female columnists. This evidence is in line with the results that exist in the studies conducted by Zhang (2017), Emilia et al. (2017), and Alhumsi et al. (2021). Given that the proportion of 137 clauses out of the total of 204 in both political articles represent 67% more than the other transitivity process types, this indicates that the material process is the predominant type in comparison with other process types.

6. Conclusion, Recommendation, and Further Studies

The current paper has employed the transitivity theory for the sake of analysis and investigation of the transitivity process types in two political articles written by male and female columnists, posting their articles on the official website of Arab News. Remarkably, this research examined gender variations in political media discourse from the point of view of male and female columnists on the article's specific theme. To assess gender variation in the political media discourse, a comparison has been made among transitivity process types through analyzing the verbs in the clauses. It is noteworthy that the choice of verbs influences participants' function in one clause as well as its specific process type (Halliday & Webster, 2014). In the light of the results, the material process has been the most frequent use in both political articles in favor of male columnist (70%) in comparison with female columnist (65%) having a relatively close scale. Generally speaking, this close scale of percentages between female and male political columnists reflects on most transitivity process types. This implies that the clauses in both articles have been appropriately and meticulously chosen for rendering the articles' specific theme. Additionally, the second higher percentage is the relational processes in favor of male columnist's article (17%) and female columnist' article (14%). Such close percentages definitely indicate the descriptive articles in a way that essentially identifies and denotes the theme, which is the Iran protests and the nuclear deal. Thus, this research presents a better understanding of transitivity process types adopted in two political articles published on the website of Arab News. All in all, the results found that the entire six process types in both political articles have been expressed in declarative and clear structures.

In comparison with other studies, this paper significantly and exclusively measures gender variations through employing Paired Sample T-Test in order to examine whether there is a significant difference in gender variations pertaining to frequencies of process types of transitivity existing in both political articles. The finding showed that there is no significant difference in gender variations pertaining to the frequencies of process types of transitivity.

The current study has some limitations due to the small size of the sample employed; only two political articles posted on the website of Arab News have been addressed. To be more specific, this research only addressed process types without taking into consideration the circumstances as well as the participants' roles; both components represent two essential columns of the transitivity theory. However, this issue potentially provides further inspiration for other researchers to conduct more research. Hence, it is recommended that such two elements probably give extra insight for the purpose of the transitivity system analysis.

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