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Media Framing of Iran's 2021 Water Protests



Sanam Mahoozi

**A thesis submitted for the fulfilment of the requirements of City St George's,
University of London for the degree of Doctor of Philosophy**

Department of Journalism

January 2025

Declaration

I, Sanam Mahoozi, confirm that the work presented in this thesis is my own. When information and data have been taken from other sources, I confirm that they have been referenced and cited in the thesis, following the university guidelines.

Signature

Sanam Mahoozi



Extenuating Circumstances Statement

This statement informs future readers of the impact of extenuating circumstances on the scope, methodology, and overall research activity related to this thesis. It is important to note that the academic standards required for completing a research degree at City, St George's, University of London, remain unchanged despite these challenges.

Thesis Title: Media Framing of Iran's 2021 Water Protests

1. The COVID-19 Pandemic

I started my PhD in Journalism in February 2020, shortly before the onset of the COVID-19 pandemic in the United Kingdom. As a result, all supervision meetings were conducted virtually until October 2021, limiting opportunities for in-person engagement. I could not participate in research methodology modules in person or fully engage in the teaching programme until 2023, my final year. The university granted a three-month extension to accommodate these disruptions.

2. "Woman, Life, Freedom" Protests

In October 2022, widespread anti-regime protests erupted in Iran following the death of Mahsa Amini. Given that my family lives in Iran and I was reporting on the events from London for *The Washington Post* and *NBC*, I experienced online harassment and emotional stress. Furthermore, the Iranian government's internet shutdown obstructed communication with my family and friends. The university granted a six-month extension to my thesis timeline.

3. Escalating Conflict in the Middle East

In 2023, tensions in the Middle East, particularly Iran's involvement in regional conflicts, have added further pressure to an already challenging period. With my

mother still living in Iran, I have faced emotional strain, compounded by financial challenges stemming from difficulties in transferring funds out of Iran.

4. Family Bereavement

In August 2024, I experienced the loss of my father, whom I had not seen for seven years, due to my inability to travel to Iran, given the risks. I had to go through the grieving process alone while on a deadline to finish my PhD, which has been a difficult task.

This statement confirms that I have completed my thesis to the best of my abilities under these challenging conditions and have adhered to all academic and ethical standards required by the university.

Date of Statement 20-01-2025

Abstract

This dissertation analyses the media framing of Iran's 2021 water protests. The study uses Entman's (2003) Cascading Activation Model (CAM) to explore how news frames originating from Iran's Supreme Leader, Ayatollah Khamenei, are disseminated and challenged across media groups within and outside Iran's censored media landscape. Additionally, it examines the role of social media in disrupting traditional information flows and news frames. The study employs a mixed-methods approach, combining quantitative and qualitative analyses of news articles and Twitter (X) posts. The findings reveal that mainstream media prioritises elite-originated frames despite differing political, cultural, and media contexts. Iranian local (national) media appear to adhere more closely to the state's narrative, which is influenced by censorship and state control. International media, while contradicting the state narrative in Iran, still makes significant use of frames originating from the elite in Iran. The thesis also analyses the role of the diaspora and social media in distorting the flow of information and news frames coming out of Iran. At a time when climate change and environmental problems are on the rise, access to accurate information can save lives. In Iran, a country with severe water issues and environmental degradation, the public's access to news is restricted by the regime, raising concerns about the future of the people who need to prepare for the consequences. This research adds to our understanding of the multi-textured media landscape in an authoritarian state like Iran by investigating the interaction between local, diasporic, international, and social media in the flow of frames.

Keywords

Framing; cascading activation model; authoritarian; water protests; social media; Iran; media; diaspora; Supreme Leader; drought.

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I would like to express my gratitude to the School of Communication and Creativity at City, Saint George's, University of London, for enrolling me as a full-time PhD student in the Journalism Department. The support provided by the school and department has enabled me to pursue this programme in the United Kingdom.

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I owe everything to my loving and supportive family. Their sacrifices, both emotional and financial, have made this achievement possible. I particularly wish to thank my late father, whose passing left a profound impact on me and whose dying wish was for me to complete this degree. His unwavering belief in my success continues to inspire me. I am also deeply grateful to my friends, whose love and support have carried me through the most challenging times.

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Acronyms

IRGC -Islamic Revolutionary Guard Corps

IPCC -Intergovernmental Panel on Climate Change

IRIB -Islamic Republic of Iran Broadcasting

COP -United Nations Climate Change Conference

UN -United Nations

WB -The World Bank

SL -The Supreme Leader

AP -The Associated Press

NYT -The New York Times

CAM -Cascading Activation Model

SM -Social Media

PWHF -Persian Wildlife Heritage Foundation

MOIS -Ministry of Intelligence and Security

VOA -Voice of America

RT-Russia Today

WB-Water Bankruptcy

AFP- Agence France Presse

Corrections

I would like to take this opportunity to thank Dr James Painter and Dr Lea Hellmuller for their invaluable feedback and suggestions on improving this thesis. I have addressed all the points in the university report and am submitting the changes ahead of schedule due to my visa requirements. I am very grateful to the examiners for accommodating my time constraints, and I appreciate their support. Below, I have listed the page numbers of each section mentioned in the corrections report, and once again, I thank you all for the helpful insights and time.

- Climate change and environment literature (pages 17,19,20,26 and 34)
- Media systems literature (pages 39 and 42)
- Protest paradigm literature (page 45)
- Research Questions (page 109)
- Cascading Activation Model Theory (pages 92 and 93)
- Frame description and selection (pages 118 and 119)
- Sample table outlets (page 122)
- Sample table social media (pages 123-128)
- Structure
 - a. Introduction Chapter (page 34)
 - b. Conclusion Chapter (page 198-200)
- Appendices code-book added
- Bibliography (all suggested literature has been added to the reference list)

I would like to add that all other concerns have been addressed throughout the dissertation, which has been edited to incorporate the corrections.

Chapter 1 - Introduction

The increasing threat of climate change and environmental degradation has intensified the need for media, governments, scientists and activists to raise public awareness worldwide. The most recent report by the Intergovernmental Panel on Climate Change (IPCC) underscores the urgency of the climate crisis. It warns that global temperatures could rise by 1.5 degrees Celsius as early as 2030, leading to harsher extreme weather events already witnessed in many countries (IPCC, 2023). With this growing problem, the media is responsible for informing the public about environmental issues, holding leaders accountable, and influencing policy (Boykoff, 2007; Junsheng et al., 2019). Studies have shown that media portrayals of climate change and environmental problems have raised awareness and strongly influenced global efforts to tackle climate change, mainly through the production and consumption of news (Swain, 2012; Junsheng et al., 2019).

However, scholars have also emphasised the media's challenges when reporting a complex subject, such as climate change and its impacts. Translating science and data into engaging narratives for readers is one of the difficulties of reporting environmental degradation. Another issue is the political and financial pressure newsrooms face, which may lead to fragmented climate change reporting, hindering the public's understanding of the full scope of the dangers (Corbett, 2015). Other challenges with how global media portray climate change include an emphasis on worst-case scenarios in environmental reporting and a notable absence of coverage regarding uncertainties, the role of human agency, and the range of available policy options (Painter, Marshall, and Leitzell, 2024).

Media are essential in spreading information about climate change; however, coverage varies in countries based on their geopolitical and economic conditions. In

addition, coverage of climate change in vulnerable countries where journalists face issues such as limited resources and limited access to scientific expertise presents another barrier for the media to raise public awareness (Pandey and Kurian, 2017). In developing countries such as those in Sub-Saharan Africa and South Asia, reporting tends to focus on immediate events, such as floods, droughts, heatwaves and adaptation measures. In contrast, in wealthier nations, reporting expands into the long-term impacts of climate change and the policy debates, creating an unequal world regarding preparedness and mitigation measures (Boykoff, 2011). Scholars argue that people living in vulnerable communities need to have access to accurate information about the state of the environment and how to prepare for the increasing consequences of climate change, such as forced migration, conflict, food security and loss of income (World Bank, 2021). Compounding this challenge is the existence of authoritarian media systems in some vulnerable countries, which mainly disseminate state narratives on climate change while limiting public access to information about significant environmental events (Arkeh and Hamzawy, 2024; Guo, Huang and Fang, 2023).

Covering the environment and political issues is especially challenging in countries with authoritarian regimes and censored media systems, such as Iran. This dissertation explores how Iran's environmental news is reported across local (national), international, diaspora, and social media, focusing on the extent to which the state controls and frames the narrative. This study provides insights into Iran's media system and how people in Iran access and consume news about the environment. It aims to contribute to the scholarly discussion on framing theory and Entman's (2003) cascading activation model, particularly regarding its applicability in Iran's censored media landscape. Another objective is to explore how journalists operate within a strict

regime such as Iran and the influence of elite sources on shaping news narratives and public perception about the environment (Gabore, 2020). The project will use Entman's (2003) cascading activation model as a framework for how information flows inside and outside Iran's authoritarian media system. This study also examines social media and how Entman's (2018) updated cascading activation model in the digital age applies to Iran.

This chapter begins by providing an overview of climate change reporting and news consumption in general. Then, it will discuss how climate change and the environment are studied in the Global South. Then, it will outline information about Iran's environment, its response to climate change, and how people in Iran access news within a restricted media landscape. Following this, the 2021 water protests in southwest and central Iran will be detailed, highlighting why this case study was selected to analyse news framing in Iran. The final section will outline the chapters and contributions included in this thesis.

Media and Climate Change

The United Nations (2021) has described climate change as the defining story of our time. As global temperatures rise and extreme weather events such as floods, droughts, and heat waves intensify, the media plays a fundamental role in preparing and informing the public (Anderson, 2009; Junsheng et al., 2019). The media serves as a mediator between scientists, policymakers, and the public. However, adherence to journalistic norms like novelty and personalisation has led to deficits in information dissemination (Boykoff, 2007). A study on journalistic objectivity found that climate change reporting has prompted journalists to redefine objectivity, striking a balance between impartiality and environmental advocacy (Hiles & Hinnant, 2014).

Traditionally, journalistic objectivity called for neutrality and fact-based reporting

without personal involvement (Bovee, 1999). Yet, recent perspectives suggest that merely reporting facts without advocating for environmental action is inadequate for climate change reporting, leading journalists to adopt a more scientific and evidence-based approach, which has increased news consumption of this issue in some parts of the world (Hase et al., 2021; Hiles and Hinnant, 2014).

A survey by the Reuters Institute and Oxford University (2023) indicates that more people are turning to news for information about environmental problems, presenting an opportunity to explore how the media operates in different countries and political structures. Media coverage of climate change varies between the Global North and Global South, with differences in access to accurate information often stemming from lower levels of trust in local media in the Global South (Vu, Liu, & Tran, 2019).

Ejaz, Mukherjee, and Fletcher (2023) discuss environmental news consumption in several countries around the world. For the Global North, their research included nations such as the United Kingdom, the United States, Germany, France, and Japan. In these countries, they found that people have stable trust in mainstream media to provide them with information about climate change. The authors identified scientists featured in media reports as the most trusted sources for explaining environmental problems. However, the study also highlighted that social media and messaging platforms are frequently associated with climate-related misinformation, particularly from politicians with an agenda to sway public opinion in their favour by downplaying or overplaying an environmental event. This analysis, however, extends beyond the Global North, as Wu, Long, Chen, and Wang (2023) argue that in China, where media is censored, mainstream media wields a more

significant influence on public opinion about climate change than social media, despite its widespread use for accessing information.

News consumption about environmental topics varies across regions. Therefore, it is helpful to investigate how the media reports environmental challenges in countries where information about climate preparedness is not easily accessible. Research suggests that the media in the Global North reports on environmental issues more frequently and with higher public trust than in the Global South (Hase, Mahl, Schäfer, and Keller, 2020). Furthermore, nations in the Global South are increasingly vulnerable to climate change and environmental degradation due to their geographic and socioeconomic conditions, as well as political instability, which raises concerns about unequal access to information. For example, most countries in the Middle East, including Iran, experience high temperatures and low rainfall patterns during the year and are often weakened economically and politically due to war and tensions in the region (International Monetary Fund, 2021).

Climate Change in the Global South

This section will discuss scholarly literature regarding the media coverage of climate change in the Global South. Schäfer and Schlichting (2014) argue that research and scholars have mostly focused on the West, with many countries in Africa, Latin America, and Asia remaining understudied. The disparity in research between the Global South and the North arises from factors such as limited journalistic resources and restricted access to scientific expertise in many countries of the Global South. Scholars argue that another reason for these differences is the concentration of most funding and research networks in the West, which disadvantages countries in some of the most vulnerable parts of the world to climate change (Ejaz and Najam, 2023; Schäfer and Schlichting, 2014).

Focusing specifically on the Middle East and Iran, research on media coverage of climate change is even less available than in the Global South, a gap that this study aims to address. Scholars argue that Middle Eastern and Arab countries demonstrate diversity in wealth, natural resources, and political structures, and despite these realities, media coverage of climate change and the environment in the region tends to focus on uniform patterns, which, in many cases, does not provide the full magnitude of the problem. Scholars also argue that in the Middle East, long-term authoritarianism and social and religious conflict have pushed the media coverage of climate change down the list of priorities. Scholars argue that much of the news about the environment in the Middle East is represented by Western media, which sometimes lacks the local angle and is often focused on big climate events such as the United Nations negotiations (Eskjær, 2017; Mocatta et al., 2024).

The existing literature on media coverage of Iran's environmental news is very limited, and this project aims to address this gap by examining various media types identified as international, diaspora, local (national), and social. A few scholars have analysed how national newspapers portray certain environmental news in the country; however, research remains limited. Amiraslani and Caiserman (2018) found that when it comes to Iran's environmental news, the data used to explain a situation such as air pollution or drought are often old and not scientifically reliable. Furthermore, the authors found that journalists working for local (or national) outlets lack professional training and depend on sources to provide the information. Amiraslani and Dragovich (2021) also argue that Iran's environmental news lacks scientific and technical research, focusing more on public awareness than on providing in-depth analysis. Scholarly work on media coverage of climate change,

water, and the environment remains very limited, which is an area to which this study aims to contribute.

Scholars argue that the news frames used to address environmental issues in the Global South and the Global North differ based on factors such as national contexts and vulnerability to climate change (Vu, Liu, and Tran, 2019). Studies have shown that dominant environmental frames in the developed world often emphasise policy action and scientific certainty, whereas, in the developing world, the emphasis is more on human impact and vulnerability (McAllister et al., 2024). Additionally, McAllister et al. (2024) identify several environmental frames within Middle Eastern media, including governance, emphasising global agreements and the process of energy transitions while linking climate action to internal policies. The media coverage also highlights environmental issues such as water scarcity and national governance, particularly in Jordan and Lebanon, where there is mention of government accountability. This dissertation has identified a research gap regarding environmental frames, specifically in relation to Iran, which it aims to address in later chapters.

Painter and Schafer (2024) discuss how climate change is reported across various countries and emphasise the importance of cross-national comparisons. The authors contend that coverage of climate change and environmental issues has increased over the past two decades, with peaks during climate change summits and reports. The authors have also found that, in general, coverage has shifted from focusing on the scientific basis of climate change towards political and social factors. The authors acknowledge that in countries with restricted press freedom, particularly authoritarian ones, state narratives and the tendency to deflect blame for environmental challenges influence the media coverage of environmental news.

Çömlekçi (2024) highlights the challenges faced by journalists when covering environmental issues in authoritarian regimes like Turkey, where limited policy impact often results in demotivation. Zhang (2024) similarly emphasises that political control in authoritarian contexts restricts impactful environmental reporting. This dissertation seeks to fill a research gap regarding Iran and the media's coverage of the environment.

Scholars argue that social media acts as a crucial platform for spreading news about climate change and environmental issues, encouraging public participation, and cultivating diverse perspectives. (Sanford & Painter, 2024). This role becomes particularly crucial in closed societies like Iran, where state-controlled media often restricts access to environmental news and censors the material. A study by Ameli, Bicharanlou, and Gholami (2021) on Persian Twitter (X) illustrates how the platform has emerged as an interactive space for discussing urgent environmental events, such as the water crisis, emphasising it as one of the nation's most pressing challenges. However, the same studies highlight the risks associated with social media, including the spread of misinformation and narrative polarisation, especially in politically charged contexts (Sanford et al., 2021). The authors argue that these risks are evident in the portrayal of the water crisis, where political narratives and occasionally fabricated content have influenced public discourse in one way or another (Ameli, Bicharanlou, & Gholami, 2021).

Climate News Consumption in Iran

Iran is one of the top ten contributors to global greenhouse gas emissions, the main driver of climate change (International Energy Agency, 2023). It is also one of the few countries, alongside Eritrea and Yemen, that still need to ratify the Paris Agreement, a landmark international accord aimed at limiting global temperature

increases to 1.5 degrees Celsius above pre-industrial levels (UNFCCC). In 2015, the Iranian government submitted its last plan to reduce emissions and mitigate climate change, but it has yet to meet these commitments (Climate Action Tracker, 2023). Iran's Department of Environment, responsible for representing the country at United Nations Climate Change Summits (COPs), has often cited US economic sanctions and political issues as barriers to addressing climate change, which is an explanation scholars have challenged over the years (Hakim, 2023). Disasters such as floods, dust storms, and heatwaves, with temperatures exceeding 50 degrees Celsius in parts of the country, result in thousands of deaths, loss of income and property, and hospitalisations yearly (Forbes, 2024). Therefore, media coverage of Iran's environmental news is critical for raising public awareness and providing vital information for vulnerable communities to prepare for the impacts of climate change. News about Iran's environment usually receives mainstream coverage when it is attached to a news peg, such as conflict, protests, or water disputes, and falls off the editor's radar after the event is over (Sayeh Isfahani, 2021).

A study by Karimi, Liobikiene, Saadi, and Sepahvand (2021) found that media plays a vital role in influencing environmental behaviour among Iranians. The study argues that social media, television, and newspapers focusing on the threats of climate change and raising environmental awareness on environmental degradation can lead to pro-environmental behaviours, especially among Iranian students. To fully understand the dynamics of media consumption in Iran, the next chapter explores censorship in local and social media systems. Most international media websites and applications are blocked in Iran, and individuals must use Virtual Private Networks (VPNs) to bypass these restrictions. In addition, authorities block

social media and messaging platforms such as Facebook, X, YouTube, TikTok and Telegram to control the flow of information (Dagres, 2022).

Diaspora media channels in Farsi, widespread among the older generation of Iranians, are also restricted and can only be accessed through satellite. Ownership of satellite dishes is illegal, and individuals caught using them may face fines or penalties, with law enforcement frequently carrying out raids in homes to confiscate them (Dehshiri, 2024). Despite these restrictions, Iran has one of the highest mobile subscription rates globally, with over 140 million subscriptions in a country of 85 million, suggesting that many citizens own multiple smartphone devices. Despite the legal risks and penalties associated with VPN usage, approximately 83% of Iranians use VPNs to access international news and social media. During political unrest, such as the 2022 'Woman, Life, Freedom' protests, VPN usage surged over 3000% after the authorities cut access to social media (Dehshiri, 2024). Scholars argue that VPNs have become vital for Iranians to access uncensored information. However, this represents a cyber security risk for people who rely on free and insecure VPN services because of sanctions and limitations for paying for the secure options (Dehshiri, 2024). Research shows that VPN usage is widespread in authoritarian regimes where access to news is restricted and often censored. For example, 44% of people in Saudi Arabia rely on VPNs, while in Malaysia, 43% (Statista, 2024; The Independent, 2024).

The young generation in Iran consumes environmental news from social media platforms such as Telegram, X and Instagram by circumventing internet restrictions and the older generation from Persian diaspora channels through satellite (Karimi, 2021; Dagres, 2022). As will be examined in the following chapters, environmental news in Iran tends to have a political angle and, therefore, is censored

in the local media (Kamalipour, 2007). The government often downplays environmental degradation to suppress information and keep the people from protesting. Local media usually covers officials, providing inflated data that does not show the realities of Iran's environmental challenges. It should be mentioned that local media refers to national media published in Iran.

A study by Madani, AghaKouchak, and Mirchi (2016) challenges the narrative often portrayed by the media, which suggests that climate change is the primary driver of Iran's water crisis. The authors contend that socio-economic factors, including rapid population growth, inefficient agricultural practices, and mismanagement of water resources, are the primary causes of the crisis. While Iran experiences frequent droughts, the paper contends that water scarcity primarily results from "water bankruptcy," a situation in which water demand greatly exceeds the available supply due to poor governance and depletion of water resources rather than only climate change (Madani, AghaKouchak, & Mirchi, 2016, p. 998). This analysis plays an important role in understanding mismanagement as a cause of Iran's water problems, which will be discussed in later chapters. The authors argue that climate change, while exacerbating drought in Iran and intensifying events such as floods, heatwaves and dust storms, is not the main cause, which is a notion often misrepresented by the media. This analysis highlights how political narratives often divert attention from systemic governance failures, like groundwater depletion, by attributing water scarcity to climate change and not taking responsibility (Madani, AghaKouchak, & Mirchi, 2016, p. 998).

The state of Iran's environment

Iran is located in the Middle East, one of the hottest and driest regions in the world, and it faces considerable vulnerability to climate change and environmental

degradation. Over the past decade, the country, with a population of 85 million, has experienced an increasing frequency of extreme weather events such as floods, droughts, sand and dust storms, heatwaves, and air pollution, placing it among the most environmentally challenged nations (World Bank, 2023). Iran is also suffering from a state of "Water Bankruptcy", where the available water supply is far less than the demand, passing the stage of a water crisis (Madani, 2021). Significant rivers and wetlands, such as Lake Urmia in the West, Zayandeh-Rud River in the Centre and Lake Hamoun in the East, are disappearing because of this situation. Madani (2014, p. 315) recognises three major causes of Iran's water problems: (1) rapid population growth and inappropriate spatial population distribution, (2) inefficient agriculture sector, and (3) mismanagement and thirst for development. Scholars argue that climate change has amplified environmental problems in Iran, leading to the faster and more intense drying of the water resources (Rastegaripour, Tavassoli, Babaeian, Fernández-Gálvez & Caballero-Calvo, 2024).

Before the 1979 Revolution, the Pahlavi Dynasty's rapid modernisation of Iran, while beneficial in terms of its socio-economic status, put a strain on its water resources. After the clerics took over and following the war with Iraq in the 1980s, the Islamic Republic adopted policies to protect itself from foreign reliance and prove independence to the world (Madani, 2014). The Islamic Republic's desire for food self-sufficiency has created an agriculture sector heavily reliant on irrigation, which has extracted over 90% of Iran's water resources, with farmers receiving subsidies and lower water prices as incentives to cultivate crops such as Wheat (Beheshti Tabar, Keyhani, and Rafiee, 2010).

Iran's primary water resources are surface water, which includes rivers, lakes, and reservoirs, and groundwater sourced from aquifers, wells, and qanats (traditional

underground channels). Over the years, Iran has experienced significant water depletion, particularly in its groundwater resources. Studies suggest that around 74 km³ of groundwater was depleted between 2002 and 2015, with over-extraction affecting approximately 77% of Iran's land area. This overdraft has led to critical issues, such as declining water availability, soil salinity, and land subsidence (Ashraf, Nazemi, and AghaKouchak, 2021).

It is important to note that the Islamic Revolutionary Guard Corps (IRGC), a powerful organisation with close ties to Iran's Supreme Leader, Ayatollah Khamenei, holds significant control over the water transfer permits given for industrial development across the country, which has further depleted the country's groundwater (Middle East Institute, 2021). The following chapters will discuss in more detail the role of the IRGC and the Supreme Leader in shaping environmental narratives within Iran's media.

Environment, Security and Iran's Political Structure

Scholars have provided a comprehensive understanding of Iran's unique theocratic and republican system of governance. At the top of this system sits the Supreme Leader, Ayatollah Ali Khamenei, who has held this position since 1989 after the death of Ayatollah Ruhollah Khomeini, the founder of the Islamic Revolution, which took place in 1979 and ended the monarchy of the Pahlavi Dynasty (Ehteshami, 2002). Under the Supreme Leader, the president serves as the head of government and is responsible for setting domestic policies. However, as Moslem (2002, p.419) argues, it is essential to note that the president's authority and decision-making in managing the economy, foreign relations and executing laws is significantly constrained by the 'overreaching' power of the Supreme Leader. The Supreme Leader holds significant control over Iran's military, media and judiciary and

appoints key members of the Revolutionary Guards. It is important to mention that the Supreme Leader's role is rooted in a concept of 'velayat-e-faqih', which translates into (guardianship of jurist). This Shia Islam ideological concept allows religious scholars and clergy members, in Iran's case, the Supreme Leader, to make decisions about the country's domestic and foreign affairs based on Shia Islamic law (Dabashi, 1993; Moslem, 2002).

Furthermore, Golkar (2015) explores the Islamic Revolutionary Guard Corps (IRGC) extensive role in shaping Iran's political and social landscape. Golkar argues that the IRGC, with its dual role as a military and political organisation, holds a significant power in Iran's power structure after the Supreme Leader, more so than the president. Table 1 demonstrates an outline of the political structure in Iran after the Islamic Revolution in 1979.

As will be discussed in the case study, water, wildlife, drought, and even climate change are topics which the IRGC, Iran's intelligence apparatus and the Supreme Leader consider a threat to national security, given their ability to unite people around a specific cause (Madani, 2020). One of the most noteworthy examples of this ideology is the 2018 arrests of nine environmental activists in Iran who were protecting and researching the critically endangered Asiatic Cheetah and Persian wildlife. The activists who were given long prison sentences (4-10) years were accused of placing camera traps to monitor the existence of the Asiatic Cheetah in sensitive areas and nuclear sites (Human Rights Watch, 2019). The intelligence arm of the IRGC accused these activists of espionage and working for foreign countries to gather information about Iran's sensitive areas without having presented any evidence to support this claim. In 2018, just after the arrests, Kavous Seyed Emami, an Iranian Canadian professor and one of the founders of the Persian

Wildlife Heritage Foundation (PWHF), a non-profit organisation researching the Asiatic Cheetah, suspiciously died while in Tehran's Evin prison in the custody of the intelligence arm of the IRGC (Human Rights Watch, 2018). In 2023, another co-founder of the PWHF, Morad Tahbaz, was released in a prisoner swap with the United States along with four other American citizens in exchange for 6 billion dollars of frozen Iranian assets to be sent to Qatar, the mediator of the deal (Fassihi, 2023). The last of the remaining seven conservationists and wildlife experts, two of them female, who were tortured and sexually harassed by security agents, were released in April 2024 but are prohibited from leaving Iran (*Forbes*, 2024, United Nations, 2024).

Another example is the case study of the water crisis that led to nationwide protests in Iran in 2021. The IRGC and its intelligence arm consider environmental causes in Iran a threat to the regime's stability. The local (national) media is restricted from reporting on these matters inside Iran, an area this dissertation will explore in the following chapters. The next section will detail the case study selected by this dissertation to provide insight into the dynamics of the water protests so that later chapters can better analyse their representation in different media groups.

Table 1- Iran's Political Structure

Institution	Description	Appointed By
Supreme Leader	Holds ultimate political and religious authority, controls military, judiciary, and media, and appoints key officials.	Assembly of Experts
Assembly of Experts	Elected body that selects and oversees the Supreme Leader, but its oversight is limited in practice.	Direct election by public (though candidates are vetted by the Guardian Council)
President	Head of government, responsible for executing laws and conducting diplomacy, though subordinate to the Supreme Leader.	Direct election by public

Parliament (Majlis)	Unicameral legislature with lawmaking authority, though laws must be approved by the Guardian Council.	Direct election by public
Guardian Council	Half appointed by the Supreme Leader, half by the Majlis, the Guardian Council vets laws and election candidates for adherence to Islamic principles.	Half by Supreme Leader, half by Majlis
Expediency Council	Advisory body that resolves disputes between the Majlis and the Guardian Council.	Supreme Leader
Judiciary	Oversees the legal system, including courts and law enforcement, and is heavily influenced by the Supreme Leader.	Supreme Leader
Islamic Revolutionary Guard Corps (IRGC)	Paramilitary force with significant political and economic influence, tasked with protecting the regime and enforcing internal security.	Supreme Leader

Case Study: The 2021 Water Protests

In 2021, two nationwide protests took place in Iran over severe water shortages and drought, one in the southwestern province of Khuzestan and one in the central province of Isfahan. The first one, considered one of the largest uprisings against the government before the “Woman, Life, Freedom” movement in 2022, happened in July after the people of Khuzestan faced severe water scarcity in the region. Khuzestan is home to ethnically diverse minorities and Arab-speaking populations who have been frustrated for decades over government mismanagement of resources. Khuzestan province is among the richest in Iran in terms of natural resources and sits on vast oil and gas reserves (Hein and Sedighi, 2016). Over the years, the region’s water has been depleted for various industrial and energy projects, drying the wetlands, lakes and rivers the people need to survive

(International Crisis Group, 2023). In mid-July 2021, the people of Khuzestan took to the streets, protesting the lack of access to water and drinking water. The demonstrations quickly spread to other cities, including the capital Tehran. It was around this time that the first reports of shootings by security forces appeared in the international media, and the people who died were named (Human Rights Watch, 2021). Although the number of people who were killed during the protests by security forces varies in the media, human rights organisations such as Amnesty International and Human Rights Watch have reported it to be more than a dozen, with hundreds arrested for protesting against the regime (Amnesty International, 2021).

Mismanagement of water resources by authorities has been a longstanding concern for scientists and academics who have been warning about the consequences for the people of Khuzestan. Madani (2014) argues that the oil projects, construction of hydroelectric dams, transfer of water to other provinces and poor agricultural practices are the main drivers of Khuzestan's water problems. The mismanagement of water resources is central to understanding the framing of the 2021 water protests discussed in the following chapters. The demonstrations in Khuzestan lasted for two weeks and were named the "Thirsty Uprising", given that the people did not have access to drinking water (*The New York Times*, 2021). It is also important to mention that during the protests in Khuzestan, the government shut down the internet to restrict the information from spreading between different protesting communities. The authorities sporadically shut down or slowed down the internet in homes and cellular phones to stop people from sending information to the diaspora and international media reporting on the water protests and violence by the security guards (*Iran International*, 2021). Research shows that in times of protests and limited access to the internet, media reporting and the flow of information are

affected, an area which will be discussed more in the following chapters (Mubarak, 2024).

In November 2021, after only a few months, Iran witnessed a second protest in the province of Isfahan over drought and dried-up rivers. Isfahan, located in central Iran, is home to a significant agricultural sector, primarily sustained by the Zayandeh-Rud River, which is widely regarded as the region's primary water source. Like Khuzestan, Isfahan's water resources have been mismanaged for urbanisation and diversion to other cities for industrialisation (Hein and Sedighi, 2016). Because of these poor policies in November, the River, which thousands of farmers rely on for their livelihoods, dried up with the media showing images of it as a football field (*The New York Times*, 2021). The protests and demonstrations began in November initially by farmers frustrated by the water transfers to other provinces for industrial projects. The demonstrations in Isfahan began peacefully; however, after a few days, they spread to other cities where people stood in solidarity with farmers and showed anger over the drying of Zayandeh- Rud River, a national treasure. The protests turned violent when authorities began to use tear gas and live ammunition to suppress the uprising from spreading to more cities (*Al Jazeera*, 2021).

The two consecutive water protests that started because of environmental grievances and became deadly provide a good case study for understanding the framing of environmental news in Iran. The events were both environmental and political, attracting the attention of all media groups and allowing for balanced analysis. These environmental events were rare occasions when Iran's Supreme Leader directly commented on water protests in Friday Prayers and on social media. This allows the thesis to investigate how Entman's cascading activation model

applies to Iran's environmental news, looking at the frames originated by the Supreme Leader.

Outline of chapters

The following chapters will begin with a literature review on media systems in Western countries and countries under authoritarian regimes, such as Iran, China and Saudi Arabia. The social media chapter will examine how social media operates in authoritarian regimes and point to the gaps in scholarly research. The literature review section ends with framing theory and Entman's cascading activation model, where the research questions will be presented. The methodology chapter details how the RQs will be answered using mixed quantitative and qualitative content analysis of articles and social media posts. The findings chapter details how different media groups have framed the 2021 water protests and whether and how other media, from local (national), international, diaspora and social media, adopted the Supreme Leader's narrative. In the discussion chapter, the theory and findings were used to explain patterns and outline the gaps in research and the scope for further study of framing in authoritarian regimes. The conclusion chapter will provide a summary of the findings, limitations and contributions. Appendices show the dissertations code book and examples of the 2021 water protests by different media groups.

Contributions

This thesis contributes to the theoretical understanding of authoritarian media systems, social media dynamics in authoritarian regimes, and framing theory. It contributes to framing theory by applying Entman's Cascading Activation Model (CAM) within the context of Iran's environmental news, demonstrating how frames originating from elite sources influence narratives in different media groups.

Additionally, the study adds to the conceptualisation of media systems in authoritarian regimes by identifying political parallelism, limited journalistic professionalism, and significant state intervention, which contribute to low public trust and restricted access to information. It also analyses behaviours on social media within the context of authoritarian regimes and Iran, illustrating that while these platforms can challenge state narratives, they are sometimes restricted by self-censorship and state surveillance.

This study adds to the available research on media systems and frame analysis in authoritarian contexts through a mixed methods approach that combines quantitative and qualitative analysis. It uses coding to analyse media coverage of Iran's water protests by identifying the Supreme Leader's frames and the counter-frames. By examining local (national), diaspora, and international media alongside social media, the thesis demonstrates the applicability of relevance sampling and intercoder reliability in analysing state-controlled media environments.

The thesis demonstrates how frames by elite sources cascade to media, adding to the understanding and applicability of Entman's Cascading Activation Model. The study also highlights how international media often use frames originating from elite sources, offering insights for media framing research in authoritarian regimes. Additionally, this thesis has contributed to the understanding of media framing of environmental news in countries with censored media systems, particularly Iran.

Chapter 2 - Media Systems

Introduction

The introduction discussed the state of Iran's environment, provided an overview of the case study, and outlined the dissertation's scope and contributions. This chapter will first examine existing literature on Western and international media systems. It will then expand to examine authoritarian media systems such as Iran's while pointing out gaps in academic research. Media systems and what shapes their behaviour and structure constitute a fundamental point of discussion amongst media scholars. From Siebert, Peterson, and Schramm (1956) to Hallin and Mancini (2004) and beyond, authors have recognised the importance of understanding national media systems and the socio-political sphere in which they function. Hardy (2012, p.185) defines a media system as comprising all the "mass media" operating within a given state's specific social and political structure. Hardy argues that one of the main contributions of research into media systems is its analysis of the relationship between media and politics, which is a finding shared by authors such as Merrill (2002), McQuail (2010), and De Albuquerque (2013). More recent studies point to media systems' role in the debate around misinformation and trust in media. Cushion, Morani, Kyriakidou and Soo (2022) argue that trust in journalism and news is directly correlated to the degree of freedom a media system has within a political structure and that journalists tend to challenge governments on various issues in democracies more than in undemocratic countries. Furthermore, Hellmueller and Berglez (2023) argue as multiple political powers emerge, journalism needs to refine its analysis of cross-border reporting. Given that this project looks at the flow of information within different media groups regarding Iran, it is important to demonstrate how the relevant media systems operate and are structured.

Media Systems Research

Literature focused on “media systems” appeared in (1956) with Siebert, Peterson, and Schramm's publication of *Four Theories of the Press*. According to Hardy (2012), this ground-breaking scholarship, written during the Cold War, provides an important basis for the comparison and classification of media systems across the globe. In it, the authors propose four models to explain and understand the role of the media in society and government while drawing out key differences between them: the Authoritarian theory, the Libertarian theory, the Social Responsibility theory, and the Soviet-Communist theory. The Authoritarian Theory's main feature points to the state's direct control over the media, where independence and challenging the government are restricted. The Libertarian Theory points to a media system that operates in a social and political structure developed through the philosophical principles of liberalism. The Social Responsibility theory points to the emergence of media responsibility towards the public regarding their right to access information. The Soviet-Communist theory is based on Marxist ideology, in which the press and media are regarded as instruments of the Communist party in power (Siebert, Peterson, and Schramm, 1956). Hardy argues that by separating the world into liberal, communist, social democratic and authoritarian categories, the authors provide a simple yet influential representation of the press within different political systems.

Four Theories of the Press, however, is a product of its time and, therefore, has been critiqued over the years by scholars who argue that some of its assumptions and analytical insights should be reinterpreted and built on. Nerone (1995), Merrill (2002), Hallin and Mancini (2004) and Hardy (2008) believe that *Four Theories of the Press* is coloured by a Cold War perspective. Despite its

contributions to the field and its value as a departure point for the study of media systems, a more modern and in-depth analysis was needed to reflect the change in news dissemination. Hallin and Mancini (2004, p.10) describe the work as having “stalked the landscape of media studies like a horror-movie zombie for decades beyond its natural lifetime”. De Albuquerque (2013, p.742-743), however, argues that even though *Four Theories* has been subject to criticism and labelled as “inflexible and simplistic”, it has been the source of inspiration for many studies around the world and has proved to leave a “resilient legacy”. McQuail (1992), Nerone (1995), Curran and Park (2000), and Merrill (2002) are just a few examples of scholars who have built on *Four Theories of the Press* to contribute to the understanding of media systems. However, de Albuquerque (2013, p.742-743) points out that Hallin and Mancini’s *Comparing Media Systems* has been hailed for “replacing” *Four Theories of the Press* as the basis for comparative media studies.

Hallin and Mancini (2004) researched media systems operating in Western countries. They divided their findings into three models: the liberal model (seen mainly in Britain, Ireland, and North America), the democratic model (seen in northern continental Europe) and the polarised pluralist model (seen in the Mediterranean counties of southern Europe). Within their models, Hallin and Mancini identify four dimensions that can be used when comparing the media systems that operate within nations: the development of media markets, political parallelism, the development of journalistic professionalism, and the nature of state intervention in media systems. Political parallelism is a key term used by Hallin and Mancini (2004) to demonstrate the links between the media, government, and politics and the influence that taking a political approach has on the success of journalism. However, the concept was first seen in the work of Seymour-Ure (1974), who links the press to

different political parties. Seymour-Ure argues that three factors can determine a newspaper's link to a political party: loyalty to party goals, the proximity to party organisation and the partnership of its readers.

Of the three models, the Liberal model is relevant to this research, given that most of the international media that cover Iran operate within this model and political structure. The Liberal model is characterised by low levels of state intervention, early development of journalistic professionalism and low levels of political parallelism. Before going into more detail regarding the Liberal model in the next section, explaining the other models presented in *Comparing Media Systems* is perhaps helpful. The Democratic model is characterised by the early development of the mass-circulation press, strong state intervention but with freedom of press protection and political parallelism in the national press. The Polarised Pluralist model is characterised by strong state intervention, low newspaper circulation and high levels of political parallelism (Hallin and Mancini, 2004).

Similar to *Four Theories of the Press*, Hallin and Mancini's *Comparing Media Systems* has been subjected to scholarly criticism. Brüggemann, Engesser, Büchel, Humprecht, and Castro (2014) argue that Hallin and Mancini themselves disclose and acknowledge some limitations of their study and point to their declaration regarding the fact that their research does not go beyond the Western world. Scholars such as Norris (2009, p.332) argue that this understanding of media systems is restrictive and misses several key features of media studies, such as "press freedom" and censorship.

The Liberal Model and International Media Systems

This section will look at the research conducted on the Liberal model and Western media system and how it interacts with media coverage of Iran. Given the

limited scholarly research on media coverage of Iran's environmental news specifically, this section will survey the existing work conducted in a broader range of news coverage by international media to demonstrate how the liberal model positions itself and reacts to a censored media system such as Iran's.

Considering its foundational significance in any study of how modern international media functions, the Liberal model put forward by Hallin and Mancini (2004) will be the benchmark for demonstrating research conducted on Western media systems. The key feature of the Liberal model is the influence of market forces and the predominance of commercial media. It is also categorised as including a commercial press that developed at an early stage, a sense of freedom of the press (Obijiofor & Hanusch, 2017) and a strong history of journalistic professionalism, with the media dominated by the market with some exceptions. The political systems of the countries included in this model (US, UK, Canada, and Ireland) show evidence of a majoritarian government. This democracy developed at an early stage with moderate pluralism and some diversity of political views (Hallin and Mancini, 2004). According to the authors, political parallelism in the Liberal model is typically low; they also argue that there is a balance in media content that creates some neutrality in the system.

Hallin and Mancini (2004, p.80) argue that within the Liberal model, there is a high level of differentiation of the media from what they call "other social bodies", such as religious groups, which have historically been connected to politics. In addition, journalistic professionalism is defined by the Liberal model as having the freedom to generate factual news without political affiliation and influence (Esser and Hanitzsch, 2012). Jonathan Hardy (2008) in *Western Media Systems* adds to the literature by analysing the media systems in Western Europe, the US, and Canada.

He points out that media systems in these countries have some similar characteristics, given their shared political history. Hardy (2008, p.232) argues that Hallin and Mancini (2004) have provided a “seminal framework” in media studies for understanding the relationship between political systems and the media. Hardy also argues that in countries that follow the Liberal model, some notable characteristics include a tendency towards the Anglo-American concept of professional journalism and low levels of political parallelism. In addition, Hallin and Mancini (2004) believe that the US and UK were both early proponents of capitalism, where liberal ideology developed a strong base.

There is a body of criticism produced by scholars such as Obijiofor and Hanusch (2017, p.23), who argue that *Comparing Media Systems* (2004) and *Four Theories of the Press* (1956) are based predominately on the premise that the frameworks underpinning Western media systems should be the foundation for analysing non-Western media systems. According to Norris (2009), Hallin and Mancini’s original theory fails to provide an in-depth analysis of the importance of freedom of the press and expression in the media, given that these dimensions may not have been essential to categorising Western media systems. Media freedom and religion are important factors when considering media systems beyond the Western democratic world, which includes countries like Iran (Brüggemann, Engesser, Büchel, Humprecht, and Castro, 2014). Although Hallin and Mancini expanded their work in 2012 to include a broader range of countries and regions, there is still a substantial gap in the research on the exact positioning of the media system in Iran. Despite this limitation, the literature on the Western media system and how it behaves when exposed to authoritarian regimes can provide some context regarding the international media coverage of Iran’s news.

The United States, the United Kingdom, and Canada still align with the liberal media model discussed by Hallin and Mancini (2004) due to their historical foundations in democratic governance, market-driven press systems, and norms of journalistic professionalism. These countries demonstrate low levels of political parallelism, with most media outlets not directly affiliated with political parties, therefore allowing for a diversity of perspectives within the media. In addition, the media landscape in these nations is largely shaped by market forces, where private ownership drives content production rather than direct state control or political influence, as is the case in authoritarian regimes such as Iran.

Media Systems Literature

Since Hallin and Mancini's (2004) contribution to media systems, the landscape of political polarisation in media has developed, driven by the increasing impact of digital media and social platforms. Although Hallin and Mancini categorised media systems into different models, modern media polarisation dynamics extend beyond the structural dimensions they identified. Kubin and von Sikorski (2021) argue that social media platforms, particularly, have intensified polarisation, emphasising the differences in political beliefs and ideologies. The spread of misinformation on platforms like Twitter (X) has added to the divisions while users look for content and posts that align with their own belief systems (Kubin & von Sikorski, 2021). This shift represents a departure from traditional media models, as audience behaviour and algorithmic design play a more significant role in shaping narratives and public discourse. Furthermore, in authoritarian regimes such as Iran, media polarisation is demonstrated as state-controlled narratives dominating the public sphere, with limited possibility for opposition views (Kubin & von Sikorski, 2023).

Censorship and Restrictions

Rahimi (2015, p.358) defines censorship as “the obstruction and the arbitrary suppression of discourse with the objective of manipulating public knowledge, and accordingly, shaping public opinion in favour of state power.” This section will present scholarly research on the international media coverage of countries and events under a censored media system to point to gaps in the literature and contextualise the coverage of Iran’s environmental news by foreign media. Oluseyi, Gearhart, and Cho (2020), in a study looking at how global news agencies reported on anti-government protests over economic hardship in Iran in 2017/2018, argue that various elements influence the coverage of such events. The authors examined US, UK, French, Chinese, and Russian news agencies to demonstrate the differences in coverage of this political event in Iran. Oluseyi, Gearhart, and Cho (2020, p.138) argue that the Western outlets that operate under a democratic and privately owned media system gave more attention to calls for “political change” in Iran, while coverage from the Chinese media reported more stories in support of the narrative created by the Iranian regime, which Oluseyi, Gearhart and Cho attribute to elements such as “national interest” and “ownership” of news agencies. In another study on international newspaper coverage of the Libyan civil war, Baum and Zhukov (2015, p.384) argue that there are notable differences and biases when reporting certain political events. Media tend to either “overreport” or “underreport” depending on the organisational behaviour of news outlets within the context of political allegiances. The authors point out that in the case of the 2011 Libyan uprising, the media, which operated under a censored system, reported mainly on the damage caused by “rebels” and mostly ignored crimes and infractions committed by the regime at the time. When examining media coverage of the same event by organisations operating within a democratic/liberal system, Baum and Zhukov (2015,

p.384) conclude that the opposite trend prevailed. The authors argue that reporting biases in the coverage of conflict in democracies are more often attributed to the media's preference for profit, whereas in undemocratic states, political survival and longevity of the state are what influence reporting. In the case of Libya, Baum and Zhukov conclude that media outlets in democracies reported the uprising by challenging the government's policies. In contrast, the media in less democratic countries reported stories supporting the ruling government and the status quo.

Oluseyi, Gearhart, and Cho (2020) discuss the important role that global news agencies such as Reuters and the Associated Press (AP) play in disseminating international news content. Their assertion that most news outlets do not possess the necessary resources and staff to cover all events happening worldwide and rely on readily available information from newswires operating under objectivity and factual correctness standards is relevant to this study. They also argue through their findings that when covering the 2017/2018 protests over bad economic conditions in Iran, Western media and journalists who work under democratic media systems gave more weight to stories that challenged the legitimacy of the autocratic state in comparison to non-Western media. Oluseyi, Gearhart, and Cho (2020) and Boyd-Barret (2013) also add to the scholarly research on how Western media approach sourcing when covering stories about countries in a censored environment.

Wojcieszak, Brouillette and Smith (2013) argue that in Iran, access to sources on the ground is limited and can potentially put the lives and safety of people speaking to the media at risk. Therefore, as the study on Iran demonstrates, relying on government sources and official press releases is practised across both Western and non-Western media organisations (Oluseyi, Gearhart, and Cho, 2020).

Protest Paradigm

As the case study for this thesis pertains to environmental protests, this section will examine some literature on media coverage of protests. Scholars argue that the protest paradigm is a framework in media research that describes a repeating pattern where protests are depicted in ways that delegitimise protesters, focusing on violence and conflict aspects while minimising the fundamental grievances and demands that are causing the public to protest (Harlow et al., 2020; Brown and Harlow, 2019). Scholars argue that media coverage of protests often relies on official and elite sources while downplaying dissenting voices, ultimately reinforcing the status quo and the perspectives of those on top of the power structures. Brown and Harlow (2019, p.529) elaborate on this by introducing the concept of a “hierarchy of social struggle” that demonstrates the existence of dominant power structures and social forces that influence newsroom practices and coverage.

Harlow et al. (2020) extend this framework by demonstrating that the protest paradigm persists across both traditional and digital media contexts, with the framing of protests shaped more significantly by the topic of the protest than the geographical proximity of the media outlet. The authors argue that protests stemming from human rights violations are frequently covered as delegitimising than protests driven by environmental concerns, regardless of the location of the outlet and its proximity to the event. This argument demonstrates how structural media routines and adherence to journalistic norms influence coverage more than location alone. This concept is relevant to this thesis, which examines the media coverage of Iran's 2021 water protests. Applying the protest paradigm demonstrates how authoritarian regimes, such as Iran, control media coverage to suppress dissent,

influence public perception and reinforce state narratives about an event (Balan, 2024).

Media Bias

While there is a gap in the research when it comes to how Western media systems cover Iran's news about the environment, several studies have been conducted on how they report on sensitive political subjects such as Iran's nuclear programme and protests. In addition, to help contextualise how foreign media operates when reporting on authoritarian regimes, this section will use scholarly work on Western media coverage of North Korea. This will be relevant to this study as it shows the similarities in how Western media perceives the two countries regarding their foreign policy. Seo, Choi, and Choi (2022), in their study analysing two decades of UK media coverage of North Korea, provide insight into the Anglo-American media structure and how it reacts to countries considered adversarial. They argue that when covering North Korea and its nuclear programme, the Western media showed a significant tendency towards securing national interest and assigned blame for conflict without mentioning the contextual factors that were instrumental to the development of the nuclear crisis.

Similarly, Farhadi and Reisinezhad's (2020, p.335) examination of Western media coverage of Iran's nuclear crisis adds further weight to the idea that modern media is complex and sometimes interlinked with factors such as national interest. In the case of Iran's nuclear programme, the authors argue that considering its importance to US foreign policy, the US media coverage mostly supported the opinion of the Washington elite and, in this case, the president and the legislative branch. These insights touch upon the research on framing theory, which will be discussed in the coming chapters. What is also noteworthy in this study is Farhadi

and Reisinezhad's (2020, p.333) discussion of a concept they call "Iranophobia", which is characterised by Western media's emphasis on stories that depict Iran as a threat to national security.

There is much scholarly research available on the concept of "Islamophobia" within Western media following the 9/11 terrorist attacks in the US, which can contribute to the understanding of the influences and biases at play when covering countries like Iran. Powell's (2011) study, which analyses how the US media covers terrorism attacks that occur on US soil, contributes to the literature by arguing that the media helps establish a "culture of fear" towards the Muslim world by emphasising factors such as religious differences and the need to "protect freedom" in the West (p.108). In their work on the media and Islam, Rane, Ewart, and Martinkus (2014, p.180) provide scholarly research on mass media coverage of the Muslim world. Through their analysis, they conclude that, in general, Western media perceives the Muslim world as "different" and "oppositional," which in some cases restricts its coverage by not considering the "cultural, religious and ideological" diversities in the Middle East and North Africa region. Seo, Choi, and Choi (2022, p.16) also add to the understanding of the Western media structure by arguing that elements such as "sensationalism" and "demonisation" are often present when covering countries that Western governments consider as "the Axis of Evil", a term used to describe Iran, Iraq and North Korea coined by President George W. Bush in 2002 after the 9/11 terrorist attacks in the United States (Heradstveit and Bonham, 2007). Earlier literature conducted by Meeske and Javaheri (1982), examining television coverage of the US hostages in Iran, also discusses the subject of media bias when the question of national security and interest is involved. Meeske and Javaheri (1982) argue that when faced with Iran, Western media tend to have a

consistent message in their reporting despite having restricted access to information about the country's internal affairs. Shuja (1982, p.62) adds to this understanding by examining the US media coverage during Iran's Islamic Revolution 1979. This is relevant because it points to the change in the language and content of stories about Iran, which became increasingly hostile after this period. Shuja (1982) argues that Western and conservative media emphasised the start of "extreme fanaticism" in Iran, which can still be witnessed today.

With the scope of this study in mind, this section has aimed to present the available literature on how Western media operates in censored countries like Iran. There is a substantial gap in the research regarding international media's coverage of Iran's environmental news, which this dissertation aims to fill. The following section will analyse the existing literature on Iranian and Middle Eastern media systems by providing information on the work of scholars who have studied the media systems of countries outside of Western democracies, especially systems operating under entirely different political structures. Gaps in research on Iran and its media system will be pointed out to later address them and contribute to the field of media studies in the findings and discussion chapters.

Given that this dissertation is focused on Iran, it is important to point to the fact that this section will be used as a benchmark to show the research conducted on how media in international liberal systems react to the dissemination of news about Iran in general, and, more specifically, environmental news about Iran. It is also necessary to mention that given limitations on scholarly work conducted on the exact position of Iran within a specific media system, I will also be looking at the literature available on the wider Middle Eastern region and other countries with authoritarian regimes, such as Russia and China.

Iran and the Middle East Media Systems

In this section, I will discuss the media system of Iran after the 1979 Islamic Revolution, which ended the monarchy and Pahlavi Dynasty and gave way to the clerical rule of Ayatollah Khomeini and Ayatollah Khamenei. As Gheissari and Nasr (2006) argue, the 1979 revolution transformed the political landscape in Iran and created an aggressive and ideological atmosphere where social and cultural norms were rejected and replaced with fundamentalist Islamic values. After the revolution, the clerical regime established what is known as the Islamic Republic of Iran Broadcasting (IRIB) as the leading state-sponsored news agency tasked with setting and controlling media policies in Iran (Pahlavi, 2012). What is important to note is that, as Pahlavi explains, IRIB is funded by the state and operates under the control of the Supreme Leader (Ayatollah Ali Khamenei). The agency answers to a committee comprised of the Islamic Consultative Assembly, the President, and the head of the judicial branch. This administrative structure supports Babak Rahimi's (2015) assertion that Iran's media system is heavily controlled by the state, which strongly regulates information disseminated to the public with censorship and ownership.

Gholam Khiabany's (2009) study of media in the Middle East proves helpful when attempting to follow literature in the context of Iran's media system under an authoritarian regime. Khiabany contends that after the Islamic Revolution, the state tried to integrate the Islamic religion into most of the country's sectors, including communication systems. Downing (1996, p.113) points out that media theory has primarily been conceptualised using "Anglo-American" ideas, and there is limited research on the media systems in countries that have experienced significant religious and political changes.

Downing argues that existing media theories of the time were mainly centred around Western countries that had not witnessed significant political events such as drastic regime change or religious upheavals. In *Internationalising Media Theory*, Downing (1996) examines the dynamics of media systems in post-Cold War Eastern Europe when countries and governments experienced fundamental changes in their politics and economy after the Communist era. Using countries such as Russia and Poland that have witnessed extreme political and cultural changes, Downing concludes that media theory should incorporate a global perspective that is not only dominated by the Western model. Khiabany (2009), taking the argument a step further, highlights that the study of media systems in the Middle East, specifically Iran, has received limited scholarly attention. However, ample work has been conducted on international relations in the region. Khiabany contends that to understand Iran's media system, it is important to note that Islamic ideology and state control play crucial roles in forming the print and broadcast media.

Following their initial framework in 2004, Hallin and Mancini also believe that the study of mass media needed an expansion to include a more diverse, more comprehensive representation of countries worldwide. In *Comparing Media Systems Beyond the Western World*, Hallin and Mancini (2012) present a work compiled by various authors studying media systems in different nations with unique socio-political structures. In a 2021 study, Selvik and Hoigilt argue that in non-democratic countries with high degrees of political parallelism, journalists are often pushed to influence public opinion by defending the cause of political elites who use the media as a promotion tool. Political parallelism refers to the relationship between the media and various political actors (Hallin and Mancini, 2004). Their account can be used with scholarly research conducted by Talebian (2020) and Rahimi (2015) to

demonstrate that high degrees of political parallelism exist in Iran, where the alignment between the media and the government can be witnessed through state ownership, censorship and control.

Moreover, while Hallin and Mancini do not include Iran and the Middle East in their initial exploration, scholars such as Khiabany (2009), Tourya Gaaaybess (2013), and Kraidy (2012) have used the conceptual framework of political parallelism, which provides some insight into the existence of political parallelism in Arab countries and Iran's media systems. Kraidy (2012, p.183) argues that in the case of Saudi Arabia and Lebanon, the media and its products are a direct reflection of political structures, and journalists consider themselves more as "commentators" rather than "neutral" reporters. In the case of Iran, Khiabany (2009, p.140) looks at political parallelism by examining the level of government intervention in the country's press and internet. Khiabany finds that there are high levels of political parallelism in the media and internet; however, these levels are significantly higher in broadcasting, where the state exercises full control over operations.

Even though Hallin and Mancini do not analyse Iran in their expanded study, Kraidy, Zhao, Voltmer, and Peri (2012) provide insight into media systems within the Middle East, China, and Israel, which share similar characteristics. Kraidy (2012, p.177) provides insight into how Arab media systems operate and investigates media in the Middle East by pointing to the rise of a system he characterises as "transitional". Kraidy argues that countries within the Arab region are different in wealth, culture, and level of conservatism, which, as a result, influences their media systems. He uses the example of Saudi Arabia and Lebanon to show how these two countries, with vast differences in authoritarianism, have helped shape the pan-Arab

media systems. He also rejects Hallin and Mancini's (2012) theory and proposes that media systems do not necessarily follow and operate within state boundaries.

In *Arab Media Systems*, Blum (2022) argues that limited attempts have been made to classify the media systems in the Middle East as a regional block. Blum contends that the research that does exist is often comprised of case studies of single nations or comparisons made between two, which mostly looks at how media systems operate under authoritarian regimes. The most widely used research on this subject is *The Arab Press* by William Rugh (1979), in which he divides the Arab Press into three models: "mobilisation", "loyalist", and "diverse". Rugh's work examined *Four Theories of the Press* and concluded that new theories were needed to explain how Arab media systems function. The mobilisation press refers to a model that is a product of a period where republican governments believed their people could be educated through a strongly controlled media. The loyalist press refers to a model comprised of private media conglomerates yet represents loyalty and support for the elite in power. The diverse press represents a model in which the print media is characterised by various political opinions in countries that the central government does not control. Rugh uses two key dimensions to categorise the different systems: press characteristics and political conditions. Rugh's expanded work, *Arab Mass Media* (2004), considered modern developments such as privatising media systems and introduced an additional fourth model, the "transitional" model. This model uses the examples of Egypt, Jordan, Tunisia, and Algeria to demonstrate the impact of these changes on the print media particularly. Blum (2022) adds to the understanding of the Arab media by building on the work conducted by scholars such as Rugh (2004) and Kraidy (2012). By using several dimensions, such as historical developments, social composition, political

framework, ownership, and technological infrastructure, Blum provides an overall understanding of the media systems in the Arab world. Since this dissertation focuses on Iran, this section will not go into further detail regarding classifying Arab countries into various media systems.

Baig and Mushtaq (2018) argue that comparative media studies are primarily based on the “most similar systems” design, which, according to Anckar (2007), is when countries are chosen based on their similarities to control the variables for analysis. Regarding Iran, Baig and Mushtaq (2018) applied a “dissimilar system” design to analyse Iran’s media system through the work of Hallin and Mancini (2004). Baig and Mushtaq (2018) use Hallin and Mancini to demonstrate that the role of the authoritarian state and censorship heavily influence Iran’s media system. However, they argue that placing it under one of their three models would be an oversimplification. However, they argue it is closest to Hallin and Mancini’s (2004) Polarised Pluralist Model. This model includes countries such as Spain, Italy, France, Greece, and Portugal, which the authors argue are Southern European media systems distinct from the rest of Europe. For example, the media systems in these countries are linked to politics and are involved in the dynamics of party politics (Hallin and Mancini, 2004). Using the four dimensions in *Comparing Media Systems*, Baig and Mushtaq (2018) analyse Iran’s media system. They argue that the strict censorship of media by the Iranian state influences the other dimensions of the media, including structures of media markets, political parallelism, and the professionalisation of journalism. Khiabany (2009, p.91) provides additional insight into Iran’s media system by adding several dimensions impacted by state involvement, such as changes in demographics and education, to explain the increased demand for news and information within the country.

The framework of the media system in Iran, which experienced a drastic change after the revolution, can be demonstrated by employing Kraidy (2012) and other academic research on transitional media systems across different countries. For example, Sparks (2008, p.7) discusses the transformation of media systems in three countries which underwent regime changes: Poland, Russia, and China. However, the difference is that Sparks's study focuses on countries that transitioned from communism to adopt more democratic media traits. In contrast, after the Islamic revolution, Iran adopted more extreme ideological and religious values in its media system (Gheissari and Nasr, 2006).

Khiabany (2009, p.54-55) offers some additional insight into Iran's media system by analysing a concept called "Islamic Theory of Communication", which he believes is used by the Iranian authorities to control the media and infuse it with "Islamic values". This strategy has created a heavily censored media system. Article 175 of the Iranian constitution guarantees "freedom of expression and dissemination of ideas" but states that it "must be granted through the mass media of the Islamic Republic of Iran with due observance of Islamic criteria and welfare of the country." Therefore, the first part of the article ensures freedom, and the second part surrenders control of the construction of mass media "freedom" in Iran to the country's religious authorities (Papan-Matin, 2014, p.199). Reporters Without Borders (2023) has ranked Iran as the third worst country for press freedom out of 180 countries.

Hashemzadegan and Gholami (2022), in a study conducted on internet censorship in Iran, reiterated that the country is globally recognised as one of the most critical cases of media censorship. Rahimi (2003) argues that the regime in Iran uses the doctrine of the Islamic Revolution regarding its attitude to the internet and

technology, interlinking them with faith. What is more, Talebian (2020) argues that the current Iranian government has a long history of reinforcing laws and regulatory policies which impose limitations on the way individuals and groups are allowed to carry out broadcasting activities, thus supporting the premise that the state heavily controls the media systems in Iran.

In *Comparing Media Systems Beyond the Western World*, Peri (2012) investigates the impact of national security on the formation of Israel's media systems. Peri argues that years of conflict in Israel and the issue of national security have no doubt influenced the development of the country's media system, which does not fit into one of the models offered by Hallin and Mancini (2004). Rahimi (2015, p.361) uses a similar narrative to explain that Iran's post-Revolution media is "securitised" and includes "proactive measures" to what the government believes are adversarial actions by the West. Rahimi argues that Iranian officials use rhetoric and propaganda to establish the West and its allies as "enemies" that plan to undermine the country through "sanctions", "covert activities", and "cultural diffusion".

The Role of Intelligence Agencies in Iran's Media

Rahimi (2015) argues that the media system in Iran is influenced by agencies such as IRIB and the intelligence apparatus, which control state propaganda. It is important to mention the role of the intelligence arm of the Islamic Revolutionary Guard Corps (IRGC) in the censorship of Iran's media. Wehrey, Green and Nichiporuk (2008, p.36-37) argue that within its vast operations, which include enforcing an anti-Western ideology in Iran, the Office of the Representative of the Supreme Leader is tasked with broadcasting the Supreme Leader's agenda and propaganda. The authors provide context regarding the high level of control that the IRGC possesses regarding the formation and structure of the media system in Iran.

Wehrey, Green and Nichiporuk explain that IRIB and the Ministry of Culture and Islamic Guidance have hired former and current IRGC members to cement the ideology of Shia Islam into the fundamental structure of the media in Iran (2008, p.36-37).

Furthermore, Wojcieszak, Nisbet, Kremer, Behrouzian and Glynn (2018, p.70) provide a study on media use in Iran, which was conducted to fill part of the literature gap. They use the term “selectivity in context” to describe the dissemination of news in Iran and the state’s strategy to control the flow of information. As part of this, the press is regulated by the state, journalists are harassed and jailed, and the authoritarian regime uses fear tactics to control the narrative about its legitimacy and to spread propaganda. Any criticism of the government is met with harsh punishment, such as fines, prison sentences and, in some cases, execution (Mubarak, 2024).

This research is relevant as it can provide some context for the next part, which will examine available information on Western and social media behaviour and apply it to a censored media environment like Iran. Wojcieszak, Nisbet, Kremer, Behrouzian, and Glynn (2018, p.72) argue that in countries like Iran, where media freedom is very limited, people are faced with the choice of state-controlled media or international and online media. Given that national media is considered a “mouthpiece” for the regime, independent outlets accessed through satellite television and online serve as Iranians' primary sources of information. Several other studies have been conducted about media control in Iran and are necessary to mention before looking into the available literature on the concept of “diaspora journalism”. Feinstein, Feinstein, Behari and Pavisian (2016), in a study conducted on the activities of Iranian journalists, explain that due to the high degree of

involvement of intelligence organisations in the Iranian press, local journalists are rarely allowed to report on political and sensitive news without supporting the government narrative. The authors provide an insight into the risks of journalism in Iran, which has influenced the media system and resulted in many independent journalists leaving the country, given that they are often persecuted through arrests, intimidation and sometimes death.

Diaspora Journalism

Porlezza and Arafat (2021, p.1867) argue that “diaspora journalism” has a crucial role in countries where conflict and war exist, or journalists cannot safely report independent news. Reporters Without Borders, in its 2023 study on media freedom in Iran, points to the direct control of Supreme Leader Ali Khamenei on the media and the fact that he can order arrests, criminal sentencing and even death penalties for journalists. The Iranian Constitution (1986) press law was amended in 2000 and 2009 to include censorship of online publications. Reporters Without Borders (2023) argue that while Article 24 of the Iranian Constitution guarantees the freedom of the press, the law gives power to the government to punish the media for “offending the clergy and the Supreme Leader”, “endangering the Islamic Republic” or “spread...false information”.

Feinstein, Feinstein, Behari and Pavisian (2016) argue that in this dangerous environment, the formation of diaspora journalism has provided a new source of insight into Iran and a new outlet for the freedom of the press. In the *Handbook of Diasporas, Media, and Culture*, Retis and Tsagarousianou (2019, p.299) provide an overview of research conducted on diasporic media. The authors argue that, in general, elements such as “nostalgia” or “longing for the homeland” have inspired communities to carry out media activities about their country. In the case of Iran,

Hamid Naficy (1993) investigates how diaspora media formed around elements such as religion, national identity, and the Persian language. Naficy argues that “transitional” and “diaspora media” tend to import news material that is produced in their home country, in this case, Iran, and add elements such as other languages and cultures (Karim, 1956, 2003, p. 11). Diaspora journalism or news produced in Farsi outside Iran is a crucial by-product of Iran’s media system. It is often outside of the high levels of censorship and government control. Pahlavi (2015, p.21) argues that Iran’s media system has become a tool for the Iranian regime to expand its ideological ambitions. He points out that little research has been conducted on how what he calls “media diplomacy” has been developed in Iran and the institutions overseeing these decisions. Pahlavi (2015, p.22) offers a historical account of Iran’s media landscape and supports the narrative that the Supreme Leader and the IRGC control Iran’s domestic media. Given this monopoly, the author argues that “public trust” in the media system is very low, which has resulted in the increased demand for news from outside sources. Pahlavi (2015, p.22) argues that “alternative sources” of news that provide a more unbiased account of political, social, or environmental events have become routine for Iranians because of censorship and control by the government. In this context, international media in Iran is highly relevant to a more unbiased and free representation of the news.

Conclusion

This chapter began by introducing the available literature on the study of media systems by scholars such as Hallin and Mancini (2004) and Siebert, Peterson, and Schramm (1956), who established a framework for this study. The main body of research by scholars on media systems focuses on the Western world and democratic countries, which is identified as a limitation. As this dissertation is

focused on Iran, the available literature on the Middle East and Iran media systems was presented to provide context for the following chapters. This section also examined scholarly works on Western media systems and their reactions within authoritarian regimes during protests, such as those in Iran, by providing case studies from countries with similar media censorship structures, including China, North Korea, and several Middle Eastern nations. The literature review on Iran's media system highlights gaps in the exact positioning of Iran within a specific model. In the next chapter, I will outline the role of social media in covering news in Iran, as the levels of state censorship and low levels of public trust in official media mean that social media plays an increasingly important role, especially during times of political turmoil.

Chapter 3- Social Media

Introduction

To understand the increasingly influential role of social media in shaping public discourse, it is important to discuss its relationship with legacy media and its place within media systems. In the previous chapter, existing media systems theories were presented in addition to the authoritarian media structure in which Iran operates. In this chapter, I will look at available research on the evolving influence of social media and how it distorts the principles of media systems theory. As the next chapter will focus on framing theory and Entman's (2003) cascading activation model, it is important to understand the theoretical framework behind social media to analyse later its impact on how frames flow inside and outside Iran's censored structure.

Scholars have provided various definitions for social media, which point to it as a set of tools that facilitate communication and access to information. Carr and Hayes (2014) argue that given the lack of one standard definition for social media, it would be more beneficial to scholarship to add to the understanding of how it shapes narratives that ultimately turn into news. Bennett and Iyengar (2009) argue that with the arrival of social media platforms, there is a need to re-evaluate the mainstream media's monopoly in shaping public discourse. Social media has created a space for journalists to engage with the public and question narratives put forward by politicians and leaders. Given social media's public and interactive nature, research shows that opinions on platforms endow journalists with a unique tool to investigate public debate and influence discourse regarding events happening worldwide (McGregor, 2019; Bas, Ogan and Varol, 2022). This argument is relevant for

examining how social media is used as a tool for signalling stories to international media in censored media structures such as Iran's.

Mancini (2020) argues that social media has distorted the theoretical concept of media systems and has provided a new framework for scholars to examine communication between different actors. Mancini contends that in the digital age, researchers are changing how they analyse media systems, which traditionally focus on the state, the mainstream media, and public institutions. He believes that with social media, more researchers are moving towards analysing individual users and members of the public, such as academics, activists and scientists. Furthermore, Mancini argues that until the development of social media, the state played a fundamental role in shaping the structure of a country's media system. However, since the development of social media, the state's role has become less clear and less pivotal in the character of a country's media system. Clear boundaries and lines of influence between government policy and political parties and the function of a country's media and news consumption have become blurred and increasingly complicated. In explaining the relationship between legacy media and social media, Chadwick (2013, 2017) argues that the latter carries an element of immediacy, reshaping the top-to-bottom power structure from which information emerges. This understanding is relevant to this project when later analysing the influence of social media in the flow of frames inside and outside of Iran regarding how news is disseminated.

To demonstrate its role in Iran, this chapter will provide an overview of the existing literature on social media in authoritarian regimes with a controlled mainstream media and whether it has managed to counter some of the repression of news by creating a more textured media landscape. Before narrowing the scope of

this research to Iran, this section will explore the literature available on the influence of social media in several countries with media systems that operate under authoritarian regimes. Given that this project will be looking at the flow of messages within and between different media systems and social media in the context of Iran, it is important to examine the research conducted on how various actors use social media as a tool to shape narratives.

Social media and opposition narratives

This section will provide an overview of how social media is used to circulate opposition narratives in countries with authoritarian regimes. The scholarly research on the subject will provide the theoretical basis for the subsequent analysis of social media frames regarding Iran and its environmental news, which will be conducted in this dissertation. Aslan (2022) studied the use of social media by opposition groups in Egypt in 2011 and argued that new technologies have impacted how people communicate, allowing the freedom of expression that challenges and threatens autocratic states. Regarding social media scholarship in authoritarian regimes, Mubarak (2024) believes it has become a tool for facilitating information on anti-regime sentiment and democratisation. However, another school of thought belongs to scholars who argue that authoritarian governments routinely use social media to monitor dissent and suppress the opposition, ultimately adding to the regime's longevity. This will be discussed further when addressing research on the dual nature of social media and its potential for allowing autocratic governments to use it for surveillance and spying (Gunitsky, 2015).

To demonstrate how social media is used to spread opposition narratives, Aslan (2022) examines its role in the Egyptian uprising in 2011, where people used it as the primary tool for monitoring protests, ultimately contributing to President Hosni

Mubarak's resignation. Aslan argues that during unrest and political turmoil, autocratic regimes, such as the one in Egypt at the time, often restrict the use of the internet and social media to control the narrative and flow of information to the public. As he points out, this tactic failed in Egypt as people found methods such as using Virtual Private Networks (VPNs) to circumvent the censorship and managed to stay informed regarding the protests. VPNs are technologies that increase online privacy and anonymity, and they are primarily used in countries under authoritarian regimes with high internet censorship. In the Islamic Republic of Iran, where the use of social media platforms such as Facebook, Twitter (X), and YouTube are banned, Iranians have become accustomed to using VPNs to access these technologies and communicate during times of unrest (Wulf, Randall, Aal and Rohde (2022). In Iran, scholars often describe a “cat and mouse game” between the government and the people regarding social media and communication platforms (Ahmad, 2022). To explain this, Kargar and McManamen (2018) examine the case of the popular application Telegram, which was used by more than 40 million Iranians in 2018 and was banned by the authorities to suppress the flow of information. The authors argue that people in Iran have become savvy in finding circumvention tools such as VPNs to counter restrictions on social media. Following the Telegram ban in 2018, Kargar and McManamen argue that VPNs experienced one of the highest usages among people, allowing them to access the platform despite the restrictions in place by the government. This research explains how people in Iran use social media to share opposition narratives in a system where the government blocks most platforms.

The previous chapter discussed that the public has little trust in mainstream media in Iran and, therefore, often uses social media to express their frustrations towards the government and its policies (Kuman, 2022). To conceptualise this,

Ruijgrok (2021) looks at the role of the internet in creating anti-government sentiment in 21 authoritarian regimes, including Belarus, Kazakhstan and Libya, from 2010 to 2015. Ruijgrok's study contributes to the literature by arguing that social media was used to generate anti-regime sentiments during unrest despite censorship and control implemented by these governments. This task was achieved through activists and opposition networks that revealed the abuse of power carried out by these governments and exposed people to information unavailable within the mainstream news. Scholars argue that alternative information channels on social media allow people living in autocratic states to compare their country to countries under democratic systems and share their opposition narratives online (Bailard, 2014; Ruijgrok, 2021).

Ruijgrok's study finds that even though social media platforms may not have directly affected the instigation of anti-government protests in the 21 countries, they allowed citizens to share information that ultimately undermined those in power. The author focuses on the case of Malaysia under the Barisan Nasional (BN) regime to demonstrate the impact of the internet in creating anti-regime views amongst the public. Ruijgrok argues that the BN regime had underestimated the power of digital technologies in shaping public opinion and, therefore, did not commit to censorship until 2007, when anti-government protests took place in Malaysia. The author contends that despite censorship, the BN regime faced challenges in controlling the flow of information after 2007 until the government led by Razak lost the election in 2018, ending the regime's long reign. Ruijgrok argues that while social media has not been identified as causing the regime's fall, it did provide the public with opposition narratives, which helped generate an adversarial position regarding the BN leadership amongst the public.

Furthermore, Rod and Weidmann (2015) argue that authoritarian states consider social media a threat, given its potential for mass communication and the circulation of ideas by political oppositions, including those outside the country. Rod and Weidmann use Saudi Arabia as another example to demonstrate the position of authoritarian regimes on online communication that questions the regime's legitimacy and advocates for democracy. The authors contend that the Saudi Kingdom exploits the internet and social media to monitor and intimidate dissidents to suppress any action that would threaten their power, which is a tactic also used in the Islamic Republic of Iran. Aslan (2022) finds that governments respond to this threat by filtering and banning social media platforms and shutting down the internet, which is relevant to this project as this is a routine practice by the authorities in Iran.

To provide context, a Carnegie Endowment for International Peace study examines how Saudi Arabia repurposed technologies and social media platforms originally designed to facilitate communication and converted them into tools for intimidation and surveillance. Jones (2023) provides the example of Mohammed Bin Salman (MBS), the Crown Prince of Saudi Arabia, showing that totalitarian leaders use social media to spy on people who question their power. In 2018, the iPhone of Amazon's Chief Executive, Jeff Bezos, who also owns *The Washington Post*, was hacked by a WhatsApp account belonging to MBS. A *New York Times* article contended that MBS was using surveillance to gain access to *The Washington Post*, which was the employer of Jamal Khashoggi, a dissident journalist who was writing critical articles about the Royal Family in Saudi Arabia (Frenkel, 2020). Abrahams and Leber (2020) add to the literature by looking at the influence of social media in shaping public opinion in the aftermath of Jamal Khashoggi, who was killed in the Saudi Arabian embassy in Turkey in 2018. The authors provide insight into how

social media, particularly Twitter (X), shaped narratives about the killing. Abrahams and Leber examined the conversation on social media hours after the journalist disappeared and found that an immediate political discourse occurred through hundreds of thousands of Twitter accounts. The narrative shared on social media by opposition groups, journalists, and activists said that the Kingdom and particularly MBS ordered the death of Jamal Khashoggi, which helped shape discourse on the subject. Abrahams and Leber (2020) argue that social media can help establish a narrative regarding specific events and, therefore, has a role in shaping public opinion, such as in the case of Saudi Arabia. This understanding is relevant to this project as it provides the framework for later analysing how opposition groups use social media to disseminate criticism regarding the government's environmental policies in Iran.

There has been a great deal of research conducted on the influence of social media during the Arab Spring in the Middle Eastern and North African (MENA) countries, which contributes to how it is used to spread opposition narratives in times of political turmoil (Comunello and Anzera, 2012). The scholarship provides a framework for analysing the influence of social media in the development of anti-regime discourse in times of unrest, which can be applied to Iran and the 2021 water protests in the following chapters. Comunello and Anzera (2012) argue that opposition groups used social media to express criticisms and provide information picked up by Western media that influenced coverage of the unrest. The authors identify three ways social media impacted discourse regarding the events in the Arab Spring: its contribution to the organisation of protests, the spread of information, and assistance in grassroots journalism. Comunello and Anzera also add to the literature by providing a contesting viewpoint in which they argue that the role of social media

has been questioned by scholars who believe that it can be used as a tool for secret services and intelligence officials to carry out surveillance on their people, which will be discussed in more detail further in the chapter given its relevance to Iran (Comunello and Anzera, 2012, p.453). The authors contend that when confronted with complex situations such as protests and unrest (Arab Spring), the role of social media should not be over-emphasised nor trivialised depending on many different aspects at play. Kadivar (2015) and Shirky (2011) add to this understanding by arguing that a country's media structure, politics, ideology, and freedom of the press are instrumental in determining social media's level of influence. Kadivar argues that in authoritarian regimes such as Iran's, opposition narratives on social media are not shared as freely as in democratic countries due to fear of punishment and intimidation by authorities. This topic will be discussed in more detail in the next chapters.

To offer more context, Breuer (2016) explores how social media helped shape the narrative on protests in the case of the 2011 Tunisian Revolution. The author argues that a network of educated elites and rural and urban populations who collectively acted against the authoritarian government using social media and information technology was formed. Using evidence and surveys from the Tunisian "digital elite", Breuer (2016, p. 111) found that social media allowed these actors to facilitate the flow of information and circumvent the national internet shutdowns. In the case of Tunisia, the author (p. 128) found three ways social media helped collaboration amongst the opposition group: network formation, information transmission and collective identity formation. Through surveys taken from the public in the wake of the fall of the Ben Ali government in Tunisia in 2011, Breuer found that social media had an active role in providing information about the locations of anti-

government protests in various cities. The study argues that witnessing images and videos of large demonstrations on social media by opposition groups instilled a sense of bravery in the people, urging them to attend protests. Kumar (2022) argues that sharing videos and images on social media platforms, typically on Instagram, has gained massive popularity among Iranians. The author contends that while Instagram is considered a non-political platform, in Iran, opposition groups and journalists use it to share powerful images that invoke reactions from the public. Until 2022, Instagram was one of the only global platforms that the government did not ban before the 'Woman, Life, Freedom' movement began after the death of Mahsa Amini, a young Kurdish woman who died while in the custody of morality police (Mubarak, 2024). Although Instagram is not examined in this dissertation, this understanding is relevant, as it will allow a later analysis of the role of social media in sharing opposition narratives regarding Iran's environmental news.

Gainous, Wagner, and Ziegler (2017, p.209) argue that leaders of autocratic countries consider social media that criticises the government in power and spreads information about democracy as "suspicious". Looking into the case of Russia in its 2011 and 2016 Duma elections, the authors add to the literature regarding the role of digital media and opposition narratives. The authors argue that in Russia, the government uses the ownership of domestic social media platforms, including VKontakte, Odnoklassniki, and LiveJournal, to control dissidents and activists through oligarchs who usually have close relationships with the state. Gainous, Wagner, and Ziegler (217, p.220) contend that social media platforms such as Facebook, Twitter (X) and Google are often perceived by leaders such as Vladimir Putin as a "strategy" used by the United States (US) and the CIA to "undermine" Russian sovereignty. This understanding is relevant and applicable to the case of

Iran, where those in power, such as the Supreme Leader (Ayatollah Khamenei), have often deemed social media as Western infiltration. Intelligence units in Iran have used social media to capture and arrest activists during various times of unrest, which will be discussed further in the chapter.

Social media as a tool for activists

Scholars argue that one of the features of social media is its ability to provide activists with a platform to gain the public's attention to social and political issues. Ofori-Parku and Mascato (2018) contend that activists relay the frustrations and demands of a community regarding a specific problem by creating hashtags on social media. From #MeToo to #BlackLivesMatter to #WomanLifeFreedom, hashtags on social media have supported movements that have influenced public discourse and media coverage worldwide. Hashtags are words or phrases that speak to a political or social issue that activists use to connect with the public and signal news to the media (Papacharissi, 2015). The conceptualisation of this assessment is relevant to this project for later analysing how hashtag activism contributes to the flow of information inside and outside Iran's authoritarian media structure. Journalists often search for popular hashtags to find stories and refer to narratives shared by activists on platforms such as Twitter (X) and Instagram (Jackson, Bailey, Welles, and Lauren, 2020).

A study conducted by the Reuters Institute and the University of Oxford on the widespread protests that began after Mahsa Amini's death examines how activists use social media to attract global attention. This research is relevant to this dissertation as it adds to the understanding of the power of social media in contemporary Iran in instigating debate over political and social issues. Kumar (2022) points to #MahsaAmini, which began on social media and became the symbol

of the Iranian uprising against the brutality of the Islamic Republic and their treatment of women in 2022. Activists and opposition groups inside and outside of Iran used #MahsaAmini to shed light on the decades of oppression enforced on women by the authorities in Iran. The hashtag has become the icon of the injustice endured by the people of Iran, with activists using it under Twitter and Instagram posts that speak to various injustices by the government, such as executions, arrests, environmental degradation, and mistreatment of women (Kermani, 2023).

Hashtag activism in Iran has a history of creating discussion and bringing movements to light for the international audience. Basmechi, Barnes and Heydari (2022) argue that between 2015 and 2019, a hashtag created by a group of activists, My Stealthy Freedom, that called for the removal of the mandatory hijab law, managed to gain global attention regarding the plight of women in Iran. The authors contend that even though the hashtag, which turned into a movement online against the forced hijab, didn't change any regulations in place by the government, it was the main factor behind the growth and emergence of the movement, which Western media have extensively covered. The authors argue that this is an example of innovative hashtags which evoke public reaction and manage to mobilise support. Scholars argue that in authoritarian regimes, social media provides marginalised voices to participate in online movements instigated by activists, and tactical hashtags play an important role in the discourse (Barnett, 1997; Basmechi, Barnes and Heydari, 2022).

In China, a country with strict state control on legacy media, Liao (2019) argues that activists used social media to share information on the topic of homosexuality and LGBTQ rights. The author contends that in China, where homosexuality is condemned, the #IAmGay circulated on social media managed to

raise awareness and challenge the government. This research contributes to the literature by highlighting the role of digital activism when confronted with a censored media system such as Iran's, which does not allow information to flow freely. This dissertation will examine hashtags associated with the water protests in social media texts and will include their use in the discussion later.

The two-way nature of social media

This section will examine the existing literature on the dual nature of social media. While social media can be used as a tool for opposition groups to share narratives and signal news to the media, it can also be used by governments to spread false narratives and spy on their people. This dissertation looks at the role of social media in frame flows inside and outside of Iran, and this section will help set the framework for later analysis of how the authorities used Twitter (X) to spread narratives regarding the water protests. Earlier in the chapter, it was discussed that social media can be a platform for activists and opposition groups to influence public discourse. This section will focus on research on how governments use social media in authoritarian regimes.

Much has been written about the benefits of social media for opposition groups, less so on the opportunities it provides for authoritarian regimes to harass and spy on their citizens. This section is relevant to this study as it explains how these tactics influence the spread of frames on social media in Iran and cause users to self-censor information. Pearce (2014) investigates how authoritarian governments perform a balancing act regulating social media that minimises its use by activists and maximises its potential for its purposes. While Pearce looks at the case of Azerbaijan, the research is relevant to the case of Iran as it demonstrates the surveillance tactics used by autocratic systems. Pearce (2014, p.40) argues that in

Azerbaijan, an authoritarian country, the government uses psychological techniques to establish an “environment of self-censorship” by punishing online dissent and monitoring activities. The author argues that people's behaviour is impacted by knowing they will be penalised for posting opposition narratives on social media. Parks and Mukherjee (2017) argue that self-censorship occurs on social media when an individual prohibits posting content that may arouse controversy or bring negative attention to them. In authoritarian regimes, individuals also fear for their safety and security, as governments have been known to arrest and kill people who post opposition narratives on social media (Dagres, 2022).

One notable example is the case of Rouhollah Zam, an Iranian dissident journalist who created the Telegram channel *Amadnews*, which had 1.4 million followers and played a significant role in disseminating information to the public during the 2017-2018 economic protests (Amnesty International, 2020). Zam was born into a religious and clerical family with ties to the political elite in Iran; however, he became an outspoken critic of the Iranian regime and moved to France to live in exile. In 2019, Zam was lured to Iraq from France by Iranian intelligence agents who carried out a sting operation, convincing him that he was going to meet Ayatollah Ali al-Sistani, a prominent Shi leader and rival of Iran’s Supreme Leader Ayatollah Khamenei. Zam was captured near Baghdad and deported to Iran, where he was arrested by the Islamic Revolutionary Guard Corps (IRGC) and charged with spreading propaganda and “corruption on earth”, a crime that is punishable by death under Iran’s Islamic law. The judicial system in Iran uses this term to charge people for activities ranging from posting anti-regime sentiment online, composing anti-regime lyrics, and protesting (Yazdani, Ahmari, and Rajaa Por, 2022). Zam was executed in 2020 in Iran, raising concerns about the lengths to which the Iranian

government would go to silence dissident voices, especially those who use digital platforms to organise protests and communicate with the public (European External Action Service, 2023).

El-Nawawy and Khamis (2020) argue that in regions such as the Middle East, where most countries have experienced long periods of dictatorships, there is a higher chance of social media being used as a tool for governments to crack down on dissent. In the case of Iran, it is important to discuss the restrictions set by the authorities regarding social media. Research by the Atlantic Council (2022) provides a contemporary understanding of Iran's social media landscape. The study uses recent data from the World Bank to demonstrate that out of the population of 83 million, more than 57 million people are internet users. The study highlights that over 70 per cent of internet access is used for social media platforms and communication applications. Taking into consideration these high numbers, Dagres (2022, p.21) argues that the Islamic Republic performs many censorship tactics to restrict the use of social media, such as blocking the most popular applications (Facebook, X, Signal, YouTube, and Telegram) in addition to shutting the internet down during times of unrest. The study points out that during political tension, the government has also blocked WhatsApp and Instagram, the only applications usually accessible without connecting to circumvention tools such as VPNs. Bossetta (2018) argues that another more sophisticated tactic is used by Iran's Islamic Revolutionary Guard Corps (IRGC), who use fake accounts to target dissidents and journalists. Bossetta argues that the IRGC has often created fake accounts and contacted individuals posing as journalists or members of academia to gather information and create court cases on accusations of espionage. Dagres (2022) argues that a high number of arrests that have taken place in Iran in recent years have been directly linked to the

use of social media, with authorities charging Iranians with crimes such as blasphemy, insulting the Supreme Leader, and threatening national security. Some of these charges are punishable by death. The Supreme Leader of Iran, Ayatollah Khamenei, has declared on numerous occasions that social media is a forum for promoting anti-Islamic thoughts and that participants should be put to justice. In Iran, the Center for Investigation of Organised Crime, a branch of the IRGC, oversees monitoring and surveillance that searches for examples of immorality, such as defying hijab rules (Sharafedin, 2016). Cracking down on social media is practised routinely, and the consequences for people could range from the closing of accounts, intimidation, arrests, and executions, depending on the charge given by the judiciary. During the Green Revolution in 2009 and the Mahsa Amini protests in 2022, thousands of arrests and convictions were recorded by human rights organisations as the courts used posts from social media as evidence of crimes committed by individuals (Dagres, 2022).

Kermani (2023) argues that the current social media climate after the Mahsa Amini protests can be explained through what is now called “Persian Twitter” and the regime’s “cyber army”. Lukich (2011) argues that the Iranian Cyber Army is comprised of a hacking group that is connected to the regime, which has pledged loyalty to the Supreme Leader (Ayatollah Khamenei) and uses various methods to intimidate users. In the case of the Mahsa Amini protests, the regime’s cyber army has used reputational sabotage, bullying, sexual abuse and death threats to stop journalists, activists, and political opposition from spreading negative information about the government. A study conducted by the Middle East Institute examines the cyber role of the IRGC and argues that it is the main body in Iran controlling people's online activities. Shample (2020) contends that the IRGC and the Ministry of

Intelligence and Security (MOIS) use surveillance to monitor online communications and suppress any activity that threatens the system. The study finds that over the past decade, the IRGC created made-up names to catfish people through platforms such as Facebook, Twitter, YouTube, and Google. Knafo (2021, p.729) defines catfishing as “the adaptation of a false online identity for trickery”. Shample (2020) argues that the IRGC increased and invested in cyber capabilities after the 2009 Green Movement, where people used communication and social media platforms to share information on protests.

Social media and protests in Iran

To provide a comprehensive body of research on the influence of social media in Iran, it is pertinent to include the scholarly work conducted on its role in widespread anti-government protests. El-Nawawy and Khamis (2020) consider the Green Revolution in 2009 a significant benchmark. The Green Movement that took place nationwide resulted from what the majority believed to be a rigged Presidential election, which brought Mahmoud Ahmadinejad his second term in power in 2009. The process resulted in one of the most prolonged and widespread anti-government uprisings since the Islamic Revolution of 1979, with one of the harshest crackdowns by security forces on protestors (Pourmokhtari, 2021). It was during the Green Movement when the international community became aware of the extent of the brutality of the Iranian regime when the image of a young woman, Neda Agha Soltan, who was killed by security forces, went viral on social media.

Mortensen (2011) argues that powerful images online, such as the one posted showing Neda Agha Soltan, significantly impact the coverage of political unrest by international media. The author discusses the challenges Western media face when confronted with an image or footage that has been provided through non-

professional journalism, such as the one taken of Neda Agha Soltan, a 26-year-old female who was shot and killed. Mortensen (2011, p.6) argues that regarding this case, international and opposition media took on the strategy of “publish first” and “validate later” when deciding to broadcast the footage of Neda Agha Soltan in a large pool of blood. The author argues that international media, which often don’t have much access to countries like Iran, monitor and follow social media platforms and encourage locals to share images and posts that they have seen with their own eyes. Knight (2012) argues that once the video of Neda Agha Soltan was uploaded to YouTube by a friend, the international media picked up the story and published it. The author contends that in the case of the Green Movement, journalists relied on social media for information they could not gather using traditional methods such as contacting sources by phone.

Morozov (2009) argues that Western media that operate in most other countries are banned in Iran, and news organisations often don’t have the budget and/or are reluctant for safety reasons to employ journalists on the ground. There are only a few outlets, such as Al Jazeera and The Financial Times, with correspondents in Iran, given the dangers international journalists face, such as arrests while reporting from inside the country. Most news agencies, such as Reuters and The Associated Press, have offices in the Middle East and report on Iran from outside the country. The Washington Post, for example, was forced to exit their Iran bureau chief, Jason Rezaian, after he was jailed on espionage charges in 2014 and released in 2016 (Rezaian, 2020).

In the case of the Green Movement, Kadivar (2015, p.182) analyses the role of social media and finds that most of the messaging on Twitter and Facebook came from opposition groups outside of the country. This understanding is relevant as it

adds to the importance of social media in providing opportunities for opposition narratives to be shared. Given that IRIB (state media) had banned or silenced most of the independent news regarding the Green Movement, people on the ground acted as “citizen journalists” and recorded videos and images to send to the international media abroad, such as the case of Neda Agha Soltan’s death after she was shot by security guards (Mortensen, 2011).

Elson, Yeung, and Roshan (p.11, 2012) argue that after 2009, social media became a tool for “spreading information, organising demonstrations, conducting surveillance, and swaying public opinion”. The role of social media in creating news frames was witnessed in another mass protest in Iran in 2018 over bad economic conditions. Rahbarqazi and Noei Baghban (2019) argue that posting news and information about demonstrations can encourage people to participate in higher numbers and increase political discussions, which was the case in 2018. During these protests, social media became the forum for opposition groups and the media to spread information, which is a finding that is relevant to this study and examining where news frames emerge from.

To demonstrate the growing power of social media in contemporary Iran, it is necessary to examine the literature available on recent political events. In a study conducted on internet repression after the death of Mahsa Amini, Kermani (2023) argues that protests in Iran are happening as much online as they are on the ground, with social media playing a vital role in the flow of information. Campbell (2023) contends that the Mahsa Amini protests in 2022, primarily driven by women who used platforms such as TikTok and Instagram to defy the mandatory headscarf, launched a new surveillance phase by the authorities. The author finds that the IRGC uses methods to identify dissent on social media using tools such as facial

recognition technology, which adds to the literature regarding the manipulation of social media by authoritarian governments, which was explained earlier in the chapter. Kermani's research shows, however, that Iranians have become sophisticated in identifying manipulation tactics by the government to suppress or spread false information. For example, if accounts contact them with few followers and fake profile pictures, people tend not to respond and block the respective accounts (Dagres, 2022). Kermani argues that Iranians have also realised that social media profiles belonging to individuals spreading pro-government narratives are owned mainly by the IRGC and other intelligence units.

Balan (2024) also explores how social media influences the traditional protest paradigm, demonstrating that while mainstream media often delegitimise protests by emphasising conflict and spectacle, digital platforms can present legitimising and delegitimising frames. The scholarly literature in this section is relevant to this project as it provides the groundwork for analysing the role of social media in international and local media coverage of Iran's environmental news. About the specific case study of this dissertation, the 2021 water protests, understanding the powerful role of social media in the flow of information is essential.

Conclusion

This chapter examines the available literature on the role of social media in disseminating news in authoritarian regimes, particularly Iran. Various sections looked at how social media is used as a tool by activists and opposition groups to share narratives that impact public discourse inside and outside of censored media systems such as Iran's. In this chapter, scholars argue that the flow of information in social media differs from that in legacy media systems, allowing the public and opposition groups to interact with journalists and signal stories. This chapter also

discusses the double-edged nature of social media and its ability to be used by opposition groups to share narratives and authoritarian regimes to use it for their purposes, such as surveillance. During political turmoil and unrest, it has been argued that social media plays a crucial role in impacting media coverage and providing journalists with an alternative source of information regarding countries with authoritarian regimes. While this chapter identifies research gaps regarding social media's role in disseminating Iran's environmental news, scholars argue that social media is important in educating people on environmental matters in Iran. Iranian environmental scientists and expatriates use Instagram, Twitter (X), and Telegram to inform the people in Iran about climate change and environmental degradation. These platforms are the forum for discussion and information regarding the latest conditions of drying lakes, pollution, and the country's wildlife (Zobeidi, Komendantova, and Yazdanpanah, 2022). The 2021 water protests and Iran's ongoing environmental degradation have engaged the attention of mainstream news on social media both locally and internationally. However, there is a research gap regarding the role of social media in framing Iran's environmental news specifically, which this dissertation aims to address. Given that this project will examine the cascading frames and how narratives evolve within and outside Iran, the next chapter will focus on framing theory and Entman's (2003) cascading activation model.

Chapter 4- Framing Theory

Introduction:

In the previous chapter, I discussed social media's role in influencing discourse within an authoritarian regime. The aim was to give an overview of how opposition narratives and political discussions are spread through social media in a censored system like Iran's. In this chapter, I look at the origins of framing theory before focusing on Entman's (2003) cascading activation model. Subsequently, I demonstrate how information regarding Iran's environmental news flows within a hierarchical system. The first part provides an overview of the existing literature on the cascading activation model to show why it has been selected to analyse the flow of media frames coming in and out of Iran. Amongst various media theories, the cascading model has been chosen as the best framework for structuring this thesis. This is because the study plans to discover how news stories regarding Iran's environment flow between frame originators both inside and outside an authoritarian regime and media system.

Entman's cascading model proves the best theoretical means for carrying out this task as it can demonstrate where frames derive from Iran's environmental news locally and internationally. This is important as it will later add to the knowledge of where Iranians get their information about the country's environmental problems. In the last section, I discuss developments in the literature regarding Entman's model and how it has been applied to scholarly investigations into social media in the digital age. The literature review provides the framework for analysing the flow of messages in Iran's authoritarian media system in the empirical section. The research questions will be provided at the end of this chapter and will be reiterated in the methods

chapter. The next chapter will demonstrate which methods will be used to answer the research questions asked in this project.

Origins of Framing Theory

Goffman's *Frame Analysis* (1974) is widely accepted amongst media scholars as the founding authority on framing theory. In his work, Goffman analyses how communication between individuals can be interpreted. He argues that people perceive the social interactions and events around them through frames. Goffman uses the idea of frames to explain why people are prone to interpreting a specific event in a certain way and how its interpretation gives the event meaning. Goffman defines frames as mental structures or schemas that help shape how people interpret information around them. Goffman's ideas on frames were preceded by the work of Bateson, who defined the concept of framing in *A Theory of Play and Fantasy* (1955) and, subsequently, *Steps to an Ecology of Mind* (1972). As part of his analysis, Bateson develops several terms to describe human communication's complexities, with 'frames' being one of them. In *A Theory of Play and Fantasy*, Bateson uses the analogy of picture frames as borders that distinguish a painting from its background and how frames are designed to point the viewer to a particular interpretation (Jorgenson and Steier, 2013). Bateson (1972, p. 197) defines frames as "spatial and temporary bounding of set of interactive messages that operate as a form of metacommunications".

Bateson's original conceptualisation of framing was developed by Goffman (1974), whose definition of framing is well-established in the context of mass media studies. From the 1970s onwards, Bateson's psychological understanding of framing transitioned into the field of sociology through Goffman's work. Goffman advocated a sociological perspective applied in communication studies based on conceptualising

a frame as a social framework and mental schema that permits users to compartmentalise their experiences (Ardevol-Abreu, 2015). Goffman's analysis of framing suggested that, out of many possible interpretations, human beings ascribe a preferred meaning to their experiences. He argues that through frames of understanding and classifying meaning, humans can make sense of any social situation (Goffman, 1974). This conceptualisation of framing became a useful analytical tool for unpacking journalistic messages based on the acknowledged role of the media, which has the power to create and change social frameworks of interpretation through specific discourses (Ardevol-Abreu, 2015). Thus, in the context of how media can affect discourse, framing theory has become a multidisciplinary model that allows the examination of how individuals and societies perceive events and subjects. For example, Tuchman (1978) conceptualises the news as a window bordered by a frame that limits the understanding of reality by narrowing the perception of different options of reality and only focusing on a particular aspect of the story. Additionally, Ardevol-Abreu (2015) argues that news messages are visual and textual constructs created around a central thought by media professionals, who provide the framework through which their audience views current events. While most framing research focuses on textual news, scholars argue that visual news can elicit immediate emotional responses and influence how a person perceives a story through images (Zhang & Hellmueller, 2017).

Developing framing theory

Entman, who further developed the concept of frames as mass media effects in 1993, contributed significantly to framing theory. This section first provides an overview of some of Entman's work on framing and then focuses on the cascading activation model. The cascading model provides the theoretical basis for this

dissertation, which analyses the flow of news frames in and out of Iran's power structure and media system.

Since the early 1990s, Entman's research has helped explain the relationship between the media and politics. Entman (1991) examines how the US media framed two similar incidents of commercial planes shot down by two different countries. The first pertained to the shooting down of a Korean Air Lines plane by the Soviet Union in 1983, and the second concerned the 1988 shooting down of an Iranian airline by the United States. Entman (1991) suggests that contesting frames become apparent by comparing the frames used by several US media outlets. Specifically, he found that the frames used to spread the Korean Air Lines narrative were more accusatory of the Soviet Union and swayed the reader to blame the country that shot down the plane. However, in the Iran Air flight story, because the United States was responsible for shooting the plane down, Entman (1991) shows that the frames were more forgiving of the United States and drew the audience's attention to technical issues with the plane itself. His paper provides a practical understanding of how frames can be identified via comparative analyses. Comparative analyses help to show how the media framing of stories serves the purpose of establishing a specific interpretation of a given narrative (Entman, 1991).

Entman (1991, p.7) also discusses news frames and suggests they have two levels: "mentally stored principles for information processing" and "characteristics of news text". He uses the Cold War to illustrate the "mentally stored principles for information" levels and explains how the framing of this event has affected international affairs. Entman argues that the Cold War was repeatedly framed as depicting the West and capitalism as good and the East and communism as bad. He argues that this pro-western media narrative influenced how the public perceived the

Cold War. Entman believes that frames are diagrams that help people process information. Further, he provides insight into how frames can be identified as part of news narratives and how they intentionally influence readers' perceptions and ways of thinking about the news (Entman, 1991). For example, elements such as keywords, images, and concepts ultimately construct news frames, which can be identified in the narrative regarding the number of times a particular word is repeated (Entman, 1991).

Building on his previous work in 1993, Entman's paper *Framing: Towards Clarification of a Fractured Paradigm* highlights the existing gaps in communication as a discipline. In the paper, he provides a new analytical lens and draws attention to the lack of a robust definition of framing theory within the existing literature. Entman argues that although framing theory has gained traction in the humanities and social sciences, those disciplines cannot best explain how frames are created and interpreted. Such disciplines were also limited in describing how frames impact the thinking process. In a subsequent paper, Entman (1996, p. 78) argues that "a frame operates to select and highlight some feature of reality and obscure others in a way that tells a consistent story about problems, their causes, moral implications, and remedies". Although many broad definitions of framing have been used across the social sciences, this thesis specifically uses framing theory as applied to the context of mass communication. This dual ability of framing to highlight and obscure features of specific events and how media uses it regarding Iran news provides the conceptual lens of this research.

In his paper, *Framing Public Life* (2006), Entman examines the 'coming of age' of framing as an established and prominent research tool for comprehending and evaluating the impacts of mass communication and politics. In the study,

Entman uses framing to facilitate the understanding of the relationships among the media, public opinion, and politics. However, Entman then provides a more refined sense of framing theory in his 2010 paper, *Media Framing Biases and Political Power*, by clarifying various aspects of framing theory. In the paper, he explains that although principles of Western journalism appear to favour unbiased coverage, framing often highlights one side more than the other. Further, Entman claims that prejudicial framing results from the “interaction of real-world developments, cultural norms, and journalistic decision rules with the sometimes proficient and other times maladroit efforts of competing elites to manage the news” (Entman, 2010, p. 389). In other words, while journalists champion objectivity as a rule, many factors influence their work and undermine this professional aspiration. Ownership of media organisations, the system of government, editorial concerns and political biases are examples of elements which can influence a journalist’s objectivity when writing a story.

Political and media framing is a theme that Entman developed in several studies to show the symbiotic relationship between the two. In *Media, power, and US Foreign Policy* (Aday, Entman and Livingston, 2012), the authors examine the role of the media in shaping US foreign policy, specifically regarding military decisions. The article finds that the average US citizen obtains their information, both during times of war and peace, from the national media. Hence, US citizens form their views and opinions about US wars in foreign lands, such as Iraq or Afghanistan, based on what they see on the national news. Relying on such media may culminate in an information gap, as traditionally, journalists rely on official sources for their information on current events, which may be underpinned by governmental biases (Aday, Entman and Livingston, 2012) and promote specific interpretations of political

issues (Shah et al., 2002). This influence on journalists, particularly those working in authoritarian countries where freedom of speech is restricted, is an essential feature of the farming theory that is used in this analysis of Iran's censored media system.

The Cascading Activation Model

In a defining study that uses US President Bush's framing of the September 11 attacks in 2001, Entman (2003) advances the understanding of framing by introducing the cascading activation model. This model describes the relationship between the government and the frames used by the media. Through his analysis of the frames used by President Bush after the 9/11 attacks, Entman's (2003) model offers a novel and nuanced insight into the relationship between the media and government regarding US foreign policymaking. The media adopted the frames, which ultimately dominated the news, with slogans such as "war against terror" and "axis of evil". Entman's (2003, p.14) model uses an indexing approach to explain "how interpretive frames activate and spread from the top level of a stratified system (the White House) to the network of non-administration elites such as congress members and staffers, and on to news organisations, their texts, and the public, and how interpretations feedback from lower to higher level".

To show how the cascading model works, Entman uses the work of journalists Seymour Hersh and Thomas Friedman as a case study. The journalists were framing their coverage of the September 11 terrorist attacks to challenge the dominant frames used by the government and most of the media. Hersh and Friedman tried shifting the narrative and moving the public's attention away from Afghanistan to Saudi Arabia. However, Entman (2003) argues that, ultimately, the media coverage remained within the conventional boundaries and the initial frame. Nevertheless, Entman suggests that within the traditional boundaries, the media sometimes

diverges from frames, and this divergence can be identified using the cascading activation model. He believes that to challenge political frames, “elite discord” is a prerequisite, and the concept creates opportunities for journalists to hinder or advance the administration’s narrative. This process can be identified using the cascading activation model (Entman, 2003).

The cascading model adds to framing theory by showing how interpretive frames originate from the government at the top, via news organisations, to actors at the bottom. It also explains how the perceptions of actors in the lower levels feedback to those at the top and how frames can spread across different political actors. For example, the head of state or the administration usually has the most power to spread frames to the media; however, other actors, such as the administrative branch, also have significant power to spread frames based on their interests (Handley, 2010). Scholars across various disciplines have used the cascading activation model to show how frames can be spread through different political and media systems. Handley (2010), for example, also applies the model to demonstrate how frames competed in the aftermath of the September 11 attacks about establishing Israel as either an ally of or a liability to the United States (Handley, 2010).

Rowling, Gilmore and Sheets (2015) argue that officials can influence how the public perceives, interprets, and reacts to an event or issue through framing their communication. The authors also use the example of the US war in Afghanistan to show that the public’s perception of the war was influenced by the frames presented by the US government, which were picked up by the media. “National identity” and “national security” were frames that resonated with the people who were exposed to news stories about US military intervention in Afghanistan (p.1). The authors believe

that in events of war and threats to national security, evoking powerful frames that impact the public's opinion is a strategy governments use to rally public support. These studies add to the theoretical understanding of how frames influence public discourse on a particular subject. The examples given are relevant to this project on Iran as they can demonstrate how information travels within a hierarchical system during political unrest.

Blumell and Mulupi (2020) use the cascading activation model to identify the presidential framing in the Anita Hill and Christine Blasey Ford cases, and the authors describe how the frame initiated at the top of the cascade influenced the views of those at the bottom. This paper addresses the famous Congress hearings in 1991 and 2018 into women's claims of sexual abuse against Clarence Thomas and Brett Kavanaugh, both appointees to the US Supreme Court. The authors also show how President Bush and President Trump used the Republican thematic frames to focus on American values and law. In contrast, the Democratic framing of the above cases focused on the problem of sexual abuse (Blumell and Mulupi, 2020). As mentioned above, Entman (2003) believes that strong and successful frames resonate with the public and can promote perceptions favouring one side while trying to weaken the other. He argues that the images and words used in frames are usually designed to evoke strong emotional memories and may have important cultural meanings, such as the frames used after the September 11 attacks (Entman, 2003).

Similarly, in the work of Blumell and Mulupi, it is shown that, ultimately, problems of sexual abuse in the United States are seen as secondary to so-called American values and the agenda of the President at the top of the administration. The authors demonstrate through the cascading model that the news coverage of

the events challenged the President significantly less than they challenged the victims. This concludes that the White House messaging, therefore, the most powerful actor in the narrative, prevails in the news in this case.

Challenges to Entman

While Entman's (2003) work provides a sound theoretical basis for understanding framing, it has nevertheless been subject to criticism by scholars in the field. Some of the cascading model's critics have focused on his call for a coherent model and pattern of news-framing research. D'Angelo (2006) argues that research generally includes cognitive, constructionist, and critical outlooks that limit the researcher in examining media frames and evaluating individual actors. Against this backdrop, D'Angelo (2006) questions Entman (2003) and believes that defining frames by a single theoretical model restricts the understanding of framing research. D'Angelo also suggests that to explain the complex processes involved in the interaction of media, frames, and individuals, communication studies researchers would benefit from using theories from other disciplines, such as sociology and psychology.

A study conducted on the framing of the "War on Terror" in Canadian newspapers used Entman's (1993) cascading model to show how the frames initiated by the White House were spread and adopted by the international media (Valenzano, 2009). The study uses frame analysis and the cascading model to show that the United States pushed for a particular frame to be used about the war in Afghanistan and how the frame was picked up and subsequently spread by the Western press. The study further describes that by what the cascading model portrays, when there is agreement amongst the frames instigated by the White House and ally governments, the media tends to mirror that frame. The study also

shows how the cascading model can highlight disagreements regarding the topic of war between friendly countries such as the US and Canada. For example, the Canadian elites were less supportive of the US war in Iraq against Saddam Hussein's regime in 2003, and the media in Canada enhanced frames that criticised the policies of the White House.

The author states that the more disagreement there is in the upper levels of the cascade model, the less likely it is for the frames to spread down from the top to the bottom levels (Valenzano, 2009). Notably, the cascading activation model is one of the most effective ways to explain framing in relation to the connections between the media and the government. The model helps analyse to what extent the media can highlight a voice of opposition amongst the elite by the information that flows through the hierarchical system (Aruguete, 2019). Because Entman's model was established using the United States, a democratic country, as a case study, the next part describes existing studies that used Entman's model within authoritarian regimes, which is relevant to this dissertation.

Application of the cascading activation model

This project uses Entman's cascading activation model to show who in the Iranian system is creating the frames and to describe the flow of news frames within the different media groups. This thesis uses Entman's cascading activation model to trace frame flows in a series of stories about protests that took place in 2021 in Iran over severe water shortages. By examining how the government and different media groups frame these stories, this thesis aims to describe the flow of competing frames inside and outside an authoritarian media system. Given that this project discusses the flow of information in social media, this section outlines the revised cascading activation model, as referred to in Entman's (2018) work *Framing in a Fractured*

Democracy, where he discusses the digital age's effect on the cascading activation model. The revised model considers developments in social media and changes in mainstream journalism and allows researchers to reassess the process by which information is disseminated and studied. The revised model can demonstrate digital technology's impact on communication (Entman and Usher, 2018). Entman's (1993) original cascade model showed that in the United States particularly, the hierarchical structure was ordered from the top administrative level to the non-administration elites, followed by the mainstream media and then the actors at the bottom: the public. The original model showed that despite the existence of some communication and feedback mechanisms, such as surveys and suggestion boxes, information was usually disseminated from those at the top to those at the bottom (Entman and Usher, 2018). However, the revised cascade model provides guidelines to help determine how and in what specific situations "digitalized communication of frames" can distribute power and increase democratic narratives (Entman and Usher 2018, p. 303). The authors argue that communication platforms such as Facebook and Twitter (X) have changed how information is distributed between elites, media, and the public. Entman and Usher suggest that these platforms allow elites to communicate directly with the public by detouring the mainstream media. Similarly, the public can also use social media to connect with actors at the top of the hierarchal system. This understanding is relevant to this thesis as it helps analyse the flow of information on social media regarding Iran's environmental news in the empirical section.

According to the revised model, it is through research and conceptualization that we can find "networked communication pathways" and evaluate their impact on power and order (Entman and Usher 2018, p. 303). Although the changes in

communication media in the last century enabled the interactions between the elite and the public to occur more easily, this has not necessarily resulted in the public having more power in policymaking (Entman and Usher, 2018). The revised model considers the establishment of the digital era, which has changed the relationship between the power elites, the citizens, and the media (Aruguete, 2019).

The Cascading Activation Model and Frames

Framing theory explains how information and narratives are selectively presented to shape public perceptions by boldening certain aspects of reality while downplaying others (Entman, 1993). The Cascading Activation Model (CAM), however, is focused on the flow of frames within a hierarchical structure. It illustrates how an elite source such as the president or, in Iran's case, the Supreme Leader impact the media and public opinion through a top-down process (Entman, 2003). While framing theory considers broader message construction, CAM provides insight into who controls the narrative and its flow from an elite source to various media groups and then the public.

This distinction is essential for this dissertation, as it facilitates the analysis of how frames originated by Supreme Leader Ali Khamenei are picked up and propagated by different media outlets during the 2021 water protests. Using the Cascading Activation Model (CAM) offers insight into censored media systems and authoritarian regimes by illustrating how the Supreme Leader's statements and dominant frames flow through various media outlets, revealing the extent of his control over the narrative (Akbarzadeh et al., 2024). CAM allows for this analysis by presenting a theoretical framework to examine both the reinforcement and challenge of frames as they travel through different media layers. This is also relevant when considering the revised version of CAM by Entman and Usher (2018), which

accounts for the influence of digital platforms and disruptions in bottom-up flows. By selecting CAM, this dissertation can analyse the Supreme Leader's dominant frames across media types and assess the degree to which they were contested or challenged.

CAM also illustrates how journalists, despite their role in upholding objectivity and independence, often reproduce narratives shaped by elite sources (Entman, 2010; Maras, 2013). Entman's (2003) analysis of U.S. media coverage of the Iraq War demonstrates how major outlets largely adopted the Bush administration's framing of 9/11, reinforcing official narratives. A similar pattern can be observed in media coverage of the water protests in Iran, where the Supreme Leader's framing was echoed by both Western and diaspora media despite operating in environments with freedom of expression, unlike local media, which remain subject to state censorship and restrictions (Akbarzadeh et al., 2024).

CAM was developed for Western democratic contexts, and its applicability to authoritarian regimes, where strict media control and censorship exist, presents a limitation. Additionally, the model assumes that the public responds uniformly to frames based on shared cultural schemas, which may not be the case in globalised media environments where diverse perspectives influence the public's interpretation of an event (Çeçen, 2015).

Framing Theory and Authoritarian Regimes

Building on the previous section, which provided a general understanding of framing theory and the cascading activation model, this section discusses the application of the framework to countries with authoritarian regimes and media systems. Given that both framing theory and Entman's (2003) cascading activation model were developed mostly using democratic countries as case studies, in this

section, I provide an overview of the existing literature which uses the framework in studies of non-democratic countries, such as Iran. First, I discuss studies on framing events in countries with similar media structures to those in Iran. I then specifically focus on using the cascading activation model in studies of those countries. Second, I examine the existing research on the international framing of news related to countries with censored media systems to establish further how the framework is used to compare different media systems. Additionally, this section identifies research gaps in the literature to add to the relevance of the cascading activation model in analysing the flow of information within Iran's media system. Because this dissertation includes social media, the cascading activation model's application in the digital age is discussed in the final section of this chapter.

Research on countries with authoritarian regimes, such as Russia, North Korea, China, and Iran, shows that media framing of specific topics, such as sanctions and nuclear programs, is often carried out by state media who intend to assign blame to foreign governments and entities. This section uses several academic studies conducted on the topic to define which framing tools are used by authoritarian-state media. In one study, Kazun (2016) examines the media framing of sanctions in Russia under Vladimir Putin's presidency. The study analyses keywords and strategies that the state media used in 2014 to influence public opinion in favour of the ruling authority after the Russian annexation of Crimea. Kazun argues that on the specific topic of sanctions placed on Russia, the state media used two tactics to minimise the role of the government in inflicting economic hardship on their people. Kazun contends that in the state media's coverage of economic sanctions, strategies such as "deproblematization"

and the “rally-around-the-flag effect” were used to make light of the damaging effects of sanctions on the Russian economy and raise public support for Putin by invoking a strong sense of nationalism (Kazun, 2016, p. 327). This framing method can be witnessed in other political topics in Russian media, where stories use framing tools to sway public opinion and justify the actions of the government, for example, those taken against Ukraine.

A comparative study of the Russian and German coverage of the Ukrainian crisis in 2014 examines the type of frames the media uses to influence the political debate (Lichtenstein, 2019). The Ukrainian crisis here refers to the protests in Kyiv against then-President Yanukovych and his decision not to make an agreement with the European Union on economic matters. In the case of Russia and its authoritarian regime, the study finds that state media used a recurring frame to broadcast protests, which focused on assigning blame to other countries and governments. The authors argue that Russian state media frequently implied that Russia’s power in Ukraine was lost due to the failure of the former Ukrainian president Yanukovych and the security forces, who failed to stop the protests that led to a revolution and subsequent change in government. This frame of blaming foreign countries for causing political turmoil is used in this dissertation because it facilitates understanding of the cascading activation model and where such frames originate within authoritarian state-media systems. In addition, the study by Lichtenstein (2019) argues that the Russian media blamed the United States and the European Union for interfering in Ukrainian politics and triggering the crisis to align Ukraine closer to the West.

A similar narrative is presented by Liu (2023) in a study which compares the news framing of the 2014 Ukraine conflict covered by the BBC and Russia

Today (RT). The author contends that RT, which the Kremlin controls, repeatedly blamed the United States and the West for the conflict while describing the foreign powers' interests in the region and their wish for Ukraine to join NATO. Liu (2023) argues that by focusing on Western influence and the role of the Ukrainian government in provoking the conflict, the Russian media omitted facts about Russia's involvement. Furthermore, McCombs and Shaw (1972) argue that the media plays an important role in shaping politics and public opinion by selecting which news items to report and which to ignore. Entman (2007, 2010) argues that state media use techniques such as emphasising one side of the story over the other to shape the intended frame and influence how the audience perceives the story. In the case of Russia, Liu (2023) argues that *RT* framed the Ukraine conflict in a biased way towards Russia, which stems from the fact that the mainstream media is under the control of the authoritarian regime because it is state-owned. This relationship between state media and authoritarian regimes is discussed in the previous chapter, but the use of framing theory is further explored below.

Sourcing and frames in authoritarian media

The concept of sourcing is used in various studies to describe the effect of where information comes from on how a story is framed. This dissertation uses the concept to understand where frames originate from in authoritarian media systems. The sourcing of many frames in the media depends on the source from which the reporters obtained the information they used to write the story or news script. The source, therefore, affects how a news item is framed and presented to the public (Gabore, 2020). Bennett (1990) argues that media sources, particularly those in positions of power, have a significant role in how news is framed because journalists not only base their coverage of a particular story on their

sources' information but also their sources' perspectives and biases. Furthermore, Berkowitz and Beach (1993) argue that sources influence the news and how it is framed more strongly than journalists, given that they are instrumental in selecting the initial information on which reports are based. Sourcing is an important component of framing theory, which is relevant to this study as it later examines the role of sources in framing the 2021 water protests.

Cozma (2015) argues that sourcing is one of the most important elements underlying media frames because it can manipulate and influence how news frames are shaped. Gabore (2020, p. 305) examines this claim by comparing Western and Chinese media coverage of COVID-19 prevention measures, such as the availability of vaccines in Africa. Gabore argues that "official" sources, such as political elites, and "non-official" sources, such as ordinary people, shape the framing of news items. In the case of China, which has an authoritarian media system, Gabore explains how Chinese state media only used official African and Chinese sources and did not include any unofficial sources in their reports. This ensured that the frames used in the news only supported the narrative provided by government officials rather than local people. Because sources shape the public's perception of any topic (de Vreese, 2005), such news frames influenced the Chinese population to see the pandemic only from the official point of view.

In authoritarian countries, the regime in place strongly influences how news is framed to control the flow of information and sway public opinion (Rahimi, 2015). A study examining the roles of Saudi Arabia and the United Arab Emirates (UAE) in shaping the news narrative finds that authoritarian governments are fearful of the news (Uniacke, 2021). In addition, the author argues that because the leaders in Saudi Arabia and the UAE have complete control over the ownership and

dissemination of news, their state media aim to frame news to depoliticise events, control the narrative and prevent dissent and uprisings. In such cases, Entman (1993) contends that frames exist in different locations, including the communicator or the individual who creates the message, the text, which refers to the content of the message, and the broader culture, which encompasses shared values, norms, and beliefs. Entman argues that framing is not limited to the mind of the communicator or the text alone. However, it is shaped by and interacts with the broader cultural context, ultimately influencing how an audience perceives and responds to a framed message. Cultural and geopolitical factors are important in framing news in regions with Western strategic interests, such as the Middle East and Iran. Gong and Le Billon (2014, p. 294) examine “geopolitical framing” to explain how the media use specific themes and keywords to sway public opinion. The authors provide an example of how, in their coverage during the Cold War in the mid-1980s, Western media reported on the Ethiopian famine by repeating an anti-communist geopolitical theme. The US papers used themes that pointed to the dangers of communism and the Soviet Union, which Gong and Le Billon (2014) defined as aspects of geopolitical framing. In another example, the authors point to the British coverage of China’s foreign policy in Africa in the early 2000s, where the media depicted the West as well-intentioned and the Chinese as aggressive. This finding is relevant to this dissertation as it points to the geopolitical factors regarding the international framing of news from the Middle East and Iran, given its strategic importance for Western countries.

The cascading activation model in authoritarian regimes

This section identifies a gap in scholarly research regarding examples of how Entman’s (2003) cascading activation model works in Iran’s local media. The existing

literature on the model's illustration by the international media that covers Iran and countries with similar media structures is presented below. The discussion extends the understanding of the theoretical framework used in this dissertation and identifies gaps in research regarding Iran. To demonstrate where media frames originate from during international news coverage of Iran, this section outlines several studies which use the cascading activation model. Reese, Grant, and Danielian (1994) argue that journalists tend to give weight to sources who hold power, such as those in the government, and this affects the flow of information from the top to the bottom of society, which is line with Entman's (1993) description of the cascading activation model. Semati, Cassidy and Khanjani (2021) use the cascading activation model to analyse the coverage of the Iran Nuclear Deal in *The New York Times* and *The Washington Post*. The authors examine the prominence of US, Iranian, and other international government sources in the coverage of the nuclear negotiations between 2013 and 2016 by the two newspapers. They also examine the sources the journalists used to gather their information and frame the coverage.

Regarding sourcing, the authors found that most sources were from the US executive branch and the US Congress. Because fewer sources were from Iranian government sources, the story was framed with a bias towards the US narrative. The authors also report that a significant number of sources came from the Israeli government, who were actively opposed to the Iranian deal with the West. This method of sourcing also, therefore, reinforces the anti-Iranian bias of the frames employed by the newspapers in their coverage of the Iranian Nuclear Deal.

Entman (2003) argues that perspectives and frames that flow from the presidential administration and are culturally congruent tend to prevail in the media coverage of events. However, in the case of the Iran Nuclear Deal, Semati, Cassidy

and Khanjani (2021) note that the most culturally practised media frame came from the US Congress and not the Obama administration. The authors argue that given the antagonistic political relationships between Iran, the United States, and Israel, the coverage by the *New York Times* and *The Washington Post* employed the frames shaped and given by the Republican party, which opposed the deal and its negotiation by the Democratic Obama administration. Therefore, in this case, the anti-Iran frames were the most used by the US media in the coverage of the Iran Nuclear Deal, despite not being the frame coming from the White House. The study finds that the cascading activation model had departed from the administrative branch to the congressional branch, with the media using the frames provided by the latter. The authors found that the national interest and cultural values of Congress were more powerful than the pro-Iran deal frames of the Obama White House. The authors argue that cultural congruency points towards US anti-Iran sentiment, and in this case, the frames supporting this notion came from Congress rather than the White House. Semati, Cassidy and Khanjani (2021) suggest that this is because powerful cultural frames that resonate with the public tend to dominate media coverage even if it is contested by the actors at the top of the administration.

Regarding the US media, Handley (2010) argues that the presidential office has the most power to create and shape the frames used to present the news to the public. In a study using the cascading activation model in the US coverage of the Israeli–Palestinian conflict in the early 2000s, Handley examines the frames used by the media to evaluate whether Israel was shown to be an ally of the United States and its war on terror. The cascading activation model shows how frames flow through the media from political actors within the administration, who have most of the power, followed by Congress and then think tanks, to the public. Actors in the

lower levels of the cascade are less able to activate and shape their frames within the media than the actors at the top of the cascade, such as the president (Entman, 2003). This study examines where news frames originate from in the US coverage of the Israeli–Palestinian conflict, and it argues that the media tend to report stories that support the Israeli perspective due to it being a strategic US partner in the Middle East region. Dunskey (2008) argues that the US media tends to frame the Israeli–Palestinian conflict by promoting stories that benefit US national interest in support of Israel. As Entman (2003) argues, the frames originate from the executive branch, shape the way the media covers a story, and, in turn, spread to the public. Handley (2010, p. 454) contends that “international coalition building” is integral to the cascading activation model concerning media framing a conflict. Hence, when the United States or its allies are at war, the press follows the narrative decided upon by the White House, emphasising specific sources (such as ally governments) to support the administration’s objectives.

A turning point in the literature around the international media framing of countries within the Islamic world with authoritarian governments came after the September 11 attacks in the United States in 2001. Ibrahim (2009) argues that immediately following the terrorist attacks, the US media framing of Arab nations experienced a significant change, with subjects such as nationalism and military power becoming dominant in the narrative. The author argues that coverage related to US allies, such as Egypt and Jordan, rapidly focused on the strength of the military relationship between the nations. In contrast, the networks mainly reported on the possibility of a future invasion of Iraq. Waisbord (2002) argues that after September 11, global journalism experienced a shift and became American journalism, significantly influencing how the media frames stories from

the Middle East. Reese (2001) argues that the war on terror is one of the frames that has become an ideology and dominates the US media when covering global stories.

In a study conducted on Canadian coverage of the war on terror, Valenzano (2009) examines the effect of frames originating from the White House on how Canadians view foreign leaders and foreign media. Using the cascading activation model, the author analyses how the Canadian press frames the war on terror where there are agreements and disparities between the White House narrative and that of foreign leaders. Valenzano argues that the US media use direct quotes and statements from the White House, which shapes the frames used to describe foreign policy and report international events. The next level down from the White House aligns with Entman's (2003) cascading model: the US Congress, experts, and global leaders. Then, the level below contains the national media corporations and their journalists, who actively select which frames originating from the top are used in their reporting and are spread down to the next level of the cascade model: the public.

The cascading activation model is one of the most effective ways to explain the connection between the media and national governments. The model can analyse to what extent the media influences the public's understanding of opposition to the elite; furthermore, in the revised model, the processes by which information is distributed are re-examined, and this is especially useful in studies such as this one, which focus on how social media distorts the framing of political events (Aruguete, 2019). The above discussion identifies a gap in the literature regarding applying the cascading activation model to Iran's media system. Despite the limited research using the cascading activation model in Iran and authoritarian regimes, the above discussion demonstrates where news frames originate when reporting

international events and how such coverage is similar among Western and authoritarian countries.

Framing and the Cascading activation model in social media

In the digital age and the critical role social media plays in news dissemination, scholars have been researching the applicability of framing theory to explain the flow of information within platforms such as Twitter (X), Facebook, and Instagram. Guran and Ozarslan (2022) argue that frame analysis helps understand the communication and relationship between different social media actors. The authors contend that political discussions and news production are influenced by the framing power given to audiences through the ability to share and repost narratives with high frequency using instruments such as hashtags and hyperlinks. Scholars argue that the dynamic visual functions of social media and the digitisation of information have created new and transformative capabilities for framing research and analysis (D'Angelo, 2018; Guran and Ozarslan, 2022). Framing in social media literature suggests that news sharing is an integral part of how information flows between different actors. Valenzuela, Pina and Ramirez (2017) examine the behavioural biases that drive social media users to share a specific news item more frequently than others. The authors argue that social media users share conflict, human interest, and morality topics more often, given their ability to instigate conversation and debate.

The practice of news sharing on social media has created a media environment where the structure of news organisations must incorporate accessible and reliable content online (Valenzuela, Pina and Ramirez, 2017). Scholars believe that the flow of information on social media and the ultimate news frames resulting from these communications are partly affected by what

they call social media influencers (SMIs) and user-generated content (UGC). Motahar, Tavakoli and Mura (2021) argue that SMIs, through their extensive network of followers and the ability to share news potentially seen by millions of people, have a significant role in disrupting the flow of information on social media platforms. For example, in 2017, President Trump tweeted “Covfefe”, a nonsensical word, presumably by mistake, which became viral moments later. Rippeon (2020) argues that Donald Trump, with more than 87 million followers on Twitter (X) at the time, managed to engage the public on social media, and the word was reposted by his Make America Great Again (MAGA) supporters.

Regarding news on Iran, the authors argue that adding visual images and videos to posts shared by SMIs and other influential actors, such as politicians and activists, provides news organisations with additional insight into a country where access to information is restricted. International media often gather their information from social media posts shared by users who have official accounts and from local news organisations. Given that the authoritarian system in Iran usually refuses to engage with international journalists, as explained in the chapter concerned with media systems, news agencies commit to official sourcing from social media accounts belonging to government entities or individuals. Lee (2016) argues that the social media environment of this age provides journalists and news outlets with a unique opportunity to gather information from platforms and sources without having to engage with them directly. This finding is relevant to this study on Iran as most news items published in foreign media refer to official sources through their social media posts. Kermani (2023) examines social media's critical role and hashtags' use in framing news on Iran. The author discusses #MahsaAmini, which went viral after the death in custody of a young

Kurdish woman arrested by Iran's morality police for improper attire. This hashtag and #WomanLifeFreedom symbolised the Iranian uprising on social media and had an integral role in the international framing of news coming out of Iran. Kermani and Hooman (2022) argue that women in Iran have a significant role in creating online movements on social media against the repression they endure from the government. The authors argue that the online activity of women in Iran on feminist stories can disrupt the flow of information and create debate. This assessment was witnessed in practice with #MahsaAmini, where women worldwide shared posts in solidarity, taking off their headscarves, a narrative used routinely by Western media news frames. There is limited research on framing in social media concerning Iran specifically; however, Hamdy and Gomaa (2012) provide a general understanding of where news frames originate in authoritarian regimes. The authors use the case study of the Egyptian uprising in 2011 to demonstrate the differences in frame creation across different types of news media. Hamdy and Gomaa argue that the frames picked from social media were in complete contrast with mainstream newspapers and focused on human rights and freedom of the press during the protests, which called for the resignation of Hosni Mubarak. While the authors argue that their study is related to Egypt specifically, they contend that its findings add to the literature concerning framing and social media in Arab countries. The authors argue that social media have a significant role in framing news and public opinion in political turmoil from opposition actors inside and outside the country.

As explained in the earlier section, Entman's (2018) revised cascading activation model considers how social media can distort the usual frame flow of news. Landis, William, and Allen (2022) argue that social media have become a

tool for people other than the elite to create conversation and challenge the narrative dominated by the powerful at the top of the hierarchical system. In a study examining how audiences contribute to news framing, the authors add to the literature about applying the cascading activation model in social media. Entman and Usher (2018) argue that given the changes that social media has brought about in the flow of information, the audience is now positioned to influence the cascade upwards. The authors use the example of Donald Trump, who, while President (2017-2021), often reposted material derived from outlets such as *Fox News* and *Breitbart*, demonstrating an upward information flow from the cascade. Landis, William, and Allen contend that social media has created a situation where information can flow in different directions, connecting various actors across the cascade, such as the elite, media organisations and the audience. This study is relevant to this dissertation, given that social media plays a vital role in how Iran's environmental news is framed internationally and locally. This section will provide an overview of the existing literature on the cascading activation model and social media in general and authoritarian regimes.

Bennet and Iyengar (2008) argue that new technologies allow users to voice their preferences on the content and topics they want to read, which has changed how news is framed. In a study on applying the cascading activation model in social media, Aruguete and Calvo (2018, p.481) examine how users contributed to the narrative about the 2016 protests in Argentina over the increase in utility rates. The authors argue that social media users framed the "great rate hike" by posting or discarding narratives that included words and hashtags depending on their pro or anti-government tendencies. The study compares frames preferred by protestors and the government through hashtags and the

selection of media outlets they choose to embed. The authors show that the hashtag “corruption” was primarily used by people protesting increased prices, and “wasteful spending” was a hashtag used by government supporters.

Himmelboim, Smith and Shneiderman (2013) argue that social media users select, and discard content based on their preferences and beliefs, which leads to selective exposure, the so-called “echo chamber” effect. Research in selective exposure indicates that social media users crave information that aligns with their views on a topic and reject opposing information. Quercia and Crowcroft (2013) argue that selective exposure to social media leads to polarised communities, which influence the process of news consumption. To demonstrate how social media frames are created by selective exposure, Aruguete and Calvo (2018, p.482) provide an understanding through what they call “selection effect” and “composition effect”. The authors use these terms to show how the cascading activation model was used on social media to frame the news concerning the Argentinian protests. The selection effect occurs when users share social media content that is supportive or opposed to their preferences, which results in certain narratives circulating more frequently. The authors contend that social media frames are created based on how content moves across different platforms, also known as the composition effect.

Aruguete and Calvo (2018) use the Argentinian outlet *La Nacion* to explain the differences between the flow of information in traditional media and social media. The authors give an example of two articles published on the protests, one framing the events as people responding to government corruption and the other as people reacting to wasteful spending. The authors argue that once these articles are posted on social media, the frequency of the shares they get directly

correlates with which one of the narratives frames the news. The study finds that in social media, in comparison to mainstream media, the sharing preferences of the users influence the flow of information in the cascade rather than the hierarchical system. Tokita, Guess and Tarnita (2021) argue that social media platforms tend to be significantly influenced by information cascades given that they can socially network and reshare posts. The authors contend that users often share information without knowing the content, adding to the frequency and, thus, the framing of a given topic. However, as noted above, the rise of social media use impacts this established flow of frames. As also discussed, this may scare authoritarian regimes (Uniacke, 2021), who may experience a loss of control over which frames are selected and spread to the public.

Conclusion

This chapter provides an overview of the existing literature on framing theory, the cascading activation model, and their application in authoritarian regimes. This chapter is important to this project as it demonstrates a theoretical framework for understanding where news frames originate and how information flows in and out of countries with authoritarian regimes such as Iran. This section also provides relevant research on framing and the cascading activation model in social media, which will help analyse the flow of information regarding Iran's coverage. This chapter identified gaps in scholarly research about applying the cascading activation model in local, international, and social media coverage of Iran and its environmental news. Iran is a country which is highly vulnerable to climate change and is one of the top ten contributors to CO₂ emissions globally. Iran is one of the most environmentally degraded countries in the Middle East in terms of water crisis, air pollution, heatwaves, floods, and sand and dust storms, and the

government has failed to address these problems. This dissertation uses the case study of the 2021 water protests in Khuzestan and Isfahan provinces to analyse how frames created by the Supreme Leader of Iran travelled among different media groups and the extent to which they were countered. This dissertation aims to address some of the research gaps and add to the understanding of frame flows regarding media coverage of Iran's environmental news.

Research questions

The research questions, which will be reiterated in the methodology chapter, have been selected to answer how local media, international media, diaspora media and social media reacted to frames created by the Supreme Leader of Iran in response to the news of the 2021 water protests. RQ3 specifically looks at Entman's cascading activation model, the flow of frames between different sources identified in the next chapter, and the methodology used to answer all research questions. In answering these research questions, this dissertation will also attempt to contribute to understanding the complex and multi-textured media system of an authoritarian country like Iran and the interplay between local, diasporic, international, and social media in frame flows. It will also contribute to our understanding of how social media affects frame flows in authoritarian regimes and whether, ultimately, social media enables opposition narratives to spread or whether mistrust and fear of censorship stifle any meaningful dissemination of opposition narratives on these platforms.

RQ1: How did the Supreme Leader's frames of the 2021 water protests in Iran manifest in media coverage?

Sub Q: How do the Supreme Leader's frames manifest in different types of media outlets?

RQ2: Were the Supreme Leader's frames countered in the coverage of the 2021 water protests in Iran?

RQ3: How were the frames spread through source use?

Chapter 5- Methodology

Methods

The previous chapter discussed framing theory and Entman's (2003) Cascading Activation Model. In this chapter, the methodology used in the dissertation will be explained. The case study, the 2021 water protests in Iran, has been presented in the introduction. This section will discuss the sample, frame analysis, variables, and the intercoder reliability conducted with another researcher. This study was a content analysis ($N=877$) of print and digital news coverage of the 2021 water protests in Iran. In addition, the study was a content analysis of ($N=150$) Twitter (X) posts from activists, journalists, experts and the public. To identify dominant frames for the cascade model, this study also examined Supreme Leader Ayatollah Ali Khamenei's speeches and Twitter (X) posts ($n=8$). A mixed quantitative and qualitative methods approach was selected to explain what technical procedures have been carried out to answer the research questions in the last chapter (Krippendorff, 2018).

Sampling

The sample has been selected for six months. The sample starts with the first mention of water protests in Khuzestan province in the media. The six-month period covers the nationwide protests across Iran in solidarity with Khuzestan and Isfahan provinces in the summer and autumn of 2021. The timeline ranges between July 14, 2021, and January 14, 2022, incorporating the news cycle and media coverage of the water protests locally and internationally. Krippendorff (2019) argues that adequate sampling is essential for minimising bias that may occur by generalisation and an incomplete sample size. The six-month timeline is suitable as it provides enough data and covers the news cycle related to the 2021 water protests in Iran. In

the sample, most of the coverage is concentrated around July 2021 and November 2021, when the water protests turned violent, and security forces began killing and arresting demonstrators. Since the two events occurred only a few months apart, the media and news items in November and December 2021 mention both the Khuzestan and Isfahan uprisings, another justification for the sample timeline. Neuendorf (2017) argues that the sample size should be large enough to provide a good representation of the subject under investigation, which is why six months was selected for sampling in this project.

This project will be using relevance sampling. Relevance sampling allows the researcher to select all the textual units that contribute to answering research questions. Relevance sampling is when scholars use keywords and themes in their search to reduce the data, which will then be used to conduct the analysis (Krippendorff, 2019). This section will begin by sampling the communication from the Supreme Leader (Ali Khamenei) around the 2021 water protests. Riffe, Lacy, and Fico (2014) argue that when sampling the communication of a notable individual, in this case, the Supreme Leader, it is important to research all the material available in that time frame. The following section will sample international, local and diaspora media coverage of the water protests using the same time frame of six months. The final section will sample social media posts about the 2021 water protests, which will be discussed in detail. The list of samples can be seen in Table 5.1 and 5.2.

Communication from the Supreme Leader

The same six-month sample date was used to gather communication from the Supreme Leader, Ayatollah Ali Khamenei. The official website belonging to the Supreme Leader (Khamenei.ir) archived the transcripts of speeches and press

releases ($n=5$), and his Twitter (X) account documented posts about the Iran water protests ($n=3$).

local media

The same sample date of six months was used to gather the news items for local media. The national Iranian media was identified by using the LexisNexis database, choosing the Middle East region and Iran option by searching “Iran water protests”. This sample had ($n=305$) items. Additionally, for a well-represented sample, the Iranian media in Persian was searched using the Magiran database with the search words “Eterazate bohrane ab” (Iran water protests) in the same period. This sample had ($n=121$) items. The sample represents news items not included in the LexisNexis search to provide coverage from moderate and conservative Iranian publications. For the counter side, diaspora publications outside of Iran were sampled using their online archives with keywords “Iran water protests” that had ($n=87$) items in the same period of six months. The publications with less than 10 items were eliminated from the sample, and for those with more than 100 items, every other article was coded to achieve balance in the sample analysis.

International media

The international media was identified using the LexisNexis database and the primary world publication option using the “Iran water protests” search word. The sample was set for the same period of six months (14 July 2021 to 14 January 2022) and identified ($n=621$) items. Since the significant world publications search did not include newswires, a LexisNexis search used the same keyword and period to obtain items covered by *The Associated Press* ($n=31$) and *Agence France Presse English* ($n=45$). The publications with less than 10 items were eliminated from the sample,

and for those with more than 100 items, such as BBC Monitoring, every other article was coded to achieve balance in the sample analysis.

Social media

The sample for social media was set for the same period of six months. The sample only includes Twitter (X), given its allowance for an advance search with specific dates. Riffe, Lacy, and Fico (2014) argue that when sampling social media, it is important to use software that allows for content structuring using a period to avoid getting an unmanageable data set. Kim (2013) argues that sampling approaches for social media differ from those of traditional media, given that there is no limit to the amount of content produced daily. To keep the relevance sampling structure, the sample gathered used Twitter (X) advanced search by selecting dates 14 July 2021 to 14 January 2022 using the keyword “Iran water protests”. The sample identified ($n=70$) posts from scientists, activists, the public and the media. The same keyword in Persian using the hashtag “Iran Water Protests” was used to provide a balanced sample. The sample identified ($n=100$) posts from journalists, activists, members of the public, government officials and experts. A total of ($n=150$) posts on social media will be analysed after the elimination of 20 X posts which were not relevant to the study as they were unrelated to the case study and discussed other water protests in the past years.

Frame Analysis

This section employs framing analysis, utilising a qualitative approach that combines inductive and deductive frame analysis. While part of the analysis is based on existing literature and established variables (Chong and Druckman, 2007), identifying and categorising most frames was conducted by investigating news and communication materials. These selected frames align with the characteristics

outlined by De Vreese (2005) and are commonly observed in journalistic practice, highlighting specific elements of the topic while downplaying others (Entman, 1993). Mechanisms such as headlines, quotes and photos were used to identify the frames (De Vreese, 2012). The first step began by examining the communication from Supreme Leader Ayatollah Ali Khamenei, specifically focusing on identifying the frames he used in the case study. As explained in the sampling section, the material was gathered and thoroughly reviewed multiple times using a combination of inductive and deductive approaches. De Vreese's (2005) methodological approach was employed to categorise the frames. The frames were identified by analysing the material, examining the language, topic, and the number of times they reoccurred. The next step involved identifying the variables associated with the frames used by the Supreme Leader. The variables were identified by analysing what factors and elements influenced the construction and interpretation of the frame (Chong and Druckman, 2007). This process also utilised a mix of inductive and deductive content analysis. To counter the frames used by the Supreme Leader in his communication regarding the 2021 water protests, the diaspora Persian media and social media (X) gathered in the sampling section were investigated. Identifying counter-frames and variables followed the methodological pattern proposed by Fairclough (1995) and De Vreese (2005). The counter-frames were selected by searching for narratives that oppose the initial frames. Using Entman's (1993) argument, counter-frames were identified to contest and challenge the frames that the Supreme Leader established.

Supreme Leader Frames

Two frames of *enemy* and *scapegoating* were identified, each with its list of variables. These are frames that have been previously identified in existing literature. Meeks (2020) argues that Donald Trump used the *enemy* frame in his

communication on Twitter (X) from the beginning of his candidacy in 2016 and throughout his term as President to denigrate and denounce the liberal media. The author argues that Trump used the frame to define the nonconservative press as the *enemy* of the people. Meek's research on the *enemy* frame was used to identify the same frame in Ali Khamenei's communication. Viertmann (2018) argues that the *scapegoating* frame is used in communication to shift the blame narrative away from one individual or entity to another. The method provided by the author to identify the *scapegoating* frame is used in the Supreme Leader's speeches. The communication was examined, looking for specific words and language that the Supreme Leader used to shift the blame for the water crisis from himself to the government's lower echelons (president) and foreign countries. The communication from the Supreme Leader showed that the two frames were used to promote a narrative which supports the ideology of the Islamic Republic of Iran. The frames relate to the notion that even though the provinces of Khuzestan and Isfahan have severe water problems, the people must not let the "enemy" prevail in this scenario. The Supreme leader referred to the people as pawns for the "enemy" who should not be fooled by Western propaganda that, in his opinion, is designed to create chaos in the country. These are frames that the Supreme Leader uses when confronted with domestic uprisings and political turmoil. In this case, the Supreme Leader blamed foreign countries and enemies for interfering in Iran's domestic matters twice.

The first frame identified is *enemy*. The analysis of this frame investigates a narrative relating to the Supreme Leader's use of language, which suggests that the people should not let the enemy of the Islamic Republic win by protesting on the streets because of the water crisis. The variables were identified to help determine how the frame was established, as seen below in Table 5.3.

The second frame identified is *scapegoating*. The analysis of this frame investigates a narrative relating to the Supreme Leader's use of language, which suggests that the people are not the ones who should be blamed for protesting and that they are, in essence, victims. The Supreme Leader used specific language to suggest that the US, Israel and Western media are using the people of Khuzestan and Isfahan to harm the Islamic Republic by tricking them into protesting. He also blames the government for not addressing the water problems of the provinces sooner, shifting blame from himself and the Revolutionary Guards to the lower levels of the government, such as the President and his administration. The variables identified for this frame are listed in Table 5.4.

Counter frames

Two frames, *violence* and *mismanagement*, were identified. The diaspora media and opposition figures on X focused on holding the Islamic Republic and the regime accountable for the water crisis and the protests. They concentrated on the violence and deadly force used by the security against the public to suppress the uprising and the government's mismanagement of the water resources, which led to the droughts.

The first frame identified is *violence*. The analysis of this frame investigates a narrative relating to the diaspora media and opposition figures on X using language which points to the suffering and killings of the people of Khuzestan and Isfahan regarding the water crisis. This counters the Supreme Leader's *enemy* frame by calling the regime and the security forces the real enemy of the people. The variables identified can be seen in Table 5.5.

The second frame identified is *mismanagement*. The analysis of this frame investigates a narrative relating to the diaspora media and opposition figures on X

using language that points to the water crisis during the nationwide protests in Khuzestan and Isfahan provinces and the decades of mismanagement of water resources by authorities. This counters the frames by the Supreme Leader, who was shifting the blame onto lower echelons of the establishment and away from himself and the Revolutionary Guards, who gained money and profit from building excessive dams and transferring water for industrialisation, leading to water shortages in the two provinces (Middle East Institute, 2021). The variables identified can be seen in Table 5.6.

The frames

The selection of the four frames—*enemy*, *scapegoating*, *violence*, and *mismanagement*—was based on a two-step process. First, I identified the dominant frames by analysing the Supreme Leader’s direct communication, independent of media coverage. This approach ensured the frames were derived from the primary source rather than filtered through media interpretations. Through this analysis, two frames emerged. The *enemy* frame portrayed foreign powers as external threats responsible for domestic instability, reinforcing the notion that Iran's challenges stem from external interference. The *scapegoating* frame shifted blame for the crisis onto lower government bodies, such as the president, away from the Supreme Leader. In the second step, I identified counter-frames by examining opposition narratives in diaspora media and social media, where narratives directly challenging the Supreme Leader’s messaging were present. Two counter-frames emerged in the opposition discourse. The *violence* frame countered the *enemy* frame by portraying the state as the aggressor rather than a defender against foreign threats. The *mismanagement* frame countered the *scapegoating* frame by attributing the crisis to poor resource

management and policies rather than external interference. The next step was to look at how these frames flow through the media.

These frames qualify as counter-frames rather than alternative frames because they explicitly challenge the dominant narratives rather than presenting a different perspective. In line with Entman's (1993) definition of counter-frames, they serve as disruptive frames that seek to contest and undermine elite narratives rather than coexist neutrally within the discourse.

Code development

This chapter includes a codebook that provides information on the frames, the specific variables, and instructions on how to code each variable (Riffe, Lacy, Watson and Lovejoy, 2024). Four frames were established to carry out the analysis: *enemy*, *scapegoating*, *violence*, and *mismanagement*, each with a set of variables that are associated with them. The dichotomous variables were coded using 0 to record the absence of the variable in the sample unit and 1 to record the presence of the variable. First, the article's identification information was coded for *media type*, *media ID* and the country the publication belongs to. In the next step, the article's day, month, and year of publication were coded. The next step coded for the dichotomous variables belonging to the frames and counter-frames presented in the codebook. Finally, source variables were coded, which will be explained further in the section. Each frame and its variables have been individually explained and justified in the frame analysis section of this chapter.

Sources

Using sources as a framing tool is an established practice in media research (van der Meer, 2018). Sources are used to identify and measure news frames (de Vreese, 2005). This dissertation presents sources as people who have been

mentioned or directly quoted in the sample unit. Several dichotomous variables were created to code for the sources mentioned or quoted in the article. The source variables included in the coding process were the Supreme Leader Ayatollah Ali Khamenei, president (Hassan Rouhani and Ebrahim Raisi), security forces, and other government members.

Source challenge

To analyse Entman's (2003) Cascading Activation Model, several challenge variables were included for the Supreme Leader, the President and the Security Forces. To *challenge* this project, it equals a counterargument or discrediting directly related to what the Supreme Leader or members of the Islamic Republic regime have said. For example, after the 2021 water protests in the Province of Khuzestan, when the Supreme Leader and other officials called protestors "rioters", the Human Rights group Amnesty International reported videos coming out of the province chanting slogans against the Supreme Leader. The categories of challengers were journalists/media, activists, experts, and human rights organisations.

Intercoder reliability

Once the codebook and initial texting were completed, two researchers coded 60 articles, or around 10% of the sample, for intercoder reliability. For the first round, the researchers coded 30 articles, and for the framing variables *Responsibility* ($\alpha = 0.84$), *Cause* ($\alpha = 0.93$), *Deaths and Arrests* ($\alpha = 0.79$), and *Mismanagement* ($\alpha = 0.78$), acceptable results were achieved. *Ali Khamenei* ($\alpha = 1$), *Hassan Rouhani* ($\alpha = 1$), *Security Forces* ($\alpha = 0.86$), *Kaveh Madani* ($\alpha = 0.84$), *Human Rights* ($\alpha = 1$), *Ali Akbar Mehrabian* ($\alpha = 0.78$), *Saeed Khatibzadeh* ($\alpha = 1$), *Ebrahim Raisi* ($\alpha = 1$) also achieved intercoder reliability.

After investigating and clarifying the remaining variables, both researchers coded 20 articles for a second round, which yielded acceptable results for framing variables *Enemy* ($\alpha = 0.89$), *Enemy Agenda* ($\alpha = 0.87$), *Manipulation* ($\alpha = 0.90$), *Violence* ($\alpha = 1$), and *Deadly* ($\alpha = 1$). After further clarifying the variables for the third round, the researchers coded 10 articles. They achieved acceptable results for the remaining framing variables *Infiltrate* ($\alpha = 0.88$), *Tricked* ($\alpha = 0.87$), *Blame* ($\alpha = 1$), *Thirsty Uprising* ($\alpha = 1$) and *Resource Mismanagement* ($\alpha = 1$).

Research Questions

RQ1: How did the Supreme Leader's frames of the 2021 water protests in Iran manifest in media coverage?

Sub Q: How do the Supreme Leader's frames manifest in different types of media outlets?

RQ2: Were the Supreme Leader's frames countered in the coverage of the 2021 water protests in Iran?

RQ3: How were the frames spread through source use?

Table 5.1 – Sample Articles

Publication Name	Country	Media Group	Frequency (N)
Press TV	Iran	Loca/national	60
Fars News Agency	Iran	Loca/national	66
Tehran Times	Iran	Loca/national	30
Pars Today	Iran	Loca/national	29
Iran News	Iran	Loca/national	21
Intelligence Iran Today	Iran	Loca/national	16
Donyaye Eghtesad	Iran	Loca/national	10
Shargh Daily	Iran	Loca/national	21
Keyhan	Iran	Loca/national	80
Etemad	Iran	Loca/national	10
BBC Persian	UK	Diaspora	17
Iran International	UK	Diaspora	20
Radio Farda	Czech Republic	Diaspora	15
VOA	US	Diaspora	15
IranWire	Canada	Diaspora	20
BBC Monitoring	UK	International	57
AFP	France	International	45
AP	US	International	31
The New York Times	US	International	55
Financial Times	UK	International	49
The Guardian	UK	International	46
The Independent	UK	International	43
The Jerusalem Post	Israel	International	41
The Times	UK	International	55
National Post Canada	Canada	International	15
Telegraph	UK	International	10
Total			877

Table 5.2 – Social media posts

X	Name	Date of Post	Role	Inside/Outside Iran
1	Hanif Jazayeri	24/07/2021	Journalist	Outside
2	Iran True	21/07/2021	Journalist	Outside
3	Kimia Nila	28/12/2021	Public	Inside
4	Ava Today	27/07/2021	Public	Outside
5	Iran News Wire	27/07/2021	Journalist	Outside
6	Masih Alinejad	19/11/2021	Activist	Outside
7	Iran News Wire	21/07/2021	Journalist	Outside
8	Iran News Wire	24/11/2021	Journalist	Outside
9	Iran News Wire	21/07/2021	Journalist	Outside
10	Soran Khateri	19/11/2021	Public	Outside
11	Soran Khateri	19/11/2021	Public	Outside
12	Sebastian Usher	26/11/2021	Journalist	Outside
13	Bahman Kalbasi	19/11/2021	Journalist	Outside
14	Bahman Kalbasi	19/11/2021	Journalist	Outside
15	Helena Ava	27/07/2021	Activist	Outside
16	Federation of Anarchism Era	26/11/2021	Activist	Outside
17	Shayan Sardarizadeh	26/11/2021	Public	Outside
18	Iran News Update	10/12/2021	Journalist	Outside
19	Iran News Update	22/11/2021	Journalist	Outside
20	Alireza Nader	12/11/2021	Public	Outside
21	Elhan Imami	19/11/2021	Public	Inside
22	Mitra Motamed	21/07/2021	Public	Outside
23	LW World News	27/07/2021	Journalist	Outside
24	Negar Mortazavi	20/11/2021	Journalist	Outside
25	Iran Protests.com	19/11/2021	Activist	Outside
26	Timothy Doner	19/11/2021	Public	Outside
27	Persian Banksy	19/11/2021	Public	Inside
28	Center for Human Rights in Iran	19/11/2021	Activist	Outside

29	Thomas van Linge	19/11/2021	Public	Outside
30	Federation of Anarchism Era	26/11/2021	Activist	Outside
31	Federation of Anarchism Era	26/11/2021	Activist	Outside
32	Iran News Wire	02/08/2021	Journalist	Outside
33	Gissou Nia	29/11/2021	Public	Iran
34	Shahin Gobadi	26/11/2021	Public	Outside
35	G. Kashani	27/07/2021	Public	Outside
36	Aladdin Touran	26/11/2021	Public	Outside
37	Kaveh Madani	21/07/2021	Scientist	Outside
38	Kaveh Madani	24/11/2021	Scientist	Outside
39	Kaveh Madani	05/11/2021	Scientist	Outside
40	Kaveh Madani	30/09/2021	Scientist	Outside
41	Kaveh Madani	30/11/2021	Scientist	Outside
42	Kaveh Madani	27/07/2021	Scientist	Outside
43	Kaveh Madani	05/08/2021	Scientist	Outside
44	Kaveh Madani	11/09/2021	Scientist	Outside
45	Kaveh Madani	08/10/2021	Scientist	Outside
46	BBC Persian	21/07/2021	Journalist	Outside
47	BBC Persian	21/07/2021	Journalist	Outside
48	Siavash Ardalan	21/07/2021	Journalist	Outside
49	Siavash Ardalan	17/07/2021	Journalist	Outside
50	Siavash Ardalan	27/11/2021	Journalist	Outside
51	Siavash Ardalan	21/11/2021	Journalist	Outside
52	Nik Kowsar	03/10/2021	Expert	Outside
53	Nik Kowsar	03/12/2021	Expert	Outside
54	Iran Mazandaran	20/07/2021	Journalist	Iran
55	Jamshid Bahrami	19/07/2021	Journalist	Outside
56	Shooka Bidarian	20/07/2021	Journalist	Outside
57	Reza Akvanian	19/07/2021	Public	Outside
58	Enghelabeh Zanane	31/07/2021	Public	Outside

59	Enghelabeh Zanane	31/07/2021	Public	Outside
60	Ali Jazayerii	05/08/2021	Public	Iran
61	Kaveh Madani	27/11/2021	Scientist	Outside
62	Kaveh Madani	04/01/2021	Scientist	Outside
63	Kaveh Madani	30/11/2021	Scientist	Outside
64	Kaveh Madani	30/11/2021	Scientist	Outside
65	Kaveh Madani	22/11/2021	Scientist	Outside
66	Falat Iran	22/07/2021	Journalist	Iran
67	Falat Iran	22/07/2021	Journalist	Iran
68	Falat Iran	19/11/2021	Journalist	Iran
69	Falat Iran	30/11/2021	Journalist	Iran
70	Falat Iran	19/11/2021	Journalist	Iran
71	Kaveh Madani	26/07/2021	Scientist	Outside
72	Kaveh Madani	30/11/2021	Scientist	Outside
73	Kaveh Madani	01/12/2021	Scientist	Outside
74	Kaveh Madani	01/12/2021	Scientist	Outside
75	Kaveh Madani	30/11/2021	Scientist	Outside
76	Kaveh Madani	02 /11/2021	Scientist	Outside
77	Kaveh Madani	09/12/2021	Scientist	Outside
78	Kaveh Madani	30/08/2021	Scientist	Outside
79	Kaveh Madani	30/11/2021	Scientist	Outside
80	Nik Kowsar	22/07/2021	Expert	Outside
81	Nik Kowsar	20/07/2021	Expert	Outside
82	Nik Kowsar	21/07/2021	Expert	Outside
83	Nik Kowsar	10/08/2021	Expert	Outside
84	Nik Kowsar	30/07/2021	Expert	Outside
85	Kaveh Madani	12/08/2021	Scientist	Outside
86	Kaveh Madani	10/08/2021	Scientist	Outside
87	Kaveh Madani	24/11/2021	Scientist	Outside
88	Kaveh Madani	27/07/2021	Scientist	Outside

89	Kaveh Madani	10/08/2021	Scientist	Outside
90	Kaveh Madani	27/11/2021	Scientist	Outside
91	Zaffar Baloch	26/07/2021	Public	Iran
92	Arezo Rashidian	26/07/2021	Public	Outside
93	Zaffar Baloch	25/07/2021	Public	Outside
94	Amir R. Bolurchi	17/07/2021	Public	Outside
95	Homeira Hesami	25/07/2021	Public	Outside
96	Kaveh Madani	27/11/2021	Scientist	Outside
97	David Lega	25/07/2021	Public	Outside
98	Arezo Rashidian	26/07/2021	Public	Outside
99	Potkin Azarmehr	26/11/2021	Public	Outside
100	Sherry	25/07/2021	Public	Outside
101	The Daily Outsider	25/07/2021	Public	Outside
102	Nik Kowsar	23/07/2021	Expert	Outside
103	Nik Kowsar	22/07/2021	Expert	Outside
104	Nik Kowsar	10/08/2021	Expert	Outside
105	Nik Kowsar	30/07/2021	Expert	Outside
106	Nik Kowsar	25/08/2021	Expert	Outside
107	Nik Kowsar	05/08/2021	Expert	Outside
108	Nik Kowsar	13/08/2021	Expert	Outside
109	Nik Kowsar	10/08/2021	Expert	Outside
110	Iran International	19/11/2021	Journalist	Outside
111	Iran International	24/07/2021	Journalist	Outside
112	Iran International	26/11/2021	Journalist	Outside
113	Iran International	25/11/2021	Journalist	Outside
114	Iran International	22/07/2021	Journalist	Outside
115	Iran International	19/11/2021	Journalist	Outside
116	Iran International	22/07/2021	Journalist	Outside
117	Iran International	20/07/2021	Journalist	Outside
118	Iran International	19/11/2021	Journalist	Outside

119	Iran International	21/07/2021	Journalist	Outside
120	Azam Bahrami	22/11/2021	Activist	Outside
121	Lida Ashtiani	06/10/2021	Public	Iran
122	Shima Babaei	30/07/2021	Public	Iran
123	Azam Bahrami	23/11/2021	Journalist	Outside
124	Farin Assemi	31/07/2021	Public	Outside
125	Persian God	17/07/2021	Public	Iran
126	Zeinab Rahimi	06/09/2021	Journalist	Iran
127	Siavash Ardalan	21/07/2021	Journalist	Outside
128	Reza Akvanian	31/07/2021	Public	Outside
129	Shima Bbaei	16/07/2021	Public	Iran
130	Siavash Ardalan	13/12/2021	Journalist	Outside
131	Mohamad Hashemi	10/11/2021	Public	Iran
132	Azam Bahrami	25/10/2021	Activist	Outside
133	Nooshabeh Amiri	18/07/2021	Activist	Outside
134	Reza Akvanian	26/07/2021	Public	Outside
135	Maryam Moqaddam	16/07/2021	Public	Outside
136	Kaveh Madani	20/11/2021	Scientist	Outside
137	Kaveh Madani	28/08/2021	Scientist	Outside
138	Kaveh Madani	19/07/2021	Scientist	Outside
139	Kaveh Madani	14/10/2021	Scientist	Outside
140	Kaveh Madani	19/11/2021	Scientist	Outside
141	Kaveh Madani	05/12/2021	Scientist	Outside
142	Kaveh Madani	24/11/2021	Scientist	Outside
143	Kaveh Madani	23/11/2021	Scientist	Outside
144	Kaveh Madani	03/10/2021	Scientist	Outside
145	Kaveh Madani	03/11/2021	Scientist	Outside
146	Kaveh Madani	23/11/2021	Scientist	Outside
147	Kaveh Madani	19/11/2021	Scientist	Outside
148	Kaveh Madani	21/11/2021	Scientist	Outside

149	Kaveh Madani	27/11/2021	Scientist	Outside
150	Zeinab Rahimi	06/09/2021	Journalist	Iran
Total				150

Table 5.3- The following variables were identified to determine the enemy frame

Variables	Definition	Example	K's α	Frequency
Enemy	An enemy has two meanings. A foreign enemy which is the US, Israel, or Saudi Arabia in Ali Khamenei's mind. The Western media and opposition figures inside of Iran who are trying to create problems. opposition figures also outside of the country like activists who often speak to the media and human rights organisations to shed light on the brutality of the Islamic Republic.	"The enemy uses any opportunity to advance its agenda against the Islamic Revolution. The People should not give them an excuse for their malign objective" (Ali Khamenei, 2021).	(0.89)	N 114 (16.3%)
Infiltrate	The meaning of infiltrate is also any country, individual or entity that does not support the Islamic values of the Iranian regime. Meaning the ideology of the Islamic Republic which is isolation and not trusting the West. A belief that any interest from the West is malicious and aimed at creating chaos in Iran. Any form of foreign media, foreign intervention, or foreign element is considered as infiltration in Iran's domestic policies. In the mind of the Supreme Leader, and the regime, any connection to the West, Israel or even some Arab countries is considered suspicious and possible infiltration through providing information about what happens inside Iran.	"The People should not give them an excuse for their malign objective to infiltrate" (Ali Khamenei, 2021)	(0.88)	N 387 (55.3%)
Enemy agenda	The agenda of the enemy means to undermine the legitimacy of the Islamic	"The people should be careful regarding the agenda of the enemy," (Ali Khamenei, 2021).	(0.87)	N 386 (55.1%)

Republic by pointing out the problems in the system. The Western media covering the water problems and protests is considered as a Western agenda to fuel the uprising and ultimately overthrow the regime. In his mind, the objective of countries like Israel and the US is to use Western media to turn people in Iran against the government.

Tricked or Brainwashed	Protesting or showing any form of negative behaviour towards the government and the Islamic Republic is an opportunity for the enemy to get what it wants. Which is regime change in Iran. Protesting the water crisis in his communication is also an opportunity for the media to take advantage and give a negative narrative of the Supreme Leader and the ruling regime in Iran. By opportunity, it means providing a chance (protests)for the enemy to trick and brainwash the people into an uprising.	"The people should not give an opportunity for the enemy to win," (Ali Khamenei, 2021).	(0.87)	N 491 (70.1%)
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Table 5.4- The following variables were identified to determine the scapegoating frame

Variables	Definition	Example	K's α	Frequency
Manipulation	Loyalty in the statements is meant to manipulate the people of the drought hit provinces into not protesting the government. He is using this language to gain the trust of the people and stop them from protesting. He is shifting the blame from himself and separating himself from the crisis by saying that he is on the side of the loyal people.	Example: "In recent days, one of our concerns has been Khuzestan, the people's water problems & their difficulties. It's truly painful that in Khuzestan that has such loyal people, natural resources & potentials, & so many factories, the people's situation has dissatisfied & upset them" (Ali Khamenei, 2021).	(0.90)	N 448 (64%)
Blame	Here he is shifting blame of the water crisis to the government and not himself- separating himself from the president and the ministers in charge of water management. Also, he is trying to gain the favour of the people by taking their side against the officials who oversee water management. Blame also means that the West and Israel are trying to create political tension among the people by encouraging them to protest by using media. That is why during the protests the internet was shut down so that the information that leaves the country is limited.	"Had the advice regarding Khuzestan's water and wastewater system been heeded, surely such problems wouldn't have arisen. Now, the people voiced their dissatisfaction, and they cannot be blamed at all. They are upset. Water isn't a minor issue, especially not in the Khuzestan climate," (Ali Khamenei, 2021).	(1)	N 231 (33%)
Responsibility	This means that the responsibility of the water crisis and protests is not on the Supreme leader and is with the government meaning president, and ministers. The government of President Hassan Rohani in 2021 is considered as moderate and the Supreme Leader is in favour of the conservatives.	"The current government should have been responsible with the water problems. I have asked the incoming government to follow up this issue of water very seriously, so that the enemy doesn't have an excuse to use the situation to their advantage," (Ali Khamenei, 2021).	(0.84)	N 519 (74%)

Table 5.5- The following variables were identified to determine the violence frame

Variables	Definition	Example	K's α	Frequency
Violence	It means the killing of protestors by live ammunition by the regimes security forces and police who were deployed to the streets to stop people from protesting.	"A woman in southwestern Iran was heard pleading for security forces not to use violence against those protesting water shortages after at least two demonstrators were killed." (Radio Free Europe, 2021)	(1)	N 339 (48.4%)
Cause	The cause of violence by security forces was to suppress the protests by any means necessary. The security forces were sent to the streets to shoot people and arrest them to stop people from using social media to spread the information to the media.		(0.93)	N 490 (70%)
Deadly	Bloody or deadly means that several protestors were shot or killed by the security forces. The authorities using violence and ammunition to suppress the widespread protests in the province of Khuzestan and Isfahan.	"Anyone with a little knowledge of Iran's water/environmental politics knows what the public thinks about water transfer. If you don't, read the news and see footages of Iran's bloody water protests before making a new proposal, (Kaveh Madani on X, 2021).	(1)	N 358 (51.1%)
Deaths and arrests	The reference to the number of casualties in the protests usually appear in counter articles to show that the government is using violence to respond to the peaceful demonstration by people who were demanding water. Deaths means the number of people who were shot in Khuzestan and Isfahan while protesting for water shortages. This also points to the people who were arrested during the water protests on charges of acting against national security or undermining the regime's legitimacy.	"The Islamic Republic of Iran shoots and kills people protesting water shortages. Khamenei kills and imprisons all critics and opponents of his regime. Negotiations with this regime have no result. The Islamic Republic is a murderous system and must be destroyed" (Amirhossein Miresmaeili, 2021).	(0.79)	N 270 (38.6%)

Table 5.6- The following variables were identified to determine the mismanagement frame

Variables	Definition	Example	K's α	Frequency
Mismanagement	Pointing to the real cause of the droughts that happened which were neglect and government mismanagement. This means that the authorities in charge of Iran's water resources drained the water because of excessive dam building and unsustainable agricultural practices. 95% of Iran's water and groundwater is used for agriculture. This is something that experts think is complete mismanagement. They believe that the crops and irrigation system is flawed and therefore the water resources are drained. But the regime wants to keep its food self-sufficiency not to rely on imports and influence by other countries.	"Drought and water mismanagement spark deadly protests in Iran. The driest conditions in 53 years have brought chronic mismanagement of water resources to crisis point with at least eight people killed in protests against the regime." (X,2021)	(0.78)	N 500 (71.4%)
Adjectives (thirsty, uprising)	Points to the fact that people in the two provinces were suffering from thirst and lack of water for daily use and for drinking. Thirst and lack of water resulted in the protests and uprising of the population of these provinces that were hit with drought.	"Please be the voice of Khuzestan. Iranians are out on the streets bravely taking part in the uprising of the thirsty as cities are facing constant water shortages. people are simultaneously calling for the overthrow of the regime," (X, 2021).	(1)	N 398 (56.9%)
Resource mismanagement	Mismanagement in water resources means an inefficient agriculture sector that extract more than 90% of Iran's water. Building of excessive dams for industrialisation and economic gain. The drying of wetlands that lead to the drying of iconic lakes through dam building.	"The protests are alive and is taking over the entire country. The Isfahan farmers are protesting the drying of Zayandeh Rud that has no access to water. There is no water management in drought and is a horrible situation for farmers," (Green Party of Iran, 2021)	(1)	N 337 (48.1%)

Chapter 6- Findings

Results

This thesis adopted a mixed-method approach, integrating qualitative and quantitative analyses to simultaneously address the research questions (Tashakkori and Teddlie, 2003). To answer RQ1, which asked how the Supreme Leader's frames appeared in the different media coverage, SPSS was used to create a media variable encompassing local, diaspora, international and social media. The Supreme Leader's frames of *enemy* and *scapegoating* were identified as the dependent variables and run against the media variable using a one-way ANOVA test. The frame variables were combined to create an index for each Supreme Leader's frame. Then, a one-way ANOVA test was run between the different media types and the index. In this dissertation, when the word 'regime' or 'state' is mentioned, it refers to the Supreme Leader and the IRGC. When the word government is mentioned, it refers to the presidents and other officials in Iran, such as ministers working below the Supreme Leader.

Enemy Frame

For the *enemy* frame, there was a statistically significant difference between media groups as determined by one-way ANOVA, $F(3, 696) = 13.085, p < .001$). A Bonferroni post hoc test revealed that the mean score for the *enemy* frame was statistically significantly lower for social media ($M = 0.37, SD = 0.23$) compared to local media ($M = 0.53, SD = 0.33$), diaspora media ($M = 0.50, SD = 0.26$), and international media ($M = 0.53, SD = 0.29$). There was no statistically significant difference between local, diaspora, and international media using the enemy frame. The *enemy* frame was found to be significantly less prevalent on social media compared to traditional media. Despite variations in political perspectives,

motivations, and reporting styles, traditional media, whether local, diaspora, or international, tend to conform to the journalistic norm of reiterating the Supreme Leader's statements. In contrast, social media operates outside these conventions and is less invested in perpetuating such narratives.

The qualitative analysis further supports the findings, particularly regarding the lower use of the *enemy* frame on social media, which, in this context, provided alternative narratives to those found in local, diaspora, and international media. The analysis indicates that Ayatollah Khamenei's media strategy is a coordinated approach designed to control public discourse and consolidate his domestic and international authority (Selvik, 2018). Central to this strategy is the reliance on state-controlled media, which play a pivotal role in disseminating regime-aligned messaging and reinforcing political and religious ideologies. A significant component of this strategy is the use of framing, particularly through the "enemy" narrative, which attributes Iran's challenges to foreign actors such as the U.S. and Israel, thereby deflecting domestic criticism. Khamenei also employs religious messaging to intertwine Islamic principles with political objectives, legitimising his rule (Khiabany, 2010).

Additionally, his presence on social media extends his influence globally, while domestic dissent is curtailed through censorship and the suppression of independent media. During periods of unrest, the regime spreads propaganda and disinformation to create an illusion of stability and delegitimise opposition. The qualitative analysis suggests that Khamenei's media strategy is characterised by state control, religious rhetoric, external and internal scapegoating, and censorship to shape narratives, maintain power, and influence local and international perceptions (Selvik, 2018).

The results reveal that the Supreme Leader's directive, urging people protesting water shortages to avoid “falling prey to the enemy,” appeared more frequently in local, international, and diaspora media than in social media. The findings indicate that the conservative local outlet, *Fars News Agency* ($M = 0.78$, $SD = 0.12$), used the *enemy* frame more consistently than other local news organisations, suggesting strong support for the narrative that foreign enemies are manipulating the population to protest water shortages. A qualitative example illustrates this: “The enemy will try to use any tool against the Islamic Revolution, the nation, and the people’s interests, so we must be careful not to give him any excuse” (Supreme Leader quoted in *Fars News Agency*, 23 July 2021). The one-way ANOVA test shows that the local reformist media outlet, *Etemad Newspaper* ($M = 0.77$, $SD = 0.20$), used the *enemy* frame almost as frequently as the conservative *Fars News Agency*. In Iran, conservative media align closely with the Supreme Leader and the Islamic Revolutionary Guards, steadfastly adhering to the regime's narrative. While refraining from directly confronting the Supreme Leader, reformist media in Iran sometimes criticises economic and environmental policies (Khiabany, 2010). Qualitative analysis reveals that both conservative and reformist media in Iran used the *enemy* frame, similarly, demonstrating alignment with the Supreme Leader's narrative: “The enemy is looking for ways to trick the loyal people of Khuzestan, and we must not give them any pretext to use against the values of the Islamic Republic” (Supreme Leader quoted in *Etemad Newspaper*, 23 July 2021).

Notably, these nearly identical quotations appear in both *Fars News Agency*, known for its alignment with the Iranian regime, and *Etemad Newspaper*, a reformist outlet that occasionally critiques government policies. However, regarding the Supreme Leader, none of the local media, whether conservative or reformist, directly

challenged his *enemy* frame. As anticipated, the term “enemy,” as articulated by the Supreme Leader and the Iranian regime, typically refers to the United States, Israel, and separatist elements within Iran. Additionally, Western media are frequently labelled as part of this “enemy” narrative.

International media ($M = 0.53$, $SD = 0.29$) exhibited results comparable to those of local media regarding coverage. However, qualitative analysis suggests that while international media employed the *enemy frame* as frequently as local outlets, they often followed it with statements contradicting the Supreme Leader’s narrative. Publications such as *The New York Times*, *The Financial Times*, and *The Guardian* have quoted the Supreme Leader blaming “enemies” for the water protests. However, international media frequently countered this narrative by referencing human rights groups like Amnesty International: “The Supreme Leader accused Iran’s enemies of trying to exploit the situation, but rights groups have previously accused Iran of a ferocious crackdown against nationwide protests where hundreds have been killed” (Amnesty International quoted in *The Guardian*, 23 July 2021).

The results show that diaspora media ($M = 0.50$, $SD = 0.26$) employed the *enemy* frame in over 50% of their coverage, though for different reasons than those of local and international outlets. “Khamenei did not criticise the lethal force security forces are using against protesters in Khuzestan and elsewhere. At the same time, he urged protesters not to do anything to please the enemies” (quoted in *Iran International*, 23 July 2021). Qualitative analysis of diaspora media articles indicates that the *enemy* frame was often used to debunk the Supreme Leader’s narrative, frequently refuting his claims that foreign countries are responsible for Iran’s water problems. Outlets such as *Iran International*, *BBC Persian*, and *Radio Farda* used

the enemy frame to challenge the government's official line. While local media like *Fars News Agency* (23 July 2021) used headlines such as "The Supreme Leader warns against enemy infiltration," diaspora media like *Radio Farda* (26 July 2021) opted for headlines like "Demonstrators chant death to the dictator as water protests spread," directly referring to the Supreme Leader, Ali Khamenei.

The results from the social media platform X ($M = 0.36$, $SD = 0.23$) show the lowest use of the *enemy* frame, as it allows for a wider variety of perspectives and narratives, usually from opposition groups and activists during the water protests (Kwak, 2010). In the few instances ($N = 6$) where the *enemy* frame did appear on social media, it was often used by activists to criticise the Islamic Republic: "Not having water or electricity is not the real problem the people of Khuzestan grapple with; it is actually the enemy of all of us, the Islamic Regime and the Supreme Leader" (Farshad Gardakaneh, a Kurdish activist on X, 16 July 2021).

A subsequent one-way ANOVA test was conducted to determine whether significant differences existed in using the *enemy* frame across different countries. The results indicated a statistically significant difference among countries, $F(7, 692) = 6.743$, $p < .001$. The Post hoc Bonferroni test revealed that media outlets within Iran ($M = 0.53$, $SD = 0.32$) used the *enemy* frame more frequently than those in other countries, suggesting strong alignment with the government narrative. Among the countries analysed (as listed in Table 2), Canada ($M = 0.31$, $SD = 0.33$) had the lowest use of the *enemy* frame. Further qualitative analysis demonstrates that local media in Iran frequently employed the *enemy* frame, which subsequently spread to mainstream international and diaspora media, consistent with Entman's (2003) cascading activation model. In summary, the *enemy* frame is least used on the social media platform X, which is subject to less censorship than local media and places

less emphasis on elite perspectives than international and diaspora outlets. The role of social media in providing alternative narratives to those living under authoritarian regimes will be explored further in the next chapter.

Scapegoating Frame

For the Supreme Leader's *scapegoating* frame, there was an almost statistically significant difference between media groups as determined by one-way ANOVA $F(3, 696) = 2.541, p < .055$. The common threshold for significance is $p < 0.05$. Since 0.055 is slightly above this threshold, it suggests that the result is almost significant but does not quite meet the standard cutoff for statistical significance. A Bonferroni post hoc test revealed that the mean score for the *scapegoating* frame was statistically significantly lower for international media ($M = 0.53, SD = 0.30$) compared to local media ($M = 0.60, SD = 0.36$), diaspora media ($M = 0.57, SD = 0.27$) and social media ($M = 0.61, SD = 0.23$). There was no statistically significant difference between local, diaspora, and social media in their use of the *scapegoating* frame.

Further qualitative analysis shows that local media frequently employed the *scapegoating* frame in alignment with the Supreme Leader's narrative, who often shifted blame for Iran's water issues to external factors other than himself. The Supreme Leader was quoted in local media blaming the lower echelons of the government, such as the president (Hassan Rouhani) and local officials in Khuzestan and Esfahan provinces. Reformist papers, *Etemad Newspaper* ($M = 0.88, SD = 0.16$) and *Donyaye Eghtesad* ($M = 0.93, SD = 0.14$) had the highest use of the *scapegoating* frame among the local media. Qualitative analysis indicates that the conservative publications used the *enemy* frame more than the *scapegoating* frame to blame foreign countries for Iran's water problems rather than the government

inside Iran. The qualitative analysis of the articles reveals that reformist newspapers employed the scapegoating frame more frequently than conservative outlets, largely due to their critical stance on the government's handling of Khuzestan's water shortages.

Given that the Supreme Leader himself criticised officials responsible for water management, reformist media appeared to have greater latitude in highlighting the government's shortcomings. The discussion chapter will elaborate on the differences between the conservative and reformist media. "Bad water management and unsustainable development are to blame for Zayandeh Rud drying" (quoted in *Etemad*, 22 December 2021). The headlines don't directly blame the Islamic Revolutionary Guards or the Supreme Leader for the country's water crisis and shift blame to the lower branches of the government. "If our recommendations were taken seriously by the government, the loyal people of Khuzestan would not be facing these water problems; the next presidential office needs to take the issue seriously" (the Supreme Leader quoted in *Donyaye Eghtesad*, 23 July 2021).

International media ($M= 0.53$, $SD= 0.30$) had the lowest use of the *scapegoating* frame, indicating that the frame did not flow outside the system as frequently as the *enemy* frame. Qualitative analysis suggests that the enemy frame was more prominent in international media coverage, largely due to the focus on the deaths and killings of protestors and the attribution of responsibility for these events. The framing of these narratives reflects international media's tendency to emphasise accountability and human rights violations. This context underscores the complex dynamics within the Iranian media landscape, where the extent of criticism permitted is often contingent upon the alignment of narratives with those of the ruling elite, which will be further discussed in the next chapter. Qualitative analysis of the articles

published in the international media, such as *The New York Times* ($M= 0.66$, $SD= 0.21$), *The Guardian* ($M= 0.76$, $SD= 0.25$) and *The Financial Times* ($M= 0.64$, $SD= 0.23$) show that the *scapegoating* frame was used to hold the government accountable in terms of their role in causing Iran's water problems. "Iran's decision-makers must shoulder the blame for Iran's water crisis" (quoted in the Guardian, 5 August 2021).

Diaspora media ($M= 0.57$, $SD= 0.27$) used the *scapegoating* frame higher than the international media but with a similar narrative. Qualitative analysis shows that the frame was used to hold the government accountable for Iran's water problems. "People blame government mismanagement, harmful dam building and politically motivated diversion of rivers have devastated agriculture and drinking water sources" (a source quoted in Iran International, 19 November 2021).

Qualitative analysis shows that *Iran International* is among the diaspora media which challenged the Supreme Leader directly in its use of the *scapegoating* frame by sourcing people who opposed his narrative. "Although Khamenei has been in charge of the Islamic Republic as its top leader for three decades and intervened in all matters relating to the state, he blames presidential administrations for the mounting problems in Khuzestan and elsewhere" (a source quoted in Iran International 23 July 2021).

In contrast with the *enemy* frame, social media ($M= 0.61$, $SD= 0.23$) had the highest use of the *scapegoating* frame. On social media, the discourse surrounding the water protests is predominantly shaped by activists, journalists, and regime opponents, resulting in a less distinct separation between the Supreme Leader and the government. The different roles social media plays in disseminating environmental news in the context of Iran will be examined in greater detail in the

following chapter. A qualitative analysis of the posts on Twitter (X) shows that the frame was used to hold the government accountable and debunk the statements given by the Supreme Leader that “foreign enemies” are behind the water protests. “It is the police and security forces that are using violence against the people and are to blame, not foreign hooligans like the regime says” (journalist Amir Farshad Ebrahimi on X, 26 November 2021). Further analysis shows that whenever the *scapegoating* frame was used on X, whether by journalists, activists, human rights organisations, or people, it was to blame the government for the bad management of water resources in Iran. “On the third night of the protests in Khuzestan Province, locals blocked the main road to protest severe water shortages they blame on the regime mismanagements” (quoted on X by *Iran News Wire*, 17 July 2021).

Another one-way ANOVA test was run to determine whether there were any significant differences in the use of the *scapegoating* frame among different countries. The one-way ANOVA test results to the *scapegoating* frame showed a statistically significant difference between the countries $F(7,692) = 2.916, p < .005$. The Post hoc Bonferroni test result revealed that among the countries shown in Table 2, media in Canada ($M = 0.39, SD = 0.33$) used the *scapegoating* frame the lowest. Qualitative analysis of the Canadian press indicates that the coverage was more focused on the violence used by the security forces against the protestors. The results show media in France ($M = 0.64, SD = 0.29$) had the highest use of the *scapegoating* frame. Qualitative analysis indicates that publications like *Agence France Press* used the *scapegoating* frame while quoting the local media in Iran. “A demonstrator was shot dead during protests against water shortages in drought-hit southwestern Iran, state media reported, with an official blaming the death on opportunists and rioters” (quoted in *Agence France Press*, 17 July 2021). It makes

sense that media in Iran ($M= 0.60$, $SD= .36$) scored second highest using the *scapegoating* frame. Qualitative analysis shows that France has a higher score given that the frame was used by quoting the Supreme Leader from local news and other sources that challenge the frame.

Table 6.1- Supreme Leader Frames

Media Type	Enemy Frame Mean	Enemy Frame Std Deviation	Scapegoating Frame Mean	Scapegoating Frame Std Deviation
Local Media	0.53	0.33	0.60	0.36
Diaspora Media	0.50	0.26	0.57	0.27
International Media	0.53	0.29	0.53	0.30
Social media	0.37	0.23	0.61	0.23

Table 6.2- Countries for the Supreme Leader Frames

Country	Enemy Frame Mean	Enemy Frame Std	Scapegoating Frame Mean	Scapegoating Frame Std
Iran	0.53	0.32	0.60	0.36
UK	0.52	0.29	0.51	0.30
USA	0.56	0.24	0.58	0.29
Israel	0.55	0.26	0.42	0.26
Canada	0.31	0.33	0.39	0.33
France	0.56	0.31	0.64	0.29

Counter Frames

RQ2 sought to understand whether the Supreme Leader's frames were countered in the media coverage of the 2021 Iran water protests. Using SPSS, a variable named media was created, encompassing local, diaspora, international and social media. The counter-frame of *violence* and *mismanagement* were identified as the dependent variables and run against the factor "media" using a one-way ANOVA

test. The frame variables were combined to create an index for each counter frame. To answer RQ2, a one-way ANOVA test was run between the different media types and the index.

Violence Frame

For the *violence* frame, there was a statistically significant difference between media groups as determined by one-way ANOVA, $F(3, 696) = 42.993, p < .001$). A Bonferroni post hoc test revealed that the mean score for the *violence* frame was statistically significantly lower for social media ($M = 0.33, SD = 0.29$) compared to local media ($M = 0.41, SD = 0.34$), diaspora media ($M = 0.70, SD = 0.37$) and international media ($M = 0.62, SD = 0.31$). There were also statistically significant differences between local and diaspora media ($p < .001$) and between local media and international media ($p < .001$). However, there was no statistically significant difference between diaspora media and international media in their use of the *violence* frame. The lower prevalence of the violence frame on social media compared to other media types can be attributed to the persistent threat of surveillance and reprisals faced by users, even in spaces that are less censored than traditional media. Despite the relative freedom social media offers, users are aware of the risks associated with directly addressing sensitive topics like violence. This awareness often results in self-censorship, where users consciously avoid framing discussions in terms of violence to minimise potential repercussions. Instead, they may focus on related issues in less confrontational ways, thereby contributing to the reduced emphasis on the violence frame in social media discourse.

A qualitative analysis of the diaspora media's high use of the *violence* frame shows ($M = 0.70, SD = 0.37$) that the Persian-speaking outlets outside of Iran strongly

countered the Supreme Leader's frames. *Radio Farda* and *Iran International* used the frame to show that while the regime was blaming the "enemy" for the water protests, security forces were killing and arresting people who were demanding water. "The protests turned deadly and violent shortly after they started on July 15, with local authorities blaming the death of a 30-year-old man on rioters" (quoted in Radio Farda, 20 July 2021). Other headlines by the diaspora media focused on the number of people who the security forces in Khuzestan province had killed.

Qualitative analysis of diaspora media shows that often, a quote is cited by the local press which blames "rioters" or "enemies" for the death of protestors and then is followed by the source that has refuted this narrative using the *violence* frame. For example, in an article titled "Protestors Killed in Second Night of Demonstrations", *Iran International* starts the article by quoting IRNA, a conservative news organisation in Iran saying that "rioters" have sent gunshots into the air and one of them has killed a protestor. The article then follows this statement by using the *violence* frame to hold the regime accountable for the death of a man protesting water shortages in Khuzestan province. "A young protestor was killed by a violent gunshot that the authorities tried to blame on rioters" (quoted in Iran International, 17 July 2021).

The international media ($M= 0.62$, $SD= 0.31$) use of the *violence* frame showed a statistically significant difference with the local media ($M= 0.41$, $SD= 0.34$), which used it less frequently. The qualitative analysis shows that international media used the frame to focus on human rights violations carried out by the Iranian government during the water protests. While articles used the Supreme Leader's *enemy* frame significantly, as mentioned above, their use of the *violence* frame was higher. Qualitative analysis of the coverage shows that the number of arrests and

killings is often mentioned. “We kept shouting we want water, just water, we don’t have water, and they answered us with violence and bullets” (an anonymous source quoted in *the New York Times*, 21 July 2021). Similar to diaspora media, articles in the international press used the *violence* frame to counter the Supreme Leader’s frames by starting articles indicating the number of people who have been killed in the water protests in Khuzestan, followed by the government’s narrative that “rioters” were to blame. In another example, *CNN* referenced the number of deaths in the first paragraph of the article using the *violence* frame using anonymous sources refuting the *scapegoating* frame put forward by the state media. “One witness who was at a protest in Khuzestan province told *CNN* that people were shot dead by anti-riot police and security agents and that a continued heavy security presence remained in Khuzestan on Saturday” (quoted in *CNN*, 25 July 2021). The previous paragraph in the article had a passage mentioning the state media in Iran saying that the authorities were blaming the killing on external agents. “Suspicious bullets shot by some unknown people who penetrated among peaceful protesters” (Quoted in *CNN*, 25 July 2021).

Social media ($M= 0.33$, $SD= 0.29$) had the lowest use of the *violence* frame compared to the other media groups, which shows that the Supreme Leader’s frames were countered to a lower degree. Qualitative analysis shows that a smaller number of people feel comfortable posting about killings and violence during the water protests, given the fear of reprisal inside Iran. Social media is monitored and controlled by security forces in Iran. Therefore, the use of the *violence* frame has been limited to media and people who reside outside of the country. Qualitative analysis shows that elements of fear and censorship played a role in the fact that they were used less for the *violence* frame. Most posts that discuss violence belong

to accounts of activists living outside Iran and are free to share news without being arrested. For example, prominent female activist Masih Alinejad posted multiple entries regarding killings during the water protests from the United States, asking more journalists to take part in raising awareness. “People of Ahvaz and other cities in Iran’s Khuzestan province are out in the streets asking for water. The Islamic Republic of Iran has killed scores of protestors. The protests are ongoing. Please cover Khuzestan. The Islamic Republic of Iran is using live bullets” (Masih Alinejad on X, 17 July 2021). In Iran, concerns over government reprisals lead to widespread self-censorship on social media among individuals within the country. The dynamics of self-censorship in authoritarian regimes and its implications for access to information will be explored in greater depth in the next chapter. It makes sense that local media ($M= 0.41$, $SD= 0.34$) had a low use of the *violence* frame given that they rarely counter or challenge statements provided by the Supreme Leader, Ayatollah Khamenei. The qualitative analysis of the local media supported this narrative as the *violence* frame was used in a different context than the rest of the media groups. Local media supported the government line that violence and killing during the water protests were carried out by “rioters” and “enemies” rather than the police or security forces deployed by the regime. Further qualitative analysis shows that lack of press freedom and editorial control in state media prevents the press from challenging the narrative of the Supreme Leader. For example, the conservative *Fars News Agency* used the *violence* frame in contrast with the diaspora and international media. “The post on social media shows that security forces were calm and respectful of people protesting water shortages and did not use any violence” (quoted in *Fars News Agency*, 18 July 2021). Another example, like the coverage of *Fars News Agency*, a publication close to the Supreme Leader and the Revolutionary Guards, is the

reporting of *Keyhan Newspaper*, which used the *violence* frame in support of the *enemy* frame and did not counter it. “The videos on social media show rioters and protesters with ammunition while the security forces are empty-handed” (quoted in *Keyhan*, 24 July 2021). This portrayal contrasts sharply with the narratives presented by international and diaspora media. Local media typically aligns with the government’s perspective, often presenting a version of events that absolves authorities of responsibility and avoids holding them accountable. Consequently, public trust in local media is notably low, which will be further examined in the next chapter.

Another one-way ANOVA test was run to determine whether there were any significant differences in the use of the *violence* frame among different countries. There was a statistically significant difference in the use of the *violence* frame among the different countries’ media $F(7,692) = 23.422, p < .001$. The Post hoc Bonferroni test result revealed that there were significant differences in the use of the *violence* frame between Iran ($M = 0.41, SD = 0.34$), the United States ($M = 0.77, SD = 0.28$), the United Kingdom ($M = 0.58, SD = 0.29$) and France ($M = 0.68, SD = 0.27$). There were no statistically significant differences between Iran, Israel, or Iran and Canada. The qualitative analysis indicates that the media in the United States used the *violence* frame more than any other country, followed by France. Qualitative analysis of the articles shows that the US publications used *violence* frame to provide an alternative narrative to the line of the government that no one was killed or injured at the hands of the security forces in the water protests. It makes sense that the media in Iran had the lowest use of the *violence* frame, given the lack of press freedom and media censorship.

Mismanagement Frame

The one-way ANOVA test results for the second counter-frame *mismanagement* showed a statistically significant difference among different media groups $F(3, 696) = 27.236, p < .001$). The Post hoc Bonferroni test result revealed that the mean score for the *mismanagement* frame was significantly lower for international media ($M = 0.45, SD = 0.36$) compared to local media ($M = 0.60, SD = 0.40$), diaspora media ($M = 0.70, SD = 0.31$), and social media ($M = 0.75, SD = 0.32$). There were no statistically significant differences between local, diaspora, and social media regarding their use of the *mismanagement* frame.

While international media had a high use of the *violence* frame and countered the Supreme Leader's *enemy* and *scapegoating* frame, its use of the *mismanagement* frame was lower than the other media groups. A qualitative analysis of the articles revealed that during the times of the water protests, the international media published many articles focusing on the number of killings and arrests. *The New York Times* ($M = 0.68, SD = 0.33$) and *The Guardian* ($M = 0.71, SD = 0.40$) had the highest use of the *mismanagement* frame. They countered the *scapegoating* frame by using sources and information that shed light on the reasons behind Iran's water problems. The articles often quote experts outside of Iran who spoke to the decades of water resource mismanagement by the Iranian regime. "Iran has been facing increasing water scarcity issues because of years of mismanagement" (quoted in the *New York Times*, 26 November 2021). In another example, an expert source in *The Guardian* explains the reasons for Khuzestan's water issues, pointing to mismanagement. "Excessive manipulation of the natural environment for economic purposes and water mismanagement has pushed Khuzestan's ecosystem to the breaking point" (quoted in the *Guardian*, 5 August 2021). Qualitative analysis indicates that even though the international media used the *mismanagement* frame

to counter the Supreme Leader's frames, most pieces used the *violence* frame, given the deadly nature of the water protests during the sample period. While international media predominantly employed straightforward *enemy* and *violence* frames, the more nuanced *scapegoating* and *mismanagement* frames were confined mainly to international print outlets such as *The New York Times* and *The Guardian*. The international media exhibited a lower utilisation of the *mismanagement* frame, as coverage during the sample period predominantly concentrated on the deaths and killings of protestors. Moreover, reporting on the government's internal dynamics presents significant challenges for international media, especially when they do not have direct access or correspondents on the ground, as is the situation in Iran. This preference for simplified messaging in international news coverage is significant and concerning and will be critically examined in the following chapter.

Another outlier is the local media, which used the *mismanagement* frame significantly more ($M = 0.60$, $SD = 0.40$) than it used the *violence* frame ($M = 0.41$, $SD = 0.34$). A qualitative analysis of the articles shows that while the local media did not counter the Supreme Leader's frame by using the *violence* frame, it did focus some of its coverage on the mismanagement of the water resources. Further qualitative analysis shows that the Supreme Leader mentioned water mismanagement by local officials when he made statements about the government being responsible. "Had the advice regarding Khuzestan's water and wastewater management been heeded, surely such problems wouldn't have arisen" (the Supreme Leader quoted on 23 July 2021). The local media picked up this narrative, explaining the high use of the *mismanagement* frame. In the case of local media, the *mismanagement* frame was not used to counter the Supreme Leader but to support his narrative, echoing the *scapegoating* frame. This shows why *Fars News Agency*

($M = 0.92$, $SD = 0.25$), a publication close to the IRGC and the Supreme Leader, had the highest use of the *mismanagement* frame. “His holiness, the Supreme Leader of Iran, has said that if his advice on the management of Khuzestan’s water problems were taken seriously, these problems would have never occurred, and now the people have no water” (quoted in *Fars News Agency*, 23 July 2021). This statement made by the Supreme Leader was published in reformist publications, such as *Shargh Daily* and *Etemad*, and conservative news organisations, such as *Keyhan* and *Fars News*. *Shargh Daily* had the second-highest use of the *mismanagement* frame ($M = 0.63$, $SD = 0.43$). Qualitative analysis of the *Shargh Daily* article shows more focus on the details of the mismanagement of the water resources, indicating more freedom in expression given the Supreme Leader’s statement and narrative that it is acceptable to blame the government. “Khuzestan’s water problems are the result of mismanagement, dam building and unsustainable development” (quoted in *Shargh Daily*, 11 September 2021).

Unsurprisingly, diaspora media ($M = 0.70$, $SD = 0.31$) and social media ($M = 0.75$, $SD = 0.32$) had similar use of the *mismanagement* frame and strongly countered the Supreme Leader’s *scapegoating* frame. Qualitative analysis shows similar narratives followed by diaspora media and social media regarding the water protests and the *mismanagement* frame. *Iran International* and *BBC Persian* interviewed expert sources who focused on the misuse of water resources in Khuzestan and Esfahan provinces, which local media did not. Similarly, on X, the experts who were usually sources on diaspora media have tweeted about how the government of Iran used water resources for “dam building” and “industrialisation”. For example, *BBC Persian* published articles linking to videos on social media showing people chanting, “The bad water managers have given our water away”

(quoted in *BBC Persian*, 22 November 2021). On X, similar narratives were found with experts focusing on the *mismanagement* frame to draw attention to the fundamental causes of Iran's water problems. "Solving Iran's water problems, which result from decades of bad water management, depends on whether or not structural change occurs" (Kaveh Madani on X, 5 December 2021). This water expert, based in Canada, was a former deputy head of Iran's Department of Environment.

The one-way ANOVA test results indicate a statistically significant difference in the use of the *mismanagement* frame between different countries $F(7, 692) = 13.192, p < .001$). The Bonferroni Post hoc test was performed to determine which countries differed from each other, as presented in Table 4. Following the findings for the use of the *mismanagement* frame in the different media groups, Iran ($M = 0.61, SD = 0.40$) and the United States ($M = 0.52, SD = 0.37$) had the highest use of the *mismanagement* frame but for different reasons. While the media in Iran were quoting the Supreme Leader and his statement that "management should have been better for Iran's water problems", media in the US and the United Kingdom ($M = 0.45, SD = 0.36$) were using the *mismanagement* frame to counter the official government line. Qualitative analysis shows that the media in Iran used the *mismanagement* frame supporting the Supreme Leader's narrative that "the government" should have listened to his advice on water management, deflecting blame from himself and the Revolutionary Guards who profited from industrialisation.

In contrast, the US, UK and French media used the *mismanagement* frame to hold the government accountable by sourcing experts using "unsustainable development" and "water bankruptcy". The *mismanagement* frame serves as a counter-frame employed by the media to critique the authorities' handling of the country's water resources. Local media utilised this frame with some latitude, given

that the Supreme Leader, through his use of the scapegoating frame, indirectly sanctioned criticism by deflecting blame onto lower levels of government. The two frames differ fundamentally in their application: while the scapegoating frame targets foreign “enemies,” the mismanagement frame challenges domestic governance by offering a counter-narrative.

Table 6.3- Counter Frames

Media Type	Violence Frame Mean	Violence Frame Std Deviation	Mismanagement Frame Mean	Mismanagement Frame Std Deviation
Local Media	0.41	0.34	0.60	0.40
Diaspora Media	0.70	0.37	0.70	0.31
International Media	0.62	0.31	0.45	0.36
Social media	0.33	0.29	0.75	0.32

Table 6.4- Countries for the Counter Frames

Country	Violence Frame Mean	Violence Frame Std	Mismanagement Frame Mean	Mismanagement Frame Std
Iran	0.41	0.34	0.61	0.40
UK	0.58	0.29	0.45	0.36
USA	0.77	0.28	0.52	0.37
Israel	0.45	0.41	0.27	0.38
Canada	0.45	0.27	0.45	0.40
France	0.68	0.27	0.48	0.29

Source Use

RQ3 aimed to explore the extent to which all four frames disseminated through source use, in alignment with Entman’s (2003) cascading activation model. Specifically, the research examined whether these frames cascaded through Iran’s hierarchical system, from the Supreme Leader to lower levels of government, and ultimately into media coverage. To address RQ3, Chi-square analyses were first

conducted to assess the extent of source coverage across different media groups. Subsequently, one-sample t-tests were employed to determine whether the highlighted sources significantly deviated from the overall mean for each frame. Tables 5 and 6 provide a detailed summary of the statistical findings.

The Supreme Leader

The Chi-Square results for the relationship between media type and mentions of Ali Khamenei, the Supreme Leader, indicate a statistically significant difference $\chi^2(3) = 53.024, p < .001$. The standardised residual for social media is -5.3, which exceeds the ± 3.0 threshold, indicating a statistically significant underrepresentation of Ali Khamenei mentions on social media. There was no statistical significance in local, diaspora and international media.

International media mentioned the Supreme Leader the highest $n=114$. Qualitative analysis of the $n=177$ articles shows that the coverage was focused on the *enemy*, *scapegoating* and *violence* frames. The international media quoted the Supreme Leader on 23 July 2021, when he made his first direct comments about the water protests in Khuzestan province since they began on 15 July. Ali Khamenei was quoted in state and local media saying, “People showed their discontent, but we cannot have any complaint since the issue of water in the hot climate of Khuzestan is not a minor issue”, which was picked up by international media. *The Guardian* and *The Associated Press* printed the exact quote on 23 July 2021. However, the international media also mentioned the Supreme Leader while countering his statement, which explains the higher use of his name than local media. “Ali Khamenei accused Iran’s enemies of trying to exploit the situation and warned that the enemy will try to use any tool against the revolution, the nation and the people’s interests, so we must be careful not to give him any pretext.” (quoted in *the*

Guardian, 23 July 2021). Similar to this coverage, *The Associated Press* published an article on July 23 quoting the Supreme Leader's statement and the fact that he accused "enemies of trying to exploit the situation". Qualitative analysis indicated that using the Supreme Leader's frames and counter-frames in articles has resulted in the higher mention of his name.

It makes sense that local media (34.5%) and diaspora media (36.4%) mentioned the Supreme Leader with no significant difference. Qualitative analysis of the articles shows that when the local and state media quoted Ali Khamenei or mentioned his name, the diaspora media also reported on him in Persian. After the Supreme Leader made his first speech addressing the water protests in Khuzestan on 23 July, local media published his remarks, which were submontanely covered by the diaspora media. *BBC Persian* published pieces quoting the Supreme Leader, saying that it took the Supreme Leader almost 10 days to respond to the water protests in Khuzestan in a direct speech, a different narrative than the local media, but still using his name. "Nine days after the start of the protests in Khuzestan, Ayatollah Khamenei, the Supreme Leader of Iran, has said that we cannot complain about the people asking for water" (quoted in *BBC Persian*, 23 July 2021).

Social media (6.7%) was the lowest mention of the Supreme Leader directly. Qualitative analysis suggests that Twitter (X) posts that used Ali Khamenei's name directly were limited; however, accounts belonging to activists and the opposition groups mentioned security forces and the Islamic regime regarding the water protests. Qualitative analysis shows that posts on X mentioning the Supreme Leader mostly describe protestors chanting anti-government slogans. "Protestors chant, shame on you and death to the dictator, and death to Khamenei, targeting Iran's Supreme Leader, Ali Khamenei" (expert Alireza Nader quoted on X, 29 July 2021).

Former President of Iran

The next source on Iran's hierarchical system is Hassan Rouhani, the president of Iran at the time of the water protests in Khuzestan province in July 2021. The Chi-Square test results for the relationship between media type and mentions of Hassan Rouhani indicate a statistically significant difference $\chi^2(3) = 49.246$, $p < .001$. The standardised residual for local media is 4.1, which surpasses the ± 3.0 threshold, indicating a statistically significant overrepresentation of Hassan Rouhani mentions in local media. Conversely, the standardised residual for social media is -4.2, also exceeding the ± 3.0 threshold, signifying a statistically significant underrepresentation of Rouhani mentions in social media. These findings suggest that local media heavily emphasised Hassan Rouhani, while social media platforms largely downplayed his presence during the coverage period. The highest mention of Hassan Rouhani was in local media. Qualitative analysis shows that President Rouhani, who was in office for the water protests in Khuzestan, followed the Supreme leader's *enemy* and *scapegoating* frames. After the Supreme Leader's speech on 23 July, in which he spoke about the water protests for the first time, on July 25, President Rouhani was quoted across conservative and reformist media, repeating the narrative. "Behind the incidents in Khuzestan, there are the dirty hands of the enemies and some internal rioters" (quoted in *Shargh Daily*, 25 July 2021). The diaspora media mentions the president with much less frequency than local media; qualitative analysis shows that Rouhani's statement and name were mentioned as a counter to the *scapegoating* frame, given that he often blames external factors for Khuzestan's water issues. Diaspora media *Iran International* published several articles on 25 July using Hassan Rouhani's name in the headlines, which has a narrative different from that of local media. For example, "Rouhani

blames Khuzestan's water crisis on the dirty hands of the enemy" and "Rouhani blames foreign rioters for Khuzestan's water crisis" (quoted in *Iran International*, 25 July 2021).

International media (22.3%) had the second highest mentions of President Rouhani. The international press focused on Hassan Rouhani's speech, broadcast on state television days after the water protests began. "The people of Khuzestan have the right to speak, express themselves, protest and even take to the streets within the framework of the regulations" (quoted in *the Guardian*, 22 July 2021). His speech was a day before the Supreme Leaders when he used the *enemy* frame, showing a change in the tone of Hassan Rouhani in his following statements, which were not covered by international media.

Social media had the lowest mention of Hassan Rouhani (4.7%). Qualitative analysis indicates that the posts on X mentioned the regime and security forces rather than the President, who does not hold power in Iran's system of government. Decisions by the president need to be approved by the Guardian Council, which the Supreme Leader and the Revolutionary Guards essentially control. It makes sense that the President gets mentioned less frequently than the Supreme Leader. When the protests were taking place in July in Khuzestan province, President Rouhani was about to end his second term in office. The qualitative analysis of the posts on X shows that most mentions were made by activists outside of Iran who held the administration accountable. "Anti-regime protests in Iran's Khuzestan province have spread to 17 cities while the so-called moderate Rouhani administration shamelessly called the videos fake" (Masih Alinejad on X, 18 July 2021).

Security Forces

The security forces are next on the list of Iran's political system. The Chi-Square test results for the relationship between media type mentions of security forces indicate a statistically significant difference $\chi^2(3) = 37.672$, $p < .001$. None of the standardised residuals for mentions of Security Forces meet the ± 3.0 significance threshold, indicating that while some deviations exist, they are not strong enough to be considered statistically significant according to the criteria.

As mentioned above, diaspora and international media used the violence counter frame frequently. It makes sense that both media types mentioned security forces more than the other media groups. Qualitative analysis indicates that diaspora media referenced security forces and the Islamic Revolutionary Guard Corps (IRGC) more frequently, as their coverage primarily focused on the number of individuals killed, arrested, or injured during the water protests in Khuzestan and Isfahan provinces. While security forces were mentioned, direct engagement with them was limited due to media censorship and restricted access to government sources. Qualitative analysis of the articles shows that Iran *International* and *Radio Farda* mentioned either security forces, police or the IRGC by name, followed by the news that someone has been killed. "On the sixth night of the Khuzestan protests against waterlessness, at least two young protesters, Hadi Bahrami and Mohammad Abdullahi, were shot dead by security forces in Izeh on Tuesday night" (quoted in Iran International, 21 July 2021). *Radio Farda* and *BBC Persian* had similar narratives during the first weeks of the protests in Khuzestan when dozens were killed. The mention of security forces in diaspora media is usually supported by the premise that they were guilty of shooting or killing the people protesting for water shortages. In another example, *Iran Wire* also mentions security forces and names the people who have been killed. "Two Khuzestani protesters, Mustafa Naimawi and

Ghasem Kheziri, were confirmed to have been killed by security forces while protesting the lack of water” (quoted in Iran Wire, 19 July 2021). The percentage difference between the diaspora and international media's mention of security forces was calculated. The results show that diaspora media mentioned security forces (20.12%) more than international media. Qualitative analysis indicates that the international press had a similar narrative to the diaspora media and focused the coverage on the killings and arrests by Iran’s security forces during the protests. Qualitative analysis of the articles shows the use of words such as “deadly” and “bloody” when referring to the water protests in titles. In the first sentence, the international media often mentions security forces as the perpetrators. “Security forces in Iran’s southwest Khuzestan province have been firing bullets at people protesting due to severe water shortages” (quoted in BBC, 26 July 2021). In another example, *The New York Times* mentions the violence of security forces against farmers protesting because of the drought in the province of Isfahan. “Security forces wielding batons, shields and guns swarmed the city’s riverbed around 4. a.m. Thursday as a group of farmers were sipping tea and chatting about protest strategy around a campfire” (quoted in *the New York Times*, 26 November 2021).

Qualitative analysis conducted on the local and social media's lower mentions of security forces had the following results. Local media and state media had low mention of security forces as in the rare occasions on which they covered killings; they used the narrative that “rioters” or foreign agents were to blame. Local media published articles denying the claims made by human rights organisations and the international media that people have been killed during protests. On the occasion that either reformist or conservative media did mention security forces, it was to shift blame from the regime and the guards to external forces such as “enemies” or

“infiltrators”. The local media mentioned security forces by saying that several of them have been killed during the protests to counter the coverage by diaspora and international media. During the first days of the water protests in Khuzestan in July 2021, several local media published articles saying that there had been no deaths. “In the past few days, sworn enemies have published videos showing that 3 people have been killed in Khuzestan; this is false” (quoted in *Etemad*, 20 July 2021).

Human Rights

To see how the media covered some of the sources countering the government, a Chi-Square test was run. The Chi-Square test results for the relationship between media type and mentions of human rights barely indicate a statistical significance $\chi^2(3) = 10.692$, $p < .014$. None of the standardised residuals for mentions of Human Rights meets the ± 3.0 threshold for statistical significance. This suggests that the coverage of Human Rights issues is consistent across media types, with no significant overrepresentation or underrepresentation in any particular media group.

A qualitative analysis was conducted to understand why local media has more mention of human rights than the diaspora media. The results show that most mentions of human rights in state media were mostly related to coverage countering human rights organisations that security forces were killing protestors. “A Human Rights Lawyer wrote on her Twitter page that armed members of a terrorist group trained by Israel are actively present among protesting people in Khuzestan to provoke tensions”, (quoted in *Fars News Agency*, 26 July 2021).

Experts

Another counter source is the experts. The Chi-Square test results for the relationship between media type and mentions of the experts indicate a statistically

significant difference $\chi^2(3) = 81.817, p < .001$. In international media, the standardised residual is -3.4, surpassing the ± 3.0 threshold, signifying a statistically significant underrepresentation of experts in the coverage. In social media, the standardised residual is 6.3, far exceeding the ± 3.0 threshold, indicating a statistically significant overrepresentation of expert mentions within this media type.

Social media had the highest mention of experts, and further qualitative analysis indicates that journalists and activists often reposted posts by experts talking about the water protests and the reasons for Iran's water problems. The word "expert" was used on social media to highlight the fundamental and structural issues with Iran's water management. In a post on X, a journalist from VOA wrote about the water protests in Khuzestan sourcing an expert talking about bad water management. "According to a water expert, Iran's water resources have been used to advance the ideologies of the Islamic Republic" (Voice of America X, 16 July 2021).

Table 6.5- Sources Usage by Media

Source	Local Media (%)	Diaspora Media (%)	International Media (%)	Social media (%)
Ali Khamenei	34.5	36.4	39.2	6.7
Hassan Rouhani	33.9	10.2	22.3	4.7
Security Forces	40.9	72.7	59.5	40.7
Kaveh Madani	2.9	10.2	12.0	31.3
Human Rights	22.8	17	28.9	16.7
Ali Akbar Mehrabian	2.9	3.4	2.4	0
Saeed Khatibzadeh	9.4	0	2.4	0
Ebrahim Raisi	32.2	47.7	32.6	4.7
Experts	29.2	33	23	65.3

Table 6.6- Standardised Residuals

Source	Local media	Diaspora media	International media	Social media
Ali Khamenei	0.9	1.0	2.6	-5.3
Hassan Rouhani	4.1	-2.0	0.9	-4.2
Security Forces	-2.1	2.6	1.6	-2.0
Kaveh Madani	-3.8	-0.9	-0.8	5.8
Human Rights	-0.1	-1.2	2.0	-1.7
Ebrahim Raisi	0.9	3.4	1.3	-5.5
Experts	-1.2	-0.3	-3.4	6.3

Sources and Frames

To answer RQ3, SPSS was used to find the mean and standard deviation for the frames of the *enemy* ($M= 0.49$, $SD= 0.29$), *scapegoating* ($M= 0.57$, $SD= 0.30$), *violence* ($M= 0.52$, $SD= 0.35$) and *mismanagement* ($M= 0.59$, $SD= 0.38$) in the entire coverage. A one-sample T-test was run to determine whether highlighted sources differed significantly from each frame's mean.

Ali Khamenei

The first source put through the test was the Supreme Leader, Ali Khamenei and the *enemy* frame. The results of the one-sample t-test indicate that the mean score for the *enemy* frame when mentioning Ali Khamenei is significantly higher than the test value of 0.49, $t(214) = 7.582$, $p < .001$. The findings suggest that mentions of the Supreme Leader in the context of the *enemy* frame are significantly higher than the test value, indicating a strong association between Ali Khamenei and the *enemy* frame in the media coverage analysed. The qualitative analysis supports the finding as it was the Supreme Leader who originated the *enemy* frame in a speech, he made on July 23 discussing the water protests in Khuzestan for the first time. “Don’t

give excuses to the enemy” was the Supreme Leader’s narrative, which was then cascaded through the media coverage.

For the second frame, the results of the one-sample t-test indicate that the mean score for the *scapegoating* frame when mentioning Ali Khamenei is significantly higher than the test value of 0.57, $t(214) = 5.851$, $p < .001$. These findings suggest that the mentions of Ali Khamenei in the context of the *scapegoating* frame are significantly higher than the test values, indicating a strong association between the Supreme Leader and the *scapegoating* frame. Qualitative analysis supports the finding that, like the *enemy* frame, the *scapegoating* frame originated from Ali Khamenei, who blamed foreign elements and the lower echelons of the government for Iran’s water problems in his speech on 23 July 2021. “If the government and people in charge had listened to the advice, Khuzestan’s water problems would have never got this bad”, is a statement that the Supreme leader made in his first speech and was cascaded through the media coverage.

For the counter-frames, the results of the one-sample t-test indicate that the mean score for the *violence* frame when mentioning Ali Khamenei is significantly higher than the test value of 0.52, $t(214) = 5.234$, $p < .001$. These findings suggest that mentions of Ali Khamenei in the context of the *violence* frame are significantly higher than the test value, indicating a strong association between Ali Khamenei and the *violence* frame in the media coverage. Qualitative analysis shows that the media overall portrayed Ali Khamenei in a way that highlights violence. For example, specifically in international and diaspora media when the Supreme Leader was mentioned, the coverage also talks about the violence and number of people who have been killed as shown in the examples above.

The results of the one-sample t-test indicate that the mean score for the *mismanagement* frame when mentioning Ali Khamenei is not significantly higher than the test value 0.59, $t(214) = 0.575$, $p = .566$. These findings suggest that mentions of Ali Khamenei in the context of the *mismanagement* frame are not significantly higher than the test value, indicating a weak association between the Supreme Leader and the *mismanagement* frame in the media coverage analysed. Qualitative analysis shows that the media overall does not emphasise the *mismanagement* frame when discussing the Supreme Leader.

Hassan Rouhani

The next source was President Hassan Rouhani. The results of the one-sample t-test indicate that the mean score for the *enemy* frame when mentioning Hassan Rouhani is significantly higher than the test value 0.49, $t(138) = 8.556$, $p < .001$. The findings suggest that the mentions of Hassan Rouhani in the context of the *enemy* frame are significantly higher than the test value, indicating a strong association between the President of Iran and the *enemy* frame in the media coverage analysed. The qualitative and quantitative results show that the *enemy* frame effectively cascaded from the Supreme Leader to the President, aligning with Entman's (2003) Cascading Activation Model.

The results of the one-sample t-test indicate that the mean score for the *scapegoating* frame when mentioning Hassan Rouhani is significantly higher than the test value 0.57, $t(138) = 6.570$, $p < .001$. The findings suggest that the mentions of Hassan Rouhani in the context of the *scapegoating* frame are significantly higher than the test value, indicating a strong association between the President of Iran and the *scapegoating* frame in the media coverage analysed. The mixed qualitative and quantitative results show that the *scapegoating* frame effectively cascaded from the

Supreme Leader to the President, aligning with Entman's (2003) Cascading Activation Model. Qualitative analysis shows that the Supreme Leader's strong use of the *scapegoating* frame has set the narrative adopted and reinforced by the President during the Khuzestan water protests. Further analysis will be presented in the discussion chapter.

The results of the one-sample t-test indicate that the mean score for the *violence* frame when mentioning Hassan Rouhani is significantly higher than the test value 0.52, $t(138) = 3.166$, $p < .001$. The findings suggest that the mentions of Hassan Rouhani in the context of the *violence* frame are significantly higher than the test value, indicating a notable association between the President of Iran and the *violence* frame in the media coverage analysed.

The results of the one-sample t-test indicate that the mean score for the *mismanagement* frame when mentioning Hassan Rouhani is significantly higher than the test value of 0.59, $t(138) = 2.622$, $p = .010$. The findings suggest that mentions of Hassan Rouhani in the context of the *mismanagement* frame are significantly higher than the test value, indicating a notable association between the President and the frame in media coverage. The qualitative analysis shows that mismanagement of water resources was often pointed toward the administration in office, which was the Rouhani administration.

Ebrahim Raisi

The next source is Ebrahim Raisi, president during the water protests in Isfahan province in November 2021. Ebrahim Raisi was a conservative compared to Hassan Rouhani, who campaigned as a reformist. This source is being analysed to see if there were any differences in frame flow when comparing two presidents from different governments. The results of the one-sample t-test indicate that the mean

score for the *enemy* frame when mentioning Ebrahim Raisi is significantly higher than the test value of 0.49, $t(198) = 3.202$, $p < .001$. The findings suggest that the mentions of Ebrahim Raisi in the context of the *enemy* frame are significantly higher than the test value, indicating a notable but relatively small association between Ebrahim Raisi and the *enemy* frame in the media coverage analysed. The qualitative analysis shows that the *enemy* frame was more prevalent during the first water protests in Khuzestan when the Supreme Leader made his speech. That is why even though Ebrahim Raisi was closer to Ali Khamenei, the *enemy* frame was more associated with Hassan Rouhani. The results for the one-sample t-test indicate that the mean score for the *scapegoating* frame when mentioning Ebrahim Raisi is significantly higher than the test value of 0.57, $t(198) = 2.544$, $p = .012$. The findings of the *scapegoating* frame are significantly higher than the test value, indicating a small association between Ebrahim Raisi and the *scapegoating* frame.

For the counter-frames, the results of the one-sample t-test indicate that the mean score for the *violence* frame when mentioning Ebrahim Raisi is significantly higher than the test value of 0.52, $t(198) = 3.763$, $p < .001$. The findings suggest that mentions of Ebrahim Raisi in the context of the *violence* frame are significantly higher than the test value, indicating a noticeable association between Ebrahim Raisi and the *violence* frame in the media coverage. The results of the one-sample t-test indicate that the mean score for the *mismanagement* frame when mentioning Ebrahim Raisi is not significantly lower than the test value of 0.59, $t(198) = 1.671$, $p = .096$. The findings suggest that mentions of Ebrahim Raisi in the context of the *mismanagement* frame are not significantly different from the test value, indicating no strong association between Ebrahim Raisi and the frame in the media coverage. Qualitative analysis shows that the low association is because Raisi was not

president during the July water protests in Khuzestan province and was new in office during the November protests in Isfahan.

Human Rights

For the counter source, human rights organisations, the results of the one-sample t-test indicate that the mean score for the *enemy* frame when mentioning human rights is significantly higher than the test value of 0.49, $t(162) = 4.363$, $p < .001$. These findings suggest that mentions of human rights in the context of the *enemy* frame are significantly higher than the test value, indicating a noticeable association between human rights and the *enemy* frame in the media coverage. The significant relationship between the *enemy* frame and human rights in media coverage suggests that the frame has cascaded (Entman, 2003) to human rights. This means that the *enemy* frame, initially set by elite figures like the Supreme Leader, has followed through to the media and influenced how human rights are discussed.

The results of the one-sample t-test indicate that the mean score for the *scapegoating* frame when mentioning human rights is significantly higher than the test values of 0.57, $t(162) = 4.788$, $p < .001$. The findings suggest that mentions of human rights in the context of the *scapegoating* frame are significantly higher than the test value, indicating a noticeable association between human rights and the frame in media coverage. The significant relationship between the *scapegoating* frame and human rights in media coverage suggests that the frame has cascaded (Entman, 2003) to human rights. This means that the *scapegoating* frame, initially set by elite figures like the Supreme Leader, has followed through to the media and influenced how human rights are discussed.

For the counter-frames, the results for the one-sample t-test indicate that the mean score for the *violence* frame when mentioning human rights is significantly higher than the test value of 0.52, $t(162) = 6.530$, $p < .001$. The findings suggest that mentions of human rights in the context of the *violence* frame are significantly higher than the test value, indicating a strong association between human rights and the *violence* frame in the analysed media coverage. Qualitative analysis shows that *violence* as a counter-frame was strongly associated with human rights in the media. “Iranian authorities appear to have used violence and excessive force against demonstrators in southwest Iran protesting lack of access to water, Human Rights Watch said today” (quoted in Human Rights Watch, 22 July 2021).

The results of the one-sample t-test indicate that the mean score for the *mismanagement* frame when mentioning human rights is not significantly higher than the test value of 0.59, $t(162) = 1.613$, $p = .109$. The findings suggest that mentions of human rights in the context of the *mismanagement* frame are not significantly different from the test value, indicating no strong association between human rights and the frame in the media coverage analysed.

Security Forces

The next source to look at is the security forces. The results of the one-sample t-test indicate that the mean score for the *enemy* frame when mentioning security forces is significantly higher than the test value of 0.49, $t(367) = 4.773$, $p < .001$. These findings suggest that mentions of security forces in the context of the *enemy* frame are significantly higher than the test value, indicating a noticeable association between security forces and the *enemy* frame in media coverage.

The results of the one-sample t-test indicate that the mean score for the *scapegoating* frame when mentioning security forces is significantly higher than the

test value of 0.57, $t(367) = 2.235$, $p = .026$. These findings suggest that mentions of security forces in the context of the *scapegoating* frame are significantly higher than the test value, indicating a noticeable association between security forces and the frame in media coverage. For the counter frame, the results of the one-sample t-test indicate that the mean score for the *violence* frame when mentioning security forces is significantly higher than the test value of 0.52, $t(367) = 8.405$, $p < .001$. These findings suggest that mentions of security forces in the context of the *violence* frame are significantly higher than the test value, indicating a noticeable association between security forces and the *violence* frame in media coverage. The results of the one-sample t-test indicate that the mean score for the *mismanagement* frame when mentioning security forces is not significantly higher than the test value of 0.59, $t(367) = 0.582$, $p = .561$. The findings suggest that mentions of security forces in the context of the *mismanagement* frame are not significantly different from the test value, indicating no strong association between security forces and the frame in the media coverage analysed.

Chapter 7- Discussion

Introduction

This chapter will interpret the project's findings within a theoretical context using Entman's (2003) cascading activation model as a framework. The aim is to understand the flow of frames regarding Iran's environmental news coverage inside and outside its censored system. The 2021 water protests are used as a case study due to their extensive domestic and international coverage and potential to depict the dynamics of media framing within an authoritarian regime. The methods categorised the media into four groups: local (national) media, diaspora media, international media, and social media. This section will discuss each of these media, how they engaged with the frames originated by the Supreme Leader, and the extent to which they either supported or countered his narratives.

The *enemy*, *scapegoating*, *violence*, and *mismanagement* frames will be discussed to elaborate further on the findings and demonstrate the theoretical aspect of why they cascade differently through different media groups. Each frame operates within a political and ideological context, and their flow across local, diaspora, international, and social media reflects the censorship and constraints of Iran's authoritarian media system (Khiabany, 2009). Applying Entman's model, the chapter will explore the flow of frames from elite figures, such as the Supreme Leader, to the media and contextualise the findings with theoretical research.

In addition to examining how Entman's cascading activation model manifests within a non-western media landscape like Iran, this chapter will point to key findings that contribute to the broader field of scholarship in disseminating environmental news. The project's insights into how different media groups navigate reporting on the environment when facing authoritarian regimes and the role of social media in

providing alternative narratives offer contributions to the application of framing theory in Iran and the Middle East. The insights gained will also help further refine existing scholarship on media systems in authoritarian regimes. I contend that Iran, with its heavy censorship and harsh reprisals on those seen to oppose the government, is a particularly interesting case study when it comes to examining the effects of local, diaspora, international and social media on news framing in a state's media system. The interplay between the four kinds of media analysed here reveals a highly textured and complex way environmental news is disseminated within Iran. Finally, the chapter will outline the study's limitations, acknowledge the research's scope, and suggest areas for future scholarly work.

Local Media

This section discusses the findings of how the different frames manifested in local media in the context of Iran's authoritarian media system and how they apply to Entman's (2003) cascading activation model. The media system chapter detailed Iran's media landscape after the 1979 Islamic Revolution, which became tightly controlled under the clerical regime and the Supreme Leader (Pahlavi, 2021; Rahimi, 2015). This section will examine and contextualise each frame using media systems and framing theories.

Enemy Frame

The findings reveal that the *enemy* frame was most frequently used in local media compared to other media groups, suggesting a strong alignment with the narrative created by the Supreme Leader. This is reflected by Khiabany's (2009) assessment that Iran's media is structured to support the state's dominant ideology, which is predominantly anti-Western. Local media coverage largely echoed Ayatollah Khamenei's framing of the 2021 water protests as being influenced and instigated by

foreign actors, particularly the United States and Israel. Stories about protests in Iran, regardless of their nature, are often framed as “foreign-backed”, as seen in the coverage of the “Woman, Life, Freedom” movement following the death of Mahsa Amini, who died after being arrested and beaten by the morality police for allegedly breaking the strict mandatory hijab rules (Mubarak, 2024, p.15; Horton, 2023). This framing demonstrates the local media's role in following the Supreme Leader's narrative that domestic protests are encouraged and manufactured by separatists, rioters, or foreigners who pose a threat to national security and are, therefore, illegitimate and not a real reflection of any actual environmental problems.

Qualitative analysis found that both conservative and reformist media in Iran employed the *enemy* frame, demonstrating an alignment with state interests (Hallin & Mancini, 2004), particularly those of the Supreme Leader and the Islamic Revolutionary Guard Corps (IRGC) (Talebian, 2020; Baig & Mushtaq, 2018). Conservative media outlets such as *Fars News Agency* and *Kayhan*, which have allegiances to the Supreme Leader and the IRGC, routinely publish articles that follow the narrative given by the state. In the case of the water protests, by assigning blame to foreign countries, the Supreme Leader wanted to control the narrative in the media to suppress the nationwide uprising. The reformist media in Iran emerged in the early 2000s to offer a less biased perspective towards the regime (Mohammadi, 2019). However, it has become more conservative, given ongoing restrictions, censorship, and editor's submission to crackdowns by Iran's intelligence apparatus. Mohammadi (2019) argues that while the reformist press remains critical of government policies in the economy and environment, they avoid directly confronting the Supreme Leader or the IRGC. The use of the *enemy* frame by conservative and reformist media reinforces the theories discussed in the media systems chapter,

highlighting the extent to which media in Iran aligns with the state's dominant ideological “anti-western” narrative. Local (national) media adhere to the state narrative, which relates to the protest paradigm literature indicating that media coverage often relies on elite sources that reinforce the perspectives of the dominant power structure (Brown and Harlow, 2019).

Entman’s (2003) Cascading Activation Model suggests that frames created by the political elite cascade through various levels of media, ultimately influencing public perception. In this case, the *enemy* frame, originated by the Supreme Leader, successfully cascaded to local media, which largely supported the narrative of foreign interference in the 2021 water protests. Mubarak (2024) argues that this is a framing strategy the Islamic Republic uses to control public discourse and limit access to information about the genuine cause of political unrest, such as water shortages and drought. Entman’s model can be applied within Iran’s authoritarian media landscape and the use of the *enemy* frame. It is important to note that even though the *enemy* frame cascaded to the local media in Iran, its level of influence on public perception is not that simple. In Iran, trust in local media is low, especially regarding environmental news. People tend to look to social media and diaspora media for information. Most people in Iran are aware of the regime’s propaganda to blame foreign countries for internal problems and, therefore, don’t trust the narrative given by the Supreme Leader (Salartash, 2022; Alimardani, 2022).

Scapegoating Frame

The second frame, the *scapegoating* frame, originated by the Supreme Leader in response to the water protests, was frequently used by local media, as mentioned in the findings chapter. In his speech on July 23, 2021, Ayatollah Khamenei addressed the water problems in Khuzestan, assigning the blame to

provincial officials for failing to resolve the issue. This narrative was mirrored in the media coverage, reflecting Iran's political structure, where ultimate power belongs to the Supreme Leader and the IRGC. However, the presidency and administrative branch have minimal influence over shaping media narratives and refrain from contradicting the Supreme Leader (Rahimi, 2015). Furthermore, Valenzano (2009) argued that the more elites at the top agree on a topic, the more likely frames are to spread to the media, supporting the findings of why the Supreme leader's frames travelled relatively unscathed through the flow.

The findings also indicate that reformist papers like *Etemad* and *Donyaye Eghtesad* employed the *scapegoating* frame more than conservative media, aligning with Mohammadi's (2019) argument that reformist papers criticise the government but avoid directly confronting the Supreme Leader. The *scapegoating* frame gave these reformist outlets a way to hold local officials in Khuzestan accountable for the water crisis without directly challenging the Supreme Leader or the IRGC, the main stakeholders of Iran's water and natural resources.

In Entman's Cascading Activation Model, the *scapegoating* frame flowed from the elite down through the media system. However, the conservative media used this frame less than the reformist media, highlighting the differences in how these media groups operate in the context of Iran's environmental news (Mohammadi, 2019). The model applies here as it demonstrates how frames originated by the elite are disseminated through media narratives. The Supreme Leader established the *scapegoating* frame to shift blame for Iran's water crisis away from himself to President Hassan Rouhani's administration. As with the *enemy* frame, the findings demonstrate how Entman's model can be applied to understand why local media support and challenge narratives driven by the elite. It should be noted here that like

the *enemy* frame, the *scapegoating* frame, even though cascading through to the local media, does not necessarily influence public perception as Iranians don't trust the narrative originating from the Supreme Leader and look to diaspora media and social media for alternative sources.

Regarding Iran's water crisis and other environmental issues, such as climate change, the public gets their information from experts who have accounts on X or appear on diaspora media, giving scientific opinions (Salartash, 2022; Alimardani, 2022). The distinction here is that despite the findings that Entman's model applied to Iran in terms of these frames cascading to the local media, they don't necessarily have the power to impact public opinion, and this is because of the low trust in the media system and the awareness that information has been censored to fit the narrative given by the Supreme Leader (Alimardani, 2022).

Violence Frame

The findings revealed that local media had a low use of counter-frame *violence* in comparison to diaspora media, which had the highest. This frame emerged to challenge the narrative by the Supreme Leader that foreign countries are to blame for the unrest in Iran during the water protests in 2021. This section will build upon the qualitative analysis, which identifies the local media's tendency to support the regime, especially regarding deaths and killings in protests. Mubarak (2024, p.15) argues that local media use words such as "rioters" in the headlines to divert responsibility for killings from security forces to protestors in the Mahsa Amini protests. The study also found that local media often quoted government officials mentioning damages to public property to negatively depict the protestors in the "Woman, Life, Freedom" movement. The same analogy applies to the 2021 water protests finding where local media used the *violence* frame to divert blame from the

security forces to 'rioters' for the killings. Conservative media, such as *Keyhan*, published articles referring to social media that depict protestors as people who are causing chaos attacking security guards and using the *violence* frame to counter the reports from human rights organisations listing the number of killings. It is important to note the role of the IRGC in controlling the media, as discussed in the media systems chapter. As the findings also demonstrate, during times of political unrest, the local media refrains from reporting the number of deaths by security forces and in the cases that they do, it is often to place blame on foreign elements, reinforcing the narrative of the regime (Wehrey, Green and Nichiporuk, 2008). This indicates in Iran, an authoritarian regime, information about violence, arrests and killings by the security forces in protests is tightly controlled, and the public has trouble accessing news of this nature. The trust in local media is low, and authorities frequently block social and diaspora media to suppress access to information. This is why, as was seen in the nationwide protests in 2009, 2018, 2021 and 2022 over various socio-political issues, the authorities shut down the internet to stop information from coming into or leaving the country, with people resorting to circumvention tools like satellite internet and VPNs to bypass restrictions and gain insight into the realities on the ground (Alimardani, 2022).

The counter-frames emerged in response to RQ2, which asked whether the Supreme Leader's frames were challenged in the media. The local media had a low use of the *violence* frame, and it did not counter the regime's narrative. This aligns with Entman's (2003) argument that counter-frames are often less powerful than dominant frames created by the elite. The findings regarding the use of the *violence* frame by the local media support Entman's argument that counter-frames that originate from actors who hold less power are not frequently used by the mainstream

media, especially in countries where the media is controlled by the state, in this case, Iran (Reese, Grant, and Danielian, 1994).

Mismanagement Frame

The findings revealed that the local media frequently used counter-frame *mismanagement* to cover the water protests. However, it must be noted that, like the *violence* frame, this was used not to counter the Supreme Leader but to support him. The 2021 water protests were the only times the Supreme Leader admitted to the extent that water resources had been mismanaged in Khuzestan and Isfahan. This said, the Supreme Leader's narrative was to separate himself and the IRGC from responsibility and blame the president's office, Hassan Rouhani, a reformist. Reformists in Iran have little power in the executive branch and are considered a threat to the regime, given that the public is more likely to vote for them (Mohammadi, 2019). When the Supreme Leader blames a president from the reformist faction, it is common knowledge that they are separate entities and have historically been unpopular with the IRGC. Therefore, the local media using the *mismanagement* frame to report on bad water management follows the Supreme Leader's narrative. Proof of this was presented in the findings when *Fars News Agency*, a conservative outlet, had the highest use of *mismanagement* frame, criticising the reformists and promoting the conservatives for presidential elections. The Supreme Leader, in his speech on 23 July 2021, mentioned that "God Willing", the next government will take the water issue more seriously, pointing to Ebrahim Raisi, who took over the presidency in 2021 and died in a helicopter accident in 2024 (Reuters, 2024).

The *mismanagement* frame is interesting, given that it is a counter-frame that emerged to challenge the Supreme Leader. As discussed, it has been used as such

by the diaspora media. In the specific case of the Khuzestan water protests, the *mismanagement* frame acts as an outlier because the Supreme Leader also used it to divert blame from himself to the lower echelons of the government. The frame was used in local media, mainly the conservative media, to support the narrative from the Supreme Leader that water resources have been mismanaged and that the people are not to blame. In this case, Entman's (2003) model was applied by using the *mismanagement* frame as a dominant frame that has cascaded through to the media. It can be concluded that the Supreme Leader succeeded in controlling the narrative about the water protests in local media, implicating foreign 'enemies' for the protests and the local officials for not addressing water shortages in Iran sooner, deflecting blame away from himself, who is by all intent and purposes the main decision maker in the country.

International Media

This section discusses the findings of how the different frames manifested in international media in the context of Iran's authoritarian media system and how they apply to Entman's (2003) cascading activation model. The media system chapter detailed how international media reacts and covers news about authoritarian regimes such as Iran (Oluseyi, Gearhart, and Cho, 2020). The thesis found limitations within the scholarly research regarding international media's coverage of Iran's environmental news, which will be addressed in this section. This section will examine and contextualise each frame using the research in the media systems and framing chapters.

Enemy Frame

The findings revealed that the international media used the *enemy* frame as often as the local media in Iran. Even though the Western media system operates

under the liberal model defined by Hallin and Mancini (2004), and coverage tends to be more balanced than that of media in authoritarian regimes, the findings can be explained through some patterns in framing theory. Regarding frames created by sources in power, such as the Supreme Leader of Iran, they tend to appear in Western media coverage as they did with the *enemy* frame, aligning with Resse, Grant and Danielian's (1994) argument that journalists prioritise sources at the top. The finding also revealed that the *New York Times* and *The Guardian* often used the Supreme Leader's *enemy* frame while reporting on the water protests. As Semati, Cassidy and Khanjani (2021) argue, this is related to the concept of journalistic norms and the fact that democratic media systems tend to favour using government sources and their frames in the coverage of countries like Iran. This explains why the *enemy* frame was used as frequently in the international media as in the local media. This said, the findings also show a distinct difference between the two. At the same time, the *enemy* frame and the Supreme Leader were often mentioned in international media, and references to human rights also followed them. The findings also revealed a strong association between the *enemy* frame, the Supreme Leader and human rights, which is mainly related to the international media coverage of the water protests. The international media, aside from using Ayatollah Khamenei's speeches as news, also used sources from human rights organisations that spoke to the number of deaths and killings, providing a more accurate account of events.

Therefore, the *enemy* frame has managed to cascade from the Supreme Leader down to the international media, showing that it has flowed outside of Iran's authoritarian system. The point is that the frame was equally challenged in the coverage of water protests in international news by using sources other than government officials. However, this shows that the Supreme Leader's *enemy* frame

was dominant in the international coverage of the 2021 water protests. This finding indicates that even in media organisations located and staffed beyond the boundaries of an authoritarian regime and operating with political systems markedly different from that of the regime, an elite source manages to have its frame disseminated across various media outlets. The fact that media worldwide utilise frames produced by authoritarian regimes, even when they are at times challenged, demonstrates that elite sources succeed in obtaining coverage, regardless of whether an authoritarian leader is in power or not.

Scapegoating Frame

According to the findings, the international media had the lowest use of the Supreme Leader's *scapegoating* frame compared to the other media. The Supreme Leader originated the frame to divert blame from himself and the IRGC to the president regarding Iran's water problems that resulted in the protests. Mubarak (2024) argues that international media, when covering Iran's protests, tends to focus on human rights and human-interest stories, which makes sense when considering the water protests. Most of the reporting and headlines focused on deaths and violations of human rights by the regime in Iran, which shows that the *scapegoating* frame was often used to challenge the narrative regarding the killings by security forces. The root cause for Iran's water problems, mentioned in the introduction chapter, was less covered by the Western media during the sample period as the focus was mainly on deaths, arrests and violations of human rights. The media systems chapter discussed that Western media when faced with authoritarian countries, tends to frame stories that support the narratives given by leaders and elite sources in their own countries (Farhadi and Reisinezhad, 2020).

The findings show that the international media used the *scapegoating* frame less than the other media groups. However, it was used in more than 50% of its coverage, demonstrating that it did manage to flow out of Iran's authoritarian regime into the international media. Entman (2004) argues that outlets adopt frames more often if they align with their values and interests. In the case of the *scapegoating* frame, the international media used it to hold the regime accountable for the killings that took place in the water protests rather than using it in the context that the Supreme Leader did, which was to divert blame for Iran's water issues and environmental degradation. The readers of local media don't get accurate information during the unrest, given that content is highly censored. People with access to international media have more unbiased information about the realities on the ground. During the water protests, news agencies like *Reuters* and *the Associated Press* would report the number of deaths in Khuzestan and Isfahan, which would be picked up by the diaspora media in Farsi, reaching millions of people inside of Iran who used VPNs to bypass censorship.

Violence Frame

The findings revealed that the international media used the *violence* frame very frequently to challenge the narrative of the regime. As mentioned above, the violence carried out by the security forces in the Khuzestan and Isfahan water protests was the focus of the international media, often referring to the number of deaths in the headlines. When protests are deadly, and people get killed by security forces as they did in the water protests, the international media reports it more than other environmental protests that don't have casualties. One of the reasons for this, as discussed in the media systems chapter, is that international media have limited access to sources and information in Iran and rely on newswires such as Reuters

and the Associated Press for facts (Adegbola, Gearhart, and Cho, 2022). News content provided by newswires during protests in foreign countries like Iran tends to focus on violence rather than the root causes, given urgency and newsworthiness. In times of protests, international media increases the use of anonymous sources to protect the identity of sources on the ground to tell the stories of violence. During the 2021 water protests, *The New York Times* and *CNN* often referred to anonymous sources without naming protestors directly. Adegbola, Gearhart, and Cho (2022) argue that protesting the government and challenging the authorities is an angle that journalists favour, and when there is violence, the coverage of the environment increases. This finding also corresponds to the protest paradigm literature, where the media often focuses on violence and conflict rather than the root causes of the protests (Harlow et al., 2020).

The *violence* frame successfully countered the regime's narrative in international media that the killings during the protests were caused by “rioters” and influenced by foreign entities. The Supreme Leader originated the *enemy* and *scapegoating* frames, which cascaded through to the international media; the *violence* frame then emerged to counter and challenge this narrative. It is important to note that the *violence* frame used by the international media managed to create nuances in the narrative of the water protests, providing a more balanced picture of the events compared to the local media regarding their deadly nature.

Mismanagement Frame

The finding revealed interesting statistics regarding the use of the *mismanagement* frame by the international media. This counter frame emerged on social media and diaspora media to raise awareness about Iran’s water shortages, which the people protested. It emerged to shed light on the mismanagement of water

resources due to poor agricultural practices, excessive dam building and water transfer for industrialisation (Madani, 2021). It showed that they used it the least compared to other media groups, even though it is a counter-frame challenging the government's management of water resources. What was also found in the qualitative analysis is that the international media's framing of the water protests in Iran focused on the political and human rights aspect and the regime's violations rather than environmental degradation. Because of the nature of the protests, which were nationwide and deadly, headlines and content during the six-month sample period were led by the number of arrests and killings in Khuzestan and Isfahan. Mubarak (2024) argues that the framing of Iran's political news has historically been adversary after the Islamic Revolution when relationships with the West started deteriorating. As explained in the introduction chapter, the *mismanagement* frame emerged to draw attention to the decades of bad water management by authorities that resulted in the protests. The frame does not, however, draw attention to human rights violations, which is why it appears less in the international media's framing of the events. Organisations such as *the New York Times* and *the Guardian* had a higher use of the *mismanagement* frame given their use of sources outside of Iran, which provided a narrative that shed light on the root causes of Iran's water problems.

The international media did not successfully use the *mismanagement* frame as a counter-frame regarding the water protests, which, as Entman (2004) argues, is often the case when competing with a dominant frame created by an elite source. The frame failed to resonate with the international media outside of Iran's authoritarian regime, given that the focus of the water protests was on violence. Mubarak (2024) argues that international media, when covering protests in Iran, tend

to use government frames more frequently, which is the case in water protests. The *mismanagement* frame is recent in the coverage of Iran's environmental news and was created by experts outside the country. Before this frame, the international media tended to use climate change and economic sanctions as the leading causes of Iran's environmental degradation; however, after the creation of this frame, the narrative has shifted towards looking at the root causes of Iran's water problems, which is primarily driven by resource mismanagement and expansionists policies (Iran Premier, 2021). Iran's water problems have been amplified by the increasing impacts of climate change, leading to harsher and more frequent events such as drought, sand and dust storms, heatwaves and floods (Al Jazeera, 2021).

Diaspora Media

This section discusses the findings of how the different frames manifested in diaspora media in the context of Iran's authoritarian media system and how they apply to Entman's (2003) cascading activation model. The media system chapter detailed how diaspora journalism plays a vital role in disseminating news regarding Iran inside and outside its borders, given the limited trust in local media (Pahlavi, 2015). Even though diaspora media reports in Farsi, outlets such as Iran International, Radio Farda, Voice of America (VOA), and Iran Wire have English websites and social media accounts, followed by Western politicians and journalists reporting for international media. During the Mahsa Amini protests in 2022 and the water protests in 2021, many international outlets such as *The New York Times*, *The Guardian* and *The Washington Post* would refer to diaspora media in their coverage of the events as a source. This section will examine and contextualise each frame using media systems and framing theories.

Enemy Frame

The findings showed that the *enemy* frame was used in half of the diaspora media's coverage of the water protests. As discussed in the media systems chapter, the diaspora media plays a crucial role in disseminating news related to Iran. Given the low level of trust in local media, the public consumption of diaspora news in Iran is extremely high. Porlezza and Arafat (2021) argue that the role of diaspora media in reporting news about censored and authoritarian countries is vital. Diaspora media consumed within Iran operates in countries that do not share the same restrictions that local media in Iran, such as heavy control by the state, and exists to provide an alternative and more balanced view of what is happening in Iran in Farsi, giving millions access to news. The people in Iran follow the diaspora media, such as *BBC Persian* and *Iran International*, to much higher degrees using VPNs than the local media and rely on them during times of unrest, which is why these outlets have been under scrutiny by the regime, with journalists' lives threatened abroad (Feinstein, Feinstein, Behari and Pavisian, 2016). With the *enemy* frame, the diaspora media used it to debunk the narrative provided by the Supreme Leader. Unlike the local media, the diaspora media challenges the Supreme Leader and the IRGC in their coverage as they did in the *enemy* frame and the water protest. The diaspora media is the primary news source for those who live in Iran because it is in Farsi, and people believe that the government does not control the information. This said, the coverage is mainly anti-government, who have blocked and boycotted these outlets as being "traitors" and "agents of the West" (Keyhan, 2024). The *enemy* frame was mentioned in the coverage, followed by citations of deaths and killings in the water protests by security forces like the international media. The main difference is that the language used by the diaspora media is more critical of the regime than the international media, given the values and organisational mission of the outlets, which

is to provide alternative news to the local media, which leans towards favouring the state narratives.

The *enemy* frame managed to cascade from the Supreme Leader to the diaspora media outside of Iran's authoritarian system. The difference with Entman's (2003) model is that the frame was used differently than originally intended by the Supreme Leader. The findings show that dominant frames by the elite are sometimes used as counter-frames in international and diaspora media coverage when faced with authoritarian regimes. The *enemy* frame is a good example of how the frame, which was intended to place blame on foreigners for Iran's water protests, ended up being used to debunk this narrative. There is a lack of scholarly research on how dominant frames are twisted into counter-frames when reporting on Iran. However, Naghibi (2016) argues that through the media, documentaries, and social media, Iranians in the diaspora community challenge the narratives on various issues by the regime and provide alternative perspectives.

Furthermore, Georgiou (2010) argues that alternative media, such as diaspora, sometimes undermine dominant frames by providing alternative narratives and bring about a situation where dominant frames are repurposed to provide a new interpretation. The findings of this thesis can add to the understanding that dominant frames originated by the regime in Iran are sometimes used as counter-frames to challenge the narrative. This was witnessed in the coverage of the 2021 protests on numerous occasions, as demonstrated in the chapter on findings.

Scapegoating Frame

The findings revealed that the diaspora media frequently used the *scapegoating* frame to cover water protests. The Supreme Leader originated this frame to divert blame from himself to foreign countries and people in the Iranian

government from the reformist faction for Khuzestan's water problems. Like the *enemy* frame, the diaspora media used the *scapegoating* frame to challenge the Supreme Leader. In contrast to the international media, the diaspora media used this frame since they focus more on internal economics and politics within Iran and the audience. Pahlavi (2015) argues that the regime often uses local media as a propaganda tool to stop people from learning about the country's realities. Diaspora media has a pulse on internal affairs in Iran and often challenges local media and narratives provided by the Supreme Leader. The *scapegoating* frame was used to shed light on the root causes of Iran's water problems, which are a result of bad policies that ultimately trace back to the Supreme Leader and the IRGC's expansionist agenda explained in the introduction.

The cascading activation model (Entman, 2003) and the flow of frames are interesting when looking at diaspora media. Findings show that the dominant frame created by the Supreme Leader is used to counter his narrative rather than support it. The *scapegoating* frame was frequently used, meaning that it managed to cascade from inside the authoritarian regime to the diaspora media outside of the country. However, the diaspora media can change the identity of the frame created by the Supreme Leader and use it to challenge the narrative. In their coverage of the water protests, they used the frame to report on the killings and arrests carried out by the security forces in Khuzestan and Isfahan, as well as provide evidence of water mismanagement by the IRGC in various projects over the decades.

Violence Frame

The findings revealed that the diaspora media used the frame *violence* with high frequency, more than any other media group. This is in line with the research on diaspora media, which argues that they frame news in a way that often holds the

regime in Iran accountable for human rights violations (Pooli Mamaghani, 2022). Diaspora media have a mission to disseminate news that the local media in Iran does not because of censorship and state control. The *violence* frame shows that the diaspora media focused heavily on the killings and arrests carried out by Iranian authorities during the water protests. Naficy (1993) argues that diaspora media have become a resistance movement challenging the authoritarian regime in Iran and offering alternative narratives to the public aside from local media. This is evident in their coverage of the water protests, where outlets selected sources outside of Iran to offer analysis and views on the crackdown against the protestors in Khuzestan and Isfahan. The diaspora media significantly influences news dissemination because they operate on a 24-hour basis online, print and broadcast, giving the people of Iran access to news in Farsi. This is why authorities have filtered access to these outlets and regularly fine people for having satellites in their homes. However, Dehshiri (2024) argues that approximately 83% of internet users in Iran rely on VPNs to access filtered news and 30% pay for VPNs. The author argues this creates inequalities in Iran's society between people who can pay to access uncensored news and those who cannot. Iranians also rely on family living outside the country to provide them with information and news by using platforms such as WhatsApp and Telegram, which are also routinely blocked and need VPNs. This said, the people inside the country are often afraid to speak freely on the phone or even on WhatsApp during unrest about protests or the authorities in fear of arrests. For example, during the Mahsa Amini protests in 2022, authorities confiscated phones from protestors and took people into custody if they had been communicating with people outside of Iran, such as the media and even friends and family (Atlantic

Council, 2023). The *violence* frame emerged from the diaspora media regarding the water protests by showing the arrests and killings by security forces.

The diaspora media successfully countered the narrative by the Supreme Leader using the *violence* frame in their coverage of the water protests. Compared to other media groups, they use the frame significantly more because of the higher frequency of publications and focus on Iran and their aim to challenge the regime's narrative. The relationship between Entman's (2003) model and the diaspora media is interesting as they act in the lower levels of the cascade by creating the counter-frames. They also can use the dominant frames to challenge the government rather than support it. The *violence* frame is a good example of how diaspora media used it to hold the government accountable and raise awareness inside Iran about killings and arrests to the public. Counter-frames have more power to influence public perception of environmental news in Iran, given the low trust in local media and data provided by the government. Scholars such as Dehshiri (2024) argue that in Iran, having access to VPNs and being able to afford them creates a division in society regarding the informed and not informed during political turmoil.

Mismanagement Frame

The findings show that the use of the *mismanagement* frame by the diaspora media was as high as the *violence* frame, which is in line with the scholarly arguments that diaspora media often challenge the government in their coverage (Naficy, 1993). The frame was co-created by journalists working with experts critical of the regime's environmental policies who provided alternative narratives about the root causes of Iran's water problems. *BBC Persian* and *Iran International* featured experts who offered insight into the reasons for the water crisis in Iran. These experts and the diaspora media used the frame to challenge the narrative that

“enemies” of Iran, such as foreign countries, were to blame for the water protests. Like the *violence* frame, the *mismanagement* frame managed to gain traction because of the frequency of the coverage by diaspora media and their focus on Iran’s environmental degradation. Thus, it can be said that diaspora media has an activist element to it when it comes to the coverage of Iran and its environmental problems. The frame was used to shed light on the issues with Iran’s agriculture sector, excessive dam building, and water transfer for industrialisation by the regime. Porlezza and Arafat (2021) argue that diaspora media have a significant role in providing the public with alternative viewpoints from the government in authoritarian regimes such as Iran. The *mismanagement* frame is one of the counter-frames frequently used by diaspora media regarding Iran’s environmental problems to challenge the government narrative. The international media and local media often use climate change and economic sanctions in Iran as the cause of Iran’s water problems. However, experts selected by the diaspora media offer an analysis that provides a more accurate picture of Iran’s water crisis, using the *mismanagement* frame and citing climate change as an amplifier, not the main cause.

Entman’s (2003) cascading activation model and the *mismanagement* frame act similarly to the *violence* frame in the diaspora media. They frequently used them to counter the Supreme Leader’s narrative by using expert sources outside of Iran who could report on Iran’s water protests without bias or censorship. The frame successfully countered the Supreme Leader’s *scapegoating* frame and influenced public perception about Iran’s water problems and the protests. The findings indicate that counter-frames are used by the diaspora media when covering authoritarian regimes as a vital tool for challenging the state narrative. The *mismanagement* frame and the *violence* frame essentially emerged and were spread by the diaspora media,

which are often used as references by the international media as a source. The images and the videos related to the water protests showing violence inside Iran were used in international media coverage because of the more realistic depiction of events. The *New York Times* and *the Guardian* often linked to social media posts by *BBC Persian* journalists and other diaspora journalists regarding the water protests, showing the influence of diaspora media in framing the narrative and countering the regime.

Social Media

This section discusses the findings of how the different frames manifested in social media in the context of Iran's authoritarian media system and how they apply to Entman's (2003) cascading activation model. The social media chapter detailed how Iran's authoritarian regime uses it and acts as a platform for activists, journalists, and the opposition to counter the narratives set by the government (Ruijgrok, 2021; Comunello and Anzera, 2012). This section will examine and contextualise each frame using media systems and framing theories.

Enemy Frame

The findings revealed a significantly lower use of the *enemy* frame in social media than the rest of the media groups, which can be explained by looking back at research conducted in the social media chapter. Ofori-Parku and Mascato (2018) argue that social media provides a platform for activists and journalists in authoritarian regimes to challenge the narrative by the state and local media close to the state. The *enemy* frame was not popular on social media during the 2021 water protests. Analysis shows that people opposing the regime's narrative that foreigners are to blame were countered by using counter frames such as the *mismanagement* frame. Journalists and experts used hashtags such as #WaterBankruptcy and

#drought to draw attention to the root causes of the water protests, which has become an effective way to raise awareness about Iran's environmental degradation and other political issues (Kumar, 2022; Liao, 2019). The *enemy* frame was not used on social media the way it was in diaspora and international media to counter the Supreme Leader's claims that the water protests were influenced by Iran's "enemies", but instead, the counter-frames were used to accomplish this task.

Entman and Usher (2018) argue that social media has changed information flows and allowed different actors to influence the cascade upwards. In the case of the *enemy* frame, this dominant frame did not flow through to social media from the Supreme Leader because of social media's ability to reshape the way information travels. Furthermore, Hamdy and Gomaa (2012) argue that during political unrest, such as the water protests in Iran, social media frames usually oppose the frames created by the regime and tend to focus more on human rights violations. Social media has become a major disruptive force in traditional news gathering where the traditional bowing to elites happens less than in legacy media; social media could play a vital role in giving people access to alternative narratives in authoritarian regimes such as Iran's as demonstrated in the social media and findings chapters.

Scapegoating Frame

The findings show that social media had the highest use of the *scapegoating* frame originated by the Supreme Leader. Activists and experts on X mainly used it to hold the government accountable for the mismanagement of water resources. Iranians rely on social media and diaspora media for their news (Porlezza and Arafat, 2021), and given the low trust in local media, experts use platforms such as X to raise awareness regarding Iran's environmental problems. During the protests in Khuzestan and Isfahan, experts posted on X to draw attention to the regime's bad

management of water resources. This differs from the Supreme Leader's intention for the *scapegoating* frame, as he used it to divert blame from himself and the other government officials. However, experts on social media used the frame to criticise the Supreme Leader and the IRGC for bad water policies. Here, it is important to note that Iranian users on social media and diaspora media are aware that in Iran, decisions are made by the Supreme Leader and the IRGC, who are a powerful organisation and stakeholders in most industrial developments (Middle East Institute, 2021). Experts on X used the *scapegoating* frame to highlight the lack of environmental permits for building dams. Another explanation for the high use of the *scapegoating* frame on social media can be through what was discussed in the social media chapter. Social media's dual nature allows people supporting the regime's narrative to have a platform, influencing the narrative and public discourse (Gainous, Wagner and Ziegler, 2017). In the case of the water protests, government agents and local media close to the regime used the Supreme Leader's *scapegoating* frame to support the narrative that some mismanagement had taken place on water but refrained from confronting him directly. The implication of the dissemination of news is the spread of misinformation by agents of the regime who were using the frame to blame foreign countries for the protests and unrest during the water protests. However, it is difficult to identify who these accounts belong to in the findings as they are usually created by providing fake profiles and identities (Dagres, 2022).

Entman and Usher (2018) argue that social media and the digital age allow information to move around the cascade and influence public discourse. The analysis is divided into the water protests and the *scapegoating* frame. Looking at the findings, the *scapegoating* frame managed to influence actors on social media

close to the regime who mirrored the Supreme Leader's narrative, which follows the original framework of Entman's (2003) cascading activation model. On the other hand, experts and activists on X used the frame to challenge the Supreme Leader to provide the public with an alternative narrative on why Iran is facing a water crisis (Kumar, 2022). This implies that social media users in Iran must be extra vigilant to understand the dual narratives on social media and whether they can trust an account. For example, X accounts that belong to established experts and journalists whom the public trusts to provide accurate information on Iran's environmental news are often used as sources in diaspora and international media.

Violence Frame

The findings revealed a surprisingly low use of the *violence* frame on social media. However, qualitative analysis and research explain this behaviour through how Iran's authoritarian regime controls information. Dagres (2022) argues that in Iran, social media is filtered and monitored by intelligence agents who often arrest and torture people for posting against the government. This could explain why the use of the *violence* frame was low, as it excludes users who live in Iran and or have family members living inside the country. Posts on X discussing killings and the violations of human rights mainly belong to activists and journalists outside of Iran, as was discussed in the findings. Social media is considered a threat in Iran, so the regime has filtered all the major platforms, including X, which people use VPNs to bypass (Dagres, 2022; Gainous, Wagner, and Ziegler, 2017). Users in Iran self-censor when posting about violence or human rights abuses by the regime because of fear of getting arrested. The use of the *violence* frame was therefore restricted to people who were living out of the reach of the Iranian regime in other countries.

The *violence* frame can show how a counter-frame acts in an authoritarian regime where people and users are often persecuted for posting against the government. Entman and Usher (2018) argue that social media allows different actors to influence the flow of information upwards and reshape public discourse. During the water protests, the *violence* frame did not manage to do that, given Iran's strict censorship and surveillance. It can be concluded that in authoritarian regimes where people self-censor, counter-frames that hold the government accountable for human rights violations act differently than in systems where information is less controlled.

Mismanagement Frame

Social media was most frequently used for the *mismanagement* frame, which makes sense given that experts and journalists used X to draw attention to the root causes of Iran's water problems. Guran and Ozarslan (2022) argue that journalists and other actors use social media to provide alternative views and influence public discourse. Experts used the *mismanagement* frame to debunk the regime's narrative and challenge the Supreme Leader's *enemy* frame. Experts and journalists used #Khuzestan and #Water_Management in Farsi to raise awareness about Iran's water problems. This points back to Kumar's (2022) assessment that hashtag activism is a powerful tool that can influence public discourse. The *mismanagement* frame is a counter-frame that drew attention to the misuse of water resources, which is less dangerous than the *violence* frame in terms of getting people arrested if they use it. The *mismanagement* frame was used very frequently by many actors, including local journalists and people on the ground. Some topics are shared more frequently on social media, which was the case for the *mismanagement* frame and the water protests because of their resonance with the public (Valenzuela, Pina, and Ramirez,

2017). Local people in Khuzestan and Isfahan were more comfortable posting about the mismanagement of water resources than the violence used against them by the security forces. Furthermore, Iranian environmental experts posted on X to talk about the water crisis and drought.

In the case of the *mismanagement* frame, the cascading activation model revised by Entman and Usher (2018) applies within Iran's authoritarian regime. The frame managed to cascade up and influence the narrative regarding the water protests. The findings show increased posts about water mismanagement during the protests by the diaspora media and independent journalists who interviewed experts in the field. It can be argued that in authoritarian regimes, the nature of the frame and what it represents influences the frequency of its use on social media in Iran. The *mismanagement* frame successfully counters the *scapegoating* frame by actors who used it to raise awareness about water issues in Iran.

Sources

The findings revealed that Ali Khamenei, the Supreme Leader, received the highest coverage compared to other sources mentioned in the findings across local, diaspora, and international media, demonstrating his dominance and central role in Iranian politics. Kheirabadi and Aghagolzadeh (2012) argue that journalists tend to place a high emphasis on elite figures when writing about Iran, which they found is in line with Galtung and Ruge's (1965) assertion that people in power are covered in the news more. The Supreme Leader's presence on social media was relatively low, suggesting that alternative sources and narratives were given preference. Another significant finding is the high mention of security forces in all media groups, particularly in international and diaspora media. This is because of the extensive coverage of killings and arrests by security forces and the use of the *violence* frame

by diaspora media. The findings revealed that expert sources such as Kaveh Madani, who challenged the regime's narratives on the water protests, had a high presence on social media compared to other media groups, which is in line with the argument that social media provides the ability for shaking up the public discourse (Mubarak, 2024).

Chapter 8- Conclusion

This chapter summarises this thesis's findings, limitations, and contributions. To answer RQ1 and RQ2, the study analysed how the Supreme Leader's frames manifested and were countered across local (national), diaspora, international, and social media. The results demonstrated that local media in Iran closely aligned with the Supreme Leader's narratives, emphasising external threats and deflecting blame during the 2021 water protests in Khuzestan and Isfahan provinces. Diaspora and social media platforms such as X more frequently challenged these frames, focusing on human rights violations and mismanagement of water resources.

International media took a slightly different approach, balancing regime narratives with counter frames related to human rights violations and mismanagement. Social media provided the most diverse perspectives but encountered challenges with censorship and self-censorship due to the fear of reprisals from authorities. As demonstrated in Table 5.2, most social media posts originated from activists, scientists, and journalists living outside of Iran.

RQ3 explored the flow of frames through sources, showing that the Supreme Leader's frames were more prominent in local (national) media, while diaspora and international media more often presented his frames in addition to counter-frames. This aligns with Entman's Cascading Activation Model (CAM) and demonstrates top-to-bottom influence on narrative control in Iran's authoritarian media system.

Within Iran, public fear of repercussions from authorities prevents individuals from speaking openly to the media about environmental issues, contributing to the reinforcement of the official narrative. International media face significant limitations in accessing sources within Iran, often leading to coverage that depends on official statements and narratives from social media posts or Iranian state news outlets.

Their reporting also depends on experts living in exile and human rights organisations outside of Iran. Many individuals in Iran rely on diaspora and social media for environmental information, but these channels are filtered and can only be accessed using circumvention tools like VPNs. Journalists covering Iran face considerable challenges due to limited access to up-to-date data, restricted access to on-the-ground voices, and the risks associated with reporting in such a censored environment, with possible financial fines, intimidation and prison time.

The study identified several limitations. Research on media coverage of Iran's environmental news is limited, and the framing of such issues in the Iranian context remains unresearched. Furthermore, the study of media systems in authoritarian regimes and the applicability of framing theory and the Cascading Activation Model (CAM) in such contexts is also restricted. Additionally, research on social media's role in covering Iran's environmental issues is limited, with censorship and restricted access further complicating the analysis of some deleted posts. This limited the ability to fully capture the range of counter-narratives that may have emerged from within Iran.

This thesis advances theoretical understanding of authoritarian media systems, social media dynamics in authoritarian regimes, and framing theory both in general and in the context of the environment. It applies Entman's Cascading Activation Model (CAM) to Iran's environmental news, demonstrating how frames originated by the Supreme Leader shape narratives across various media types (local, international, diaspora and social). The study identifies features of authoritarian media systems, such as high political parallelism, limited journalistic professionalism, and significant state intervention, which result in low public trust and restricted information access.

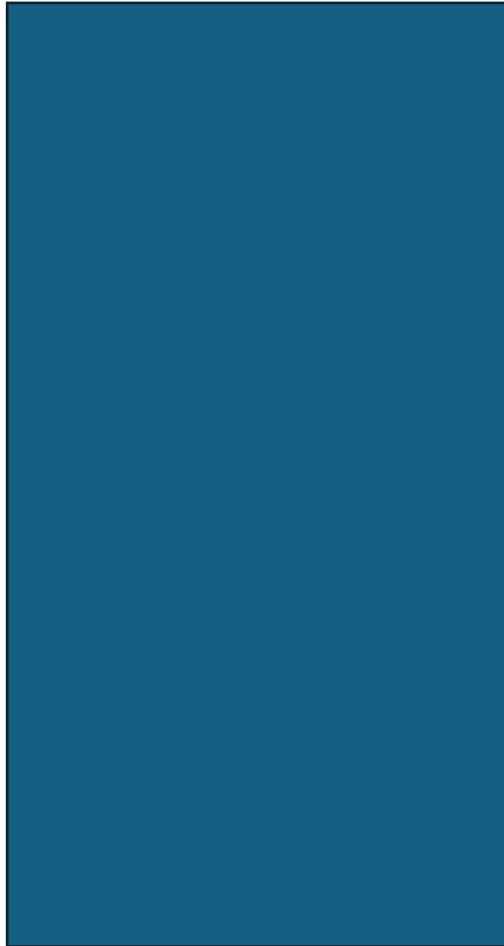
The research also explores social media behaviour in relation to Iran, highlighting both the potential to challenge state narratives and the constraints imposed by self-censorship and surveillance by authorities. By demonstrating how the Supreme Leader's frames manifest in different media types, the thesis explores CAM's applicability in authoritarian contexts and expands the understanding of media framing of environmental news in censored systems, particularly in Iran.

As this thesis focuses on environmental protests, it engages with and builds upon existing literature regarding media coverage of protests. This thesis contributes to research by examining how the protest paradigm operates in the context of environmental protests within an authoritarian regime. The findings reveal that the alignment of national media with the state narrative is not only a reflection of state control but also a function of the protest paradigm. This indicates that within censored media systems, patterns of elite-driven framing persist, further reinforcing state narratives while suppressing oppositional discourse. By applying the protest paradigm to environmental protests under authoritarian regimes, this research expands its applicability, demonstrating how media coverage that downplays protests can take place across different media types, such as it did regarding the 2021 water protests.

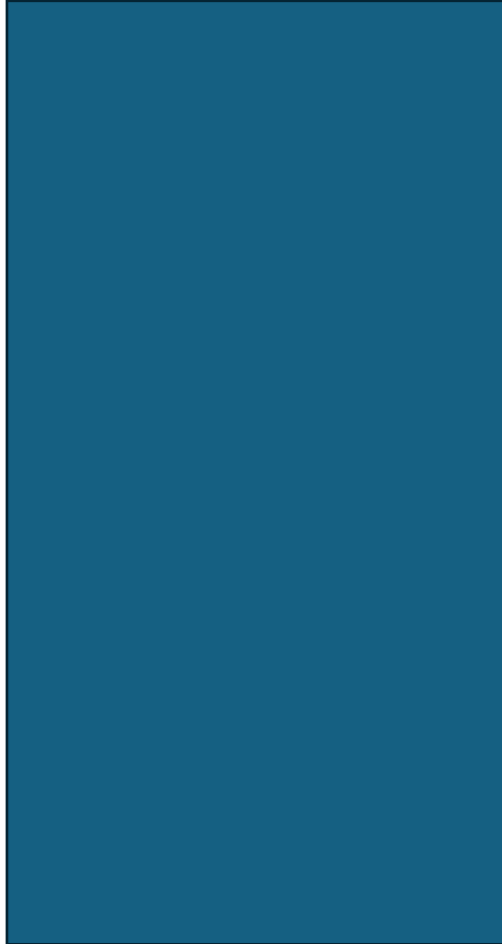
Future research could expand by identifying additional frames and conducting comparative studies on how environmental media frames originate and disseminate in authoritarian regimes. It could also focus on the role of limited media access and censorship in shaping the coverage of environmental issues, specifically examining how self-censorship influences journalistic practices and the public's understanding of environmental issues. Further research could also explore how digital platforms

and circumvention tools impact the distribution of environmental information under restrictive regimes.

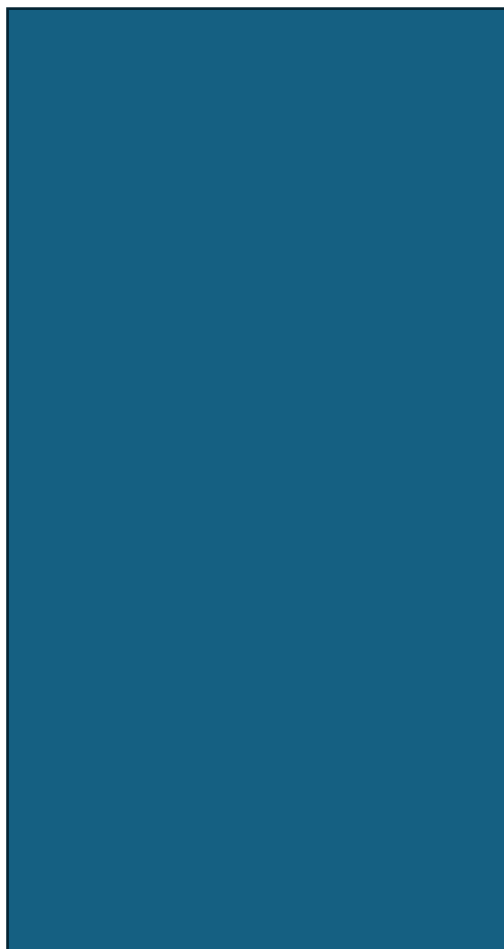
Appendix A – Local Media



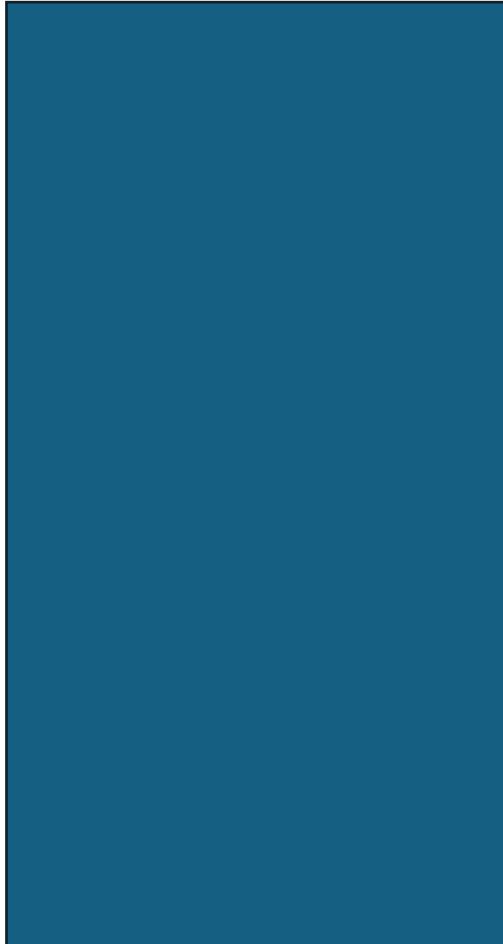
~~Appendix B – International Media~~



Appendix C- Diaspora Media



Appendix D- Social Media



Appendix E- Code Book

Identifying Information

V01 Media Type:

1= Newswires and Press releases

2= Newspapers

3= Web-based Publications

V02 Media ID

1= Press TV

2= Fars News Agency

3= Tehran Times

4= Pars Today

5= Iran News

6= Intelligent News Iran

7= Donyaye Eghtesad

8= Shargh Daily

9= Keyhan

10=Etemad

11= Diaspora Media

12= BBC Monitoring International Reports

13=AFP

14=AP

15= The New York Times

16=Financial Times

17= The Guardian

18= The Independent

19= The Jerusalem Post

20= The Times

21= National Post Canada

22= The Times UK

23= Telegraph

24= Twitter (X)

25= CNN International

V03a Month

1= January

2= February

3=March

4= April

5= May

6= June

7= July

8= August

9= September

10= October

11= November

12= December

V03b Date:

Identify the date (day) the coding unit was published

V03c Year:

Identify the year the coding unit was published

V04 Country of Media

1= Iran

2= The United Kingdom

3=The United States

4= Israel

5= Canada

6=France

7= Diaspora Media

8= Social media

Enemy Frame

V05 enemy

Does the article mention the word enemy?

0= No

1= Code if enemy mentioned at least once

V06 Infiltrate

Does the article mention any foreign country other than Iran?

0=No

1= Code if the Unites States (US), Israel, CIA, Mossad, Saudi Arabia, West, separatist, or terrorist is mentioned at least once

V07 Enemy Agenda

Does the article mention the agenda of the enemy and undermining the legitimacy of the Islamic Republic?

0=No

1= Code if the Islamic Republic, IRGC, rioters, al-Ahwaziyah or armed is mentioned at least once

V08 Tricked

Does the article mention the people of Iran being tricked by foreign countries or members for protesting the government?

0=No

1= Code if disguised, MKO, terrorist group, southwest or southwestern, ethnic minorities are mentioned at least once

Scapegoating Frame

V09 Manipulation

Does the article mention that the protests are not the people's fault and that they are loyal?

0=No

1= Code if loyal people, problems, resolve, follow up is mentioned at least once

V010 Blame

Does the article mention that the people are not to blame and that they have the right to be upset about water shortages?

0=No

1= Code if blame or blamed mentioned at least once

V011 Responsibility

Does the article mention the government's responsibility to address water issues?

0= No

1= Code if the government, blackouts, agriculture, and rainfall are mentioned at least once

Violence Frame

V012 Violence

Does the article or social media post mention that security forces have used violence and force to suppress the water protest?

0= No

1= Code if violence, killed, shot, shooting, killing mentioned at least once

V013 Cause

Does the article or social media post mention the cause of security forces' violence?

0=No

1= Code if crackdown, protesting, cracking down, river, heat mentioned at least once

V014 Deadly

Does the article or social media post mention deadly or bloody violence?

0=No

1=Code if deadly, bloody, tear gas, or killed mentioned at least once

V015 Deaths and Arrests

0= No

1= Code if arrests, arrested, prison, or shot mentioned at least once

Mismanagement Frame

V016 Mismanagement

Does the article or social media post mention the government's mismanagement of water resources, leading to the water protests?

0=No

1= Code if mismanagement, water Bankruptcy, dams, or droughts mentioned at least once

V017 Thirsty Uprising

Does the article or social media post mention the adjective thirst or thirsty?

0= No

1= Code if thirsty, anti-government protests or river mentioned at least once

V018 Resource Mismanagement

Does the article or social media post mention water resource mismanagement by the authorities?

0= No

1= Code if mismanagement, dam or dams mentioned at least once

Source Variables

V019 Ali Khamenei

Does the article or social media post mention the Supreme Leader Ayatollah Ali Khamenei?

0=No

1=Yes

V020 Hassan Rouhani

Does the article or social media post mention President Hassan Rouhani

0=No

1=Yes

V021 Security Forces

Does the article or social media post mention security forces or the IRGC?

0= No

1=Yes

V022 Kaveh Madani

Does the article or social media post mention Kaveh Madani, a scientist and activist?
Does this source challenge the government directly?

0=No

1= Yes

V023 Human Right

Does the article mention Human Rights Watch, Amnesty International, or the United Nations?

0= No

1= Yes

V024 Ali Akbar Mehrabian

Does the article mention Ali Akbar Mehrabian, Iran's Energy Minister?

0= No

1= Yes

V025 Saeed Khatibzadeh

Does the article mention Saeed Khatibzadeh or the spokesperson for Iran's Foreign Ministry

0= No

1= Yes

V026 Ebrahim Raisi

Does the article mention Ebrahim Raisi, the incoming President at the time

0= No

1= Yes

V027 Experts

Does any source challenge the Supreme Leader directly?

0= No

1= Code is experts, social media, or activists are mentioned at least once

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Publications, Conferences, and Academic Experience during PhD registration period (2020-2024)

Academic Publications

- **In 2022-** I participated in a paper with Dr Lindsey Blumell and Dr Rana Arafat- *Rethinking Social Media Affordances and Online Reaction to News Coverage: A Case Study of the Death of Mahsa Amini and Iranian Protests* (Under review)
- **In 2023,** I am co-editor, along with Professor Kaveh Madani, of a book, *Water Management and Policy in Iran*, to be published by Springer in the Global Issues in Water Policy Series.
- Mahoozi, S. and Madani, K. (2023) Energy transition in MENA must address the issue of fairness. *American University in Cairo: Alternative Policy Solutions* [online]. Available at: <https://aps.aucegypt.edu/en/articles/974/energy-transition-in-mena-must-address-the-issue-of-fairness> (Accessed 14 October 2024).
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Podcasts

- The Washington Post- Podcast on Iran protests
<https://www.washingtonpost.com/podcasts/post-reports/hope-and-fear-dispatches-from-iran/>
- The Undivide Project- Reporting Climate Change
https://open.spotify.com/episode/4yRp2sHWI5vOgfUiY9oPHs?si=7hj9_18gTzWhrxIXcXRVng
- Earth5R- Reporting Climate Change
<https://www.youtube.com/watch?v=mtmVKQp5NbY>

Conferences

- Reporter- in August 2024, I attended World Water Week in Stockholm in and covered the event.
- Presenter- In April 2024, Oklahoma State University invited me to participate in a symposium on the state of Iran's Environment. I was a guest speaker and discussed media coverage of Iran's environmental news.
- Presenter- In 2020, I participated in the festival of research by City University discussing my research.

Academic Roles

- JOM293—In 2023, I was the seminar leader for the Global Journalism Module, where I taught the seminars and graded presentations and final essays under the supervision of Dr Zahera Harb.
- JOM700- I was the seminar leader for the Journalism Ethics Module in 2023, where I taught the seminars and graded presentations and final essays under the supervision of Dr Lea Hellmuller.
- JOM700- I graded the essays for the Journalism Ethics Module in 2021
- I was a guest speaker for the Journalism Ethics Module in 2024, discussing challenges in reporting Iran's environmental news.
- SAM004- Qualitative Research Methods
- SAM005- Applied Qualitative Research Methods

TV and Live Interviews

- As a journalist, I have been interviewed live on BBC Persian, Iran International, Iran Wire, and TRT World about heatwaves, floods, dust storms, drought, and climate change in Iran.

Relevant Degrees Awarded

- University of Cambridge, Cambridge, UK

Institute for Sustainability Leadership

Course: *Business and Climate Change: Towards Net Zero Emissions*

Completed: May 2021

- Lomonosov Moscow State University, Moscow, Russia

Certificate in Russian Media and Journalism

Two-week English-taught course on mass media and politics in Russia

Completed: April 2019

- City University of London, London, UK

M.A. in International Journalism

Relevant Subjects: TV, radio, print, and digital journalism

Specialised in: Broadcast journalism with a focus on environmental reporting

Dissertation: *The CNN Effect and Climate Change Reporting*

Graduated: 2019

- School of Oriental and African Studies (SOAS), London, UK

M.S. in Economics concerning Middle East Economics and Development

Relevant Subjects: Finance, economics, accounting, and comparative financial markets

Dissertation: *Iran's Economic Reliance on Its Oil Industry: Dutch Disease*

Graduated: 2009

- London School of Economics and Political Science (LSE), London, UK

M.S. in History of International Relations

Relevant Subjects: European history, politics, and international relations

Dissertation: *UK/US Involvement in the Overthrow of Mosaddegh: 1953 Coup d'état*

Graduated: 2008

- American University of Paris (AUP), Paris, France

M.A. in International Affairs, Conflict Resolution, and Civil Society Development

Relevant Subjects: Economics of the European Union, conflict in the Middle East, non-profit organisations, and their role in society

Dissertation: *Women's Rights in Iran and Law*

Graduated: 2007

- American University of Paris (AUP), Paris, France

B.A. in International Economics

Relevant Subjects: International economics, financial accounting, communications, philosophy, and literature

Graduated: 2005