Bridge over Troubled Water

Water Cooperation as a Mean to Reach Positive Peace Between Iraq and Turkey

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Abstract

Analysing the three existing water treaties between Iraq and Turkey from 1946, 2009 and 2019, this research aimed to answer the research question: How are the three water treaties between Iraq and Turkey linguistically formulated in regard to the theories on water cooperation? This research question was addressed through applying Discourse Analysis I in accordance with Gillian Rose’s approach and supported by an analytical framework containing four stages, built on the theories on water cooperation and further supported by Galtung's theory on positive peace. Results of the research showed that the water treaties to a very low extent were formulated in regard to the theories on water cooperation and of nine different themes identified in the water treaties, three themes were directly related to the theories. The 1946 water treaty did through the themes Unification, Common self-identity & Solidarity succeed in addressing a part of the theories on water cooperation through reaching stage B of the analytical framework. While the water treaties from 2009 and 2019 both did almost thoroughly fail in formulating the treaties in regards to those theories. Additionally the discourses identified in the treaties did concerne two main topics; threats and risks, and the relationship and representation of the relationship between Iraq and Turkey.

Keywords: Discourse Analysis, Iraq, Turkey, Water disputes, Water treaties
# Abbreviations

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<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tr>
<td>BC</td>
<td>Before Christ</td>
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<tr>
<td>CIA</td>
<td>Central Intelligence Agency</td>
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<td>GAP</td>
<td>Southeastern Anatolia Project</td>
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<td>ICSSI</td>
<td>Iraqi Civil Society Solidarity Initiative</td>
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<td>JTC</td>
<td>Joint Technical Committee</td>
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<td>MENA</td>
<td>Middle East and North Africa</td>
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<td>MoU</td>
<td>Memorandum of Understanding</td>
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<td>NGO</td>
<td>Non Governmental Organisation</td>
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<td>PACS</td>
<td>Peace and Conflict Studies</td>
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<td>USA</td>
<td>United States of America</td>
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<td>UN</td>
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Glossary

**Hydropolitics** – Also known as Water politics, describes politics related to, or affected by the availability of water resources. It also refers to the study of cross-border cooperation or conflict over water resources (Elhance 1999:3).

**Falkenmark Indicator** – A common measurement of water scarcity, assessing the amount of renewable freshwater that is available for each person each year for a population of a country. A country with the amount of renewable water below 1,700 m³ per person per year is assessed as water stressed, below 1,000 m³ is assessed to suffer water scarcity and below 500 m³ is assessed to suffer absolute water scarcity (White 2012).

**Memorandum of Understanding (MoU)** – Is a preliminary agreement expressed through a formal document, ensuring that all parties are on the same page. If a MoU is legally binding depends on the content of it.

**Water dispute** – Refers to disputes between countries or groups over water resources.

**Water treaty** – Refers to written agreements on water resources between countries or groups.
List of Figures

Cover Image  Source: Pacific Institute 2018
Figure 1:  Tigris and Euphrates Map. Source: Global Water 2011.
Figure 2:  Precipitation in Iraq. Source: Fanack Water 2016.
Figure 3:  Rainfall Distribution in Turkey. Source: Maden 2019.
# Table of Contents

Abstract ........................................................................................................................................1
Abbreviations ................................................................................................................................2
Glossary.........................................................................................................................................3
List of figures................................................................................................................................4

1. Introduction ................................................................................................................................7
   1.1 Research Problem and Aim ..................................................................................................8
   1.2 Research Question ...............................................................................................................9
   1.3 Relevance to Peace and Conflict Studies .........................................................................9
   1.4 Delimitations .....................................................................................................................11
   1.5 Thesis Outline ......................................................................................................................12

2. Background .............................................................................................................................13
   2.1 Iraq’s Water Resources .....................................................................................................13
   2.2 Turkey’s Water Resources ...............................................................................................15
   2.3 Iraq’s and Turkey’s Water Relations ...............................................................................17

3. Previous Research ................................................................................................................19
   3.1 Water Conflicts in MENA ...............................................................................................19
   3.2 The Reperian Countries of Tigris and Euphrates ..............................................................21
   3.3 Management of Crossborder Water Resource ..................................................................22

4. Theoretical Overview and Analytical Framework ..................................................................24
   4.1 Theory on Peaceful Crossborder Water Management .....................................................24
   4.2 Theory on Environmental Peacemaking .........................................................................25
   4.3 Theory on Water Management and Cooperation in the Middle East ..................................26
   4.4 Theory on Positive Peace .................................................................................................27
   4.5 Analytical Framework .......................................................................................................28

5. Methodology ..........................................................................................................................29
5.1 Research design.................................................................29
5.2 Method...............................................................................30
5.3 Material..............................................................................34
5.4 Source Criticism..............................................................36
5.5 Positionality.......................................................................36

6. Analysis..................................................................................38
6.1 Treaty of Friendship and Neighbourly Relations 1946........38
6.1.1 What themes and expressions can be found in the treaties?..38
6.1.2 How is the water of the Tigris and Euphrates rivers and their-
tributaries addressed in the treaties?..........................................40
6.1.3 What are the underlying discourses reflected in the treaties?..42

6.2 Memorandum of Understanding
2009...............................................................................43
6.2.1 What themes and expressions can be found in the treaties?..43
6.2.2 How is the water of the Tigris and Euphrates rivers and their-
tributaries addressed in the treaties?..........................................45
6.2.3 What are the underlying discourses reflected in the treaties?..46

6.3 Memorandum of Understanding 2019..............................47
6.3.1 What themes and expressions can be found in the treaties?..47
6.3.2 How is the water of the Tigris and Euphrates rivers and their-
tributaries addressed in the treaties?..........................................48
6.3.3 What are the underlying discourses reflected in the treaties?..49

7. Conclusions............................................................................51
7.1 Answering the Research Question.......................................51
7.2 Further Research...............................................................54

8. References.............................................................................55
8.1 Analysed Material.............................................................55
8.1 Literature..............................................................................55
1. Introduction

Natural resources and renewable natural resources such as freshwater resources have played a decisive role in the development of civilisations. At the same time they have complicated and escalated conflicts (United Nations Environmental Programme 2009:8). Even if it is difficult to untie the many knots of causes to conflicts, the role of water in conflicts is increasing (Gleick 1994:42). Some reasons are that the availability of freshwater resources is changing together with the quality of them, among other due to climate change and environmental degradation. Concurrent the global demand for freshwater is growing due to higher life standards and rapid population growth (Detges, Pohl & Schaller 2017).

One region where freshwater resources have been a remarkably strong source of conflict is the Middle East and North Africa (MENA) region. This is the most water-scarce region in the world (Baconi 2018). Here unfair distributions of water resources have caused tensed international relations and regional disputes (Gleick 1994:41). One of those water disputes is the one between Iraq and Turkey.

Both Iraq and Turkey are highly dependent on the Tigris and Euphrates rivers which rise in Turkey, making Turkey the riparian hegemon with a dominant river position upstream. While Iraq’s position as a downstream reperian is therefore dependent on the goodwill of Turkey. Several factors have played a crucial role in this water dispute, among them water management, population growth, Turkish dam constructions, economic development and food and energy security (Al-Ansari 2016:140). Those factors together with the water shortage have made hydropolitics a vital matter for both Iraq and Turkey (Ohlsson 1995:92).

Still despite the many factors affecting water disputes, records testify that water disputes can be managed in diplomatic ways such as cooperation through water treaties. The first treaty of any kind is said to be an agreement on water from 2500 years BC between the two Sumerian city-states of Lagash and Umma on the
specific water of the Tigris river. Furthermore in the last 50 years there has been 150 treaties on water signed, in comparison to 37 water disputes resulting in violent conflicts (Water for Life Decade 2015), where three water treaties have been signed between Iraq and Turkey. Hence this research will analyse the linguistic formation of the three water treaties between Iraq and Turkey according to theories on water cooperation.

Lastly clarifying positive peace, it will in this research be defined in accordance with the peace and conflict scholar Johan Galtung's description as; “cooperation for mutual and equal benefits” (EnvisionPeaceMuseum 2012). Positive peace will later be discussed in the theory chapter.

1.1 Research Problem and Aim

The three water treaties signed between Iraq and Turkey are an achievement in themselves, but of course the content of the treaties is vital for a successful effect in practice. The United Nations Convention on Non-Navigational Uses of International Watercourses has focused on two key principles to guide countries sharing water resources, those are; to not cause significant harm to neighboring countries and a reasonable and equitable use of the water. Still those principles are broad when it comes to details, therefore they could be interpreted in many ways. This has also been displayed when water treaties have been examined closer where weaknesses and gaps have been uncovered in the treaties (Water for Life Decade 2015). Hence the open interpretation of how to construct water treaties with the result of weaknesses and gaps in the content of water treaties are in this research identified as the research problem.

Still there are today significant independent research on how water treaties should be drawn up. This research will through Discourse Analysis I in accordance with Gillian Rose’s approach aim to examine the linguistic formation of the water treaties between Iraq and Turkey. It will also take in consideration to what extent
the treaties are aware of the theories on water cooperation. Hence the long-term objective is also to inspire an analytical foundation that a sustainable water treaty between Iraq and Turkey could stand upon in the future, as a step in the process to reach positive peace between Iraq and Turkey. Here this long term objective will be embodied through the theory of positive peace.

1.2 Research Question

The research question is:

1. How are the three water treaties between Iraq and Turkey linguistically formulated in regard to the theories on water cooperation?

The operational questions that will help address the research question are:

1. What themes and expressions can be found in the three treaties between Iraq and Turkey?

2. How is the water of the Tigris and Euphrates rivers and tributaries addressed in the treaties?

3. What are the underlying discourses reflected in the treaties?

4. To what extent are the three treaties between Iraq and Turkey aware of the theories on water cooperation?

1.3 Relevance to Peace and Conflict Studies

The rivalry over natural resources has been a recurring theme in conflicts and wars throughout the history. Still the late 20th century has provided a new area of dilemmas concerning natural resources, the scarcity of renewable resources such
as freshwater (Ohlsson 1998: iii). But even if the water scarcity of the modern time has allowed a high number of new water conflicts to emerge, disputes and conflicts over water are not a new phenomenon, and neither is the use of water in conflicts.

One example is the bombing of German dams during the second World War by the allied forces (Cunningham 2014). Another example is the United States of Americas (USA) military attack during the Gulf Wars on Iraq’s hydroelectric dams (Rubaie 2019). While a more time related example is how militants from the terror organisation Daesh in 2014, took control over dams along the Tigris and Euphrates rivers and used them as weapons through flooding irrigation channels and cutting off the water, displacing entire communities (Cunningham 2014).

Supplementary, according to the traditional international security analysis, a natural resource could be viewed as a goal of military action if it is an important part of a country's power. This either through being a source of supply for the country politically or economically. Here the freshwater resources of the Middle East fits in this model, where they long had a vital strategic meaning in the region. For this reason water in the Middle East has been traced to the causes, the tools and the roots of conflicts and wars (Gleick 1994:42-43). This makes this topic highly relevant for Peace and Conflict Studies (PACS).

When it comes to the water dispute between Iraq and Turkey it almost triggered a war between the countries in 1990 due to clashes over the Turkish dam constructions. Later it also resulted in internal migration waves due to the filling of Turkish dams that strangled the water flow into Iraq in 2013 (Al-Muqdadi et al. 2016:1098). Additionally another important cause behind the Iraqi and Turkish water dispute, is the serious water crisis that Iraq is dealing with as an aftermath of the wars, which makes this water dispute relevant also because it partly is an aftermath of wars.

In addition to this the choice to conduct a research on the Middle East region itself has a strong relevance to PACS, where for the past decades this region has been nearly a constant battlefield for an irrational number of armed conflicts. Where in
many of those conflicts, water has been involved because of the water scarcity the region suffers and the vital importance of water for the region.

For this same reason the former United Nation (UN) Secretary General Boutros Boutros-Ghali, believed that the next war in the Middle East would be about water. Also the former UN Secretary-General Kofi Annan, thought that the violent competitions for fresh water could lead to sources of conflict and war in the future. But later Kofi Annan could add, that water could instead be the subject of cooperation (Jägerskog 2012:39). Both Kofi Annan’s thought of water as a cause of conflict and war and his thought of water as a subject of possible cooperation between nations, does underline the relevance to PACS of a research on a water dispute and water cooperation.

1.4 Delimitations

This research is limited to focus on the water relations of Iraq and Turkey, even if I could have chosen to include Syria that also is counted as one of the main reperian countries of Tigris and Euphrates river basin. The reasons for this decision is the complexity of Syria's geographical position, where Syria not only shares the water of the Tigris and Euphrates rivers but also of the Jordan river, thereof Syria is also part of the major Jordan river conflict. Further since the intention of this research is to analyse water treaties between the involved countries, and there has never been any treaty which include all three countries, but instead a number of treaties between Iraq and Syria, Turkey and Syria and Turkey and Iraq, this limit was set up to keep the analysis narrowed and focused.

Another point that could be observed both as a weakness and a strength, is the third treaty from 2019 a Memorandum of Understanding (MoU), included in the analysis. The weakness might be that the MoU is new, making it hard to discuss the effects and result of it. Still, it provides the analysis with an important time perspective and the analysis will be centralized around the content of the treaty,
therefore the advantages is considered to outweigh the disadvantages. Additionally there are other topics brought up in the treaties beside the water, those will be excluded from the analysis. Lastly information about other countries connected to the concerned water will also be excluded, for the sake of a concentrated and clear research paper.

1.5 Thesis Outline

This research is organized into seven chapters, where the second chapter provides a comprehensive background on the the water situation of Iraq and Turkey and their water relations. The third chapter introduces relevant previous research on water-related conflicts in MENA, while chapter four is divided into two sections where the first offers a theoretical overview and the second presents an analytical framework. The following fifth chapter discusses the methodology of the research. Finally chapter six is dedicated to the analysis, and divided into three sections in accordance with the three treaties analysed, those in turn are divided into subsection based on the operational questions. Lastly chapter seven summarizes the analytical findings and answers the research question.
2. Background

In order to gain a deeper understanding of the water dispute between Iraq and Turkey and the background and context of the water treaties, it is necessary to explore the water situation of Iraq and Turkey, as well as the water relations between the two countries historically. Below is a map of the shared water resources of the Tigris and Euphrates from Global water.

![Figure 1: Tigris and Euphrates Map; Tigris in the top right, Euphrates in the bottom left. (Source: Global Water 2011).](image)

2.1 Iraq’s Water Resources

To understand the current water situation of Iraq, one must take in consideration that the water supply, nature and geopolitics have gone through massive changes. Here the wars that have shaped the modern history of Iraq since the 1980’s
together with a decade of sanctions, have had catastrophic consequences on the freshwater resources (Rubai 2019). Later few capital investments in water infrastructure, dam constructions of neighboring countries, environmental pollution and an increased salinity level in the water together with a fast growing population have decreased the freshwater resources additionally (United Nations 2013).

In 2015 the population of Iraq reached over 37 millions and are estimated to increase about a million a year for the next 20 years. This will place additional pressure on the already scarce freshwater resources of the country (Virginia 2019). When it comes to the water supply of Iraq 98% comes from surface water and 2% comes from groundwater (Hussain et al. 2014). Here between 90 to 100% of Iraq's surface water supply is made up by the two rivers Tigris and Euphrates and their watersheds and tributaries (United Nations 2013). Further Iraq’s downstream position do not allow Iraq to control the flow of the Tigris and the Euphrates and does at the same time make Iraq highly vulnerable for the dam constructions of neighboring countries. This also means that 81% of Iraq's water is controlled by its neighbors and 71% of that water comes from Turkey (Rubai 2019).

Iraq also encompasses a number of aquifers and tributaries, where the majority originates in neighboring countries (Ali et al. 2017). Also exploring the freshwater resources of Iraq in accordance with the Falkenmark indicator, Iraq was on the brink of water scarcity in the latest measurement 2014 with the water potential 1006m3 per capita (Index mundi 2014). When it comes to the climate of Iraq the rainfall is seasonal from December to April, with highest annual rainfall of 1200 mm in the north and east, while 100 mm in the southern parts of the country (Fanack Water 2016). The below figure shows the precipitation of Iraq.
2.2 Turkey’s Water Resources

The components that have contributed to the current water situation of Turkey is rapid population growth, urbanization and climate change. But also insufficiencies in water technology such as in the agricultural sector, which stands for 73% of the country's total water use. Another reason for the challenging water situation is the increasing power generation of Turkey together with a decreased ability to fulfil the energy demand with the country's own resources. Here about 27% of Turkey's electricity output did in 2016 rely on hydropower (Fanack Water 2016).

Turkey’s dependency on water for hydropower, industrialization and agriculture are some of the reasons for Turkey’s extensive dam constructions on the Tigris and Euphrates rivers. Since the 1970s Turkey has built more than 20 dams on the Euphrates and its tributaries, among them the Ataturk dam which is the 5th largest in the world. While the Southeastern Anatolia Project (GAP) including the construction of 22 dams on the Tigris and Euphrates rivers, estimated to grant 25% of
Turkey’s electricity when completed, is the world’s largest river basin project (Tsakalidou Ilektra 2013). When it comes to the population, Turkey’s population reached 78 millions 2015 and is estimated to increase to 84 millions in 2023, which will increase the demand for freshwater additionally (Maden 2019). Moving on to the water supply of the country, Turkey is divided in 25 basins, where the majority of the water originates inside the country. Here the rivers Tigris and Euphrates make up nearly 28.4% of Turkey’s water potential as the largest basin (Fanack Water 2016).

Furthermore about 87.5% of Turkey’s total water potential, is surface water and 12.5% is groundwater, here a wide and unconstrained utilization of the surface and groundwater of the country, currently threatens the freshwater resources with extinction. Examining instead the current freshwater resources in accordance with the Falkenmark Indicator, Turkey was classified as water stressed in the latest measurement 2016 with the water potential; 1,000-1,500m3 per capita (Fanack Water 2016). While Turkey’s climate is usually described as semi-arid, contrasting types of climate can be found throughout the country. The highest annual rainfall is in the mountainous coastal regions; 1,260-2,500 mm while the lowest annual rainfall is in central Anatolia; 200-600mm (Maden 2019). The figure below presents the rainfall distribution of Turkey.

Figure 3 Rainfall Distribution in Turkey (Source: Ibid).
2.3 Iraq’s and Turkey’s Water Relations

The earliest water treaty between Iraq and Turkey as independent states is from 1946, this was a friendship treaty signed by King Faisal II of Iraq and the President of the Turkish Republic Ismet Inonu. But due to unpredicted population raise two decades later the water demand increased tremendously. This changed the water conditions of the two countries and lead to that Turkey started planning for dam construction (Al-Muqdadi et al. 2016:1098).

In 1975 Turkey started the construction of the GAP (Tsakalidou 2013), which was criticized by Iraq with the concerns to reduce 80% of the water flow. Those concerns resulted in a forum between Iraq and Turkey in 1980, held to discuss the regional water issues. On the forum the Joint Technical Committee (JTC) was established with the attempt to reach mutual agreements (Ibid).

Ten years after the founding of the JTC, the Atatürk dam part of the GAP project was completed, but Iraq and Turkey had still not succeeded to sign any agreements. The filling of the dam cut off the Euphrates water, hence Iraq asked to share 700 cubic m³/sec reducing 75% from Euphrates river water in Iraq temporarily. For this reason Iraq threatened to militarily attack Turkey to demolish the dam. Hence Turkey threatened to cut off the river flow completely for Iraq, while preparing forces to be ready for an Iraqi attack. Here mediating neighboring countries succeeded to avert Iraq from attacking (Ibid).

The tensed relations between Iraq and Turkey continued and in 1992 the Prime Minister of Turkey at that time, argued that Turkey does not share the oil resources of Iraq and for that reason, Iraq can not say that they share the Turkish water resources. He also stated that the water resources is the Turkish right of sovereignty. In 1996 Iraq notified Turkey that the water of Euphrates was polluted and the water level was reduced by Turkish irrigation activities and the construction of the Birecik dam (Ibid). One year later Iraq voted for the International Law Commission of the UN on the law of Non-navigational Uses of International Watercourses, while Turkey voted against it (Gruen 2000:574).
Further during the shift between the 1990’s and the 2000’s the Iraqi and Turkish water relations were frozen due to the international sanctions on Iraq, followed by the USA military attack and invasion of the country. While during 2006 to 2014 the water relation improved and Iraq and Turkey succeeded to sign a MoU over the water in 2009 (Von Bogdandy & Wolfrum 2012:51).

Later in 2009 Iraq faced a risk for food security problems and therefore requested 500 cubic m³/sec more water from Turkey. Here Turkey agreed to allow Iraq 400 cubic m³/sec, but the agreed water amount did never reach Iraq. Iraq once again requested more water 2012 for the southern marshlands affected by drought, with a similar outcome. In 2013 Turkey started the construction of the Ilisu dam, another part of the GAP project. This resulted in that the water levels of Tigris and Euphrates decreased to less than two thirds, allowing salt water from the Arabian Gulf to enter the Shatt Al-Arab river. This caused destruction of many Iraqi territories and water shortages producing an internal migration wave of about 100,000 people (Al-Muqdadi et al. 2016:1098).

Later in 2018 Iraq protested against the filling of the Ilisu dam and here Turkey agreed to temporarily halt it (Seibert 2019). Further in january 2019 the Iraqi Ministry of Water and the Turkish Ministry of Forest and Water Affairs, prepared a second MoU which in April was at the confirmation stage (Dawood 2019). A strong factor making it possible to sign the 2019 MoU, was the temporary less tense relations between Iraq and Turkey due to the exceptionally high amount of rain from the winter 2018, filling Iraq's water reservoir (Seibert 2019). Finally the Iraqi-Turkish water relations is much dependent on Iraq and Turkey's water supply, making it highly vulnerable and easily affected by the climate and regional precipitation. This instability further highlights the need of sustainable agreements between Iraq and Turkey.
3. Previous Research

3.1 Water Conflicts in MENA

There is a consensus among scholars in a variety of disciplines, such as peace and development, conflict resolution, international relations and social antropologi, that fresh water resources and the scarcity of them are sources of conflict in MENA. Here Michael Schulz, Helena Lindholm and Jan Hultin scholars at University of Gothenburg, explain that the water shortage in the MENA has allowed the tensed relations between MENA countries to become even more strained and unstable. Lindholm and Hultin sheds lights on that the former leaders of both Jordan and Egypt have stated that they could go to war over water, as an example (Ohlson 1995:233).

Also John Bulloch and Adel Darwish in their book “Water Wars: Coming Conflicts in the Middle East”, puts great weight on the complicated relations between the Middle Eastern countries worsened by the dependence on neighboring states for freshwater resources. The authors add that another issue is the increased demand the countries of the Middle East are making upon the limited supply of water of the region, arguing that this demand is the result of the goals of individual countries, which in turn depends mainly on the wish and need to maintain and expand irrigation for agriculture (Bulloch & Darwish 1993:23).

Further Schulz sheds light to a risk assessment paper by the Central Intelligence Agency (CIA) where the USA government aimed to point to possible places in the world where war could emerge over shared water resources. This paper warned that the Middle East held the majority of those potential crisis spots (Schulz 1995:94). He also highlights the seriousness of the water situation of the Middle East further, through the median water prices of the Middle East region, which is the highest per capita in the world (Schulz 1995:95). Additionally the MENA
Hultin stresses that many of the riparian countries of the Nile either faces or have earlier faced different stages of water shortage. He further points to that many of those countries rely heavily on the water of the Nile, such as Egypt where almost the entire country's water supply comes from the Nile river. Hultin further illustrates that a great fear that the Nile water would decrease or cease to flow has long existed. This fear has been embodied by the hydropolitics of the countries of the Nile river basin. An example Hultin provides is how the Egyptian dam construction, has been a way to manage the flow and to store water, which makes Egypt sensitive for the slightest regulations of the flow of the Nile, which in turn rises disputes between the reperian countries of the Nile (Hultin 1995:31).

Furthermore Kimenyi and Bmaku authors of “*Governing the Nile River Basin*” add that the major conflict around the Nile river, has been between upstream and downstream states (Kimenyi & Bmaku 2015:52). Those authors and Hultin also touches upon the previous agreements, arguing that there has been agreements between different countries, but no agreement which include all the reperian countries of the Nile(Hultin 1995:33).

Another highly intense water conflict in the Middle East, circles around the Jordan river. Bulloch and Darwish describe this water conflict as a conflict inside the Arab-Israeli conflict, which include Palestine, Israel, Jordan, Lebanon and Syria. Also the authors pay attention to how a conflict perspective is between upstream and downstream countries, where Lebanon and Syria are upstream and Palestine, Israel and Jordan are downstream (Ibid). Here Lindholm sheds light on the importance of the accessibility and control over the Jordan river in the highlands of the West Bank, for the Israeli occupation of Palestine (Bulloch & Darwish 1993:51).
Lindholm further believes that the water conflict of the Jordan river is a core issue in attempts to resolve the Palestinian-Israeli conflict (Lindholm 1995:55). Lastly Hultin, Lindholm and Bulloch and Darwish all agree that one of the core threads behind the Middle Eastern water conflicts are how the rapidly growing populations in the MENA countries are on a collision course with the limited water resources (Lindholm 1995:57), (Hultin 1995:31), (Bulloch & Darwish 1993:93).

The 3.2 Reperian Countries of the Tigris and Euphrates

When it comes to the academic field of the hydropolitics of the Middle East, there is a remarkable amount of research and literature on the topic. Still much of the literature concerns the hydropolitics of the countries around the Jordan river, but there is also a valuable academic space of literature on the hydropolitics of the reperian countries of the Tigris and Euphrates rivers. While the amount of modern research after 2010 on Middle Eastern hydropolitics are far from satisfying, where most of the literature on the topic available today, is from the end of the 1990s.

In the discussion of of the reperian countries of Tigris and Euphrates, Jan Schulz early defines the relation between those reperian countries in the context of their dependence on Tigris and Euphrates, as a theoretical hydropolitical security complex (Schulz 1995:91). Here the water challenges and the common dependency on the Tigris and Euphrates waters, links their national security together. He also underlines that the water shortage of Iraq, Turkey and Syria has allowed hydropolitics to become a major issue for those countries, where the risk for future water scarcity is prioritized on the very top of these countries agenda of strategic security issues. For those reasons, Schulz believes that the traditional understanding of national security, needs to be expanded to include the environmental and ecological dimensions (Schulz 1995:92-93).
Bulloch and Darwish on the other hand, illuminate the water disputes and water shortages effect on the international relations between the reperian countries of the Tigris and Euphrates. Here they explain that the water dispute and the dam construction following it, turned Syria against Turkey, and Iraq against both of them. Bulloch and Darwish also focus on how this water dispute almost waged war between the countries several times. At the same time Schulz argues that the water shortage is not alone the reason behind the conflicted relation between the reperian states of the Tigris and Euphrates, but could rather be viewed as one of the threads in the web of underlying conflict patterns and combustible security situation of the three countries (Schulz 1995:96).

3.3 Management of Crossborder Water Resources

The literature on management of crossborder water resources, could be described as wide to a certain extent, dominated by scholars with the opinion that the water dispute between Iraq and Turkey lays in the failure in managing the water. Much focus in this field lays also on the inefficiencies in water technology and the importance of mapping the water needs and use. When it comes to literature on peace agreements over water resources, which this section intended to include, there is a highly salient lack in accessible literature in this field.

According to Schulz, the quantity of the water in the Tigris and Euphrates is not the core issue in the water conflict between Iraq and Turkey, he rather believes that the center of the conflict is the management of the water (Schulz 1995:120). Here the journalist Abu moghli adds that the water scarcity issue has arised due to the meager water management of the Tigris and Euphrates basin (Abu moghli 2015). At the same time he illuminates that a high amount of the water is wasted through uncovered canals, deficient irrigation systems and water evaporation from reservoirs (Ibid). Here the scholar Al-Muqdadi and his colleagues suggest an action plan to sum up the need of technical solutions for better and more efficient water management (Al-Muqdadi et al. 2016:1101). Further Schulz frames internal
and external political problems as underlying factors, that affects the water management of Iraq and Turkey, which he believes results in infectiously tangled relations. He therefore suggests that layers of subcomplex patterns in the larger hydropolitical security complex of the riparian countries of the Tigris and Euphrates, should be identified as a step towards resolving the conflict (Schulz 1995:105-106).

On the other hand Al-Muqdadi and his colleagues point to how the negotiation environment between the countries needs to change, from a political setting to a scientific one. They also highlight how a stable water relation between Iraq and Turkey, is crucial to both sides, since Turkey’s return investments in Iraq reaches about 12 billions per year. They also illustrate the importance for Iraq as a downstream country to strive for international support as well as to implement international laws taking Iraq's rights to the water allocations in consideration (Al-Muqdadi et al. 2016:1101). Lastly Anders Jägerskog former peace and conflict scholar at Gothenburg University, argues that water issues has developed into an inevitable part of all forms of peace negotiations in the Middle East, due to their economic importance for the region (Jägerskog 2012:16).

Although the above studies offer a range of discussions on the background to the water conflicts in MENA and the importance of hydropolitics for the reperian countries of the Tigris and Euphrates, no current research has offered an updated perspective on the water treaties of the reperian countries of the Tigris and Euphrates. This thesis will therefore expand on the current studies by adding in particular a research on the water treaties between Iraq and Turkey, two of the three reperian countries of the Tigris and Euphrates.
This chapter will present the theoretical ground that this research stands upon. Firstly three theories presenting different aspects of water cooperation will be introduced; the theory on Peaceful Cross Border Water Management by Leif Ohlsson, the theory of Environmental Peacemaking by Ken Conca and Geoffrey Dabelko and the theory on Water Management and Cooperation in the Middle East by Peter Gleick. Those are chosen for the reason, that all three raises an important discussion on what elements should be included, in a sustainable water treaty and what should be considered when sharing joint water resources. Therethrough they are strongly connected to the research question and highly relevant for this research.

Further those will be followed by Galtung’s theory on Positive Peace, in order to clarify the theory of positive peace’s connection to the long term aim of this research. While the last part of this chapter will introduce an analytical framework built on the three water cooperation theories. Those theories will serve as an analytical lens, which will be used to process the three water treaties between Iraq and Turkey.

4.1 Theory on Peaceful Cross Border Water Management

Starting with Leif Ohlsson’s research, Ohlson places weight on the fact that cross border water resources instead of being a reason for conflict, could increase the chances for peaceful water management and cooperation between neighboring countries (Ohlson 1995:22). For sustainable cooperation he points to the
importance of mapping the concerned countries water use and need of water, to be able to form suitable and fair regulations and agreements. Here Ohlsson also advises a water management plan where the different forms of water of the country, together with the water use should be included such as surface and groundwater and the flow and origin of the water (Ohlsson 1998:4-5).

In the cases where countries share freshwater resources from rivers, he advises mapping of the whole river basin, as well as including water used for irrigation (Ibid). This due to that 70% of the freshwater resources of the world, are estimated to go to the agricultural sector. Ohlsson also suggests water efficient techniques to replace the older wasteful irrigation techniques (Ohlsson 1998:9).

Additionally Ohlsson points to that a change in irrigation policies, would decrease the water shortage and therethrough open up opportunities for less tense negotiations between the countries. Supplementary he argues that to be able to reach successful peace negotiations over the shared water resources, the management of the water must be included in relevant institutional tools (Ohlsson 1998:4). This theory will be used to investigate if the water treaties between Iraq and Turkey were mapping the uses and needs of water of Iraq and Turkey and if they were using a management plan. This main point of this theory will form stage A of the analytical framework.

4.2 Theory of Environmental Peacemaking

Moving on to the theory of Environmental Peacemaking, it is a theory that originally evolved out from the theory of environmental security, developed first by Ken Conca and Geoffrey Dabelko in 2002 (Darst 2002:116). This theory is designed to be carried out in two different stages. At the first level the theory is meant to encourage trust and cooperation between the concerned parties in the conflict. This by viewing the environmental problems as opportunities for cooperation and for adopting the habits of cooperation. The second level of the
theory moves on from setting the seeds of cooperation and unification over the environmental problems, to shape a shared collective identity (Conca & Dabelko 2002:57-58).

Furthermore this theory also believes that through reaching sustainable development, one reaches lasting peace. Another great focus lays on to start and uphold dialogues between parties in conflicts (Carius 2006). Therethrough Conca and Dabelko argue that this theory can move on from resolving conflicts related to environment to conflict resolution in general (Conca and Dabelko 2002:57-58). This theory will be used to explore if the water treaties between Iraq and Turkey were trying to reach for trust and cooperation and if they tried to shape a shared collective identity. Also here the main point of this theory will form stage B of the analytical framework.

4.3 Theory on Water Management and Cooperation in the Middle East

Moving on to the theory of Peter Gleick in his work “Reducing the Risks of Conflict Over Fresh Water Resources in the Middle East”, he focuses on the instruments and principles, that could be used to improve cooperation on water in the Middle East and reduce water conflicts in the region (Gleick 1994:41). Here Gleick highlights that all parties of the water conflict should at least have access to the minimum water requirement, with a proportional distribution instead of fixed strategies (Gleick 1994:42). Gleick also advocates direct negotiation between the parties, and also advises agricultural regulations and methods to improve the water-use efficiency. Further to reach a sustainable agreement between the involved countries in the Middle East, Gleick underlines the need to consider some other circumstances as well, such as economic and military strength of a country and how the access to other water supplies looks like (Gleick 1994:46).
He also highlights the importance of taking the position of a country to the water sources or rivers in consideration, such as if the country is sharing a river as a border and whether a country is upstream or downstream. Lastly Gleick mentions other factors that can affect the process of reaching an agreement, such as national practices, interstate politics and other social and political factors that can stand in the way (Ibid). This theory will be used to examine if the water treaties between Iraq and Turkey were using a proportional distribution instead of fixed strategies, and if they did take in consideration the countries positions to the water and their economic and military strength. Those main points of this theory will form stage C and D of the analytical framework.

4.4 Theory on Positive Peace

The theory on positive peace by Johan Galtung, founding father of peace research, departures from the division of peace in two categories; negative and positive peace. Here he explains that all peace concepts involves the absences of direct violence. Moreover to really understand positive peace it needs to be juxtaposed to negative peace. Where Galtung distinguish both forms of peace through the clarification that negative peace is the absence of direct violence with passive coexistence, where an example is ceasefires, which he frames as only 1/6 of the complete peace process. This is better than violence but not really peace, he therefore argues that negative peace could be placed in a space between no violence but neither peace.

On the other hand positive peace could be explained as active love, uniting the body, mind and the soul, which is only reached through building a foundation on equal rights and equal benefits with dignity and reciprocity. Galtung here associates positive peace with the golden rule; what you want for yourself you should also be willing to give other (Galtung & Fischer 2013:173-174). This theory will be used to embody the long term objective to reach positive peace between Iraq and Turkey.
4.5 Analytical Framework

This section will introduce the analytical framework, which consists of four stages A-D, built on the three theories on water cooperation. Stage A derived from the theory on Peaceful Cross Border Water Management, stage B from the theory of Environmental Peacemaking, while stage C and D derived from the theory on Water Management and Cooperation in the Middle East. This analytical framework will support and guide the analysis and is developed in order to strengthen this research. Finally through this analytical framework, the analysis will be able to explore to what extent the three treaties between Iraq and Turkey, are aware of the theories on water cooperation. Following are the four stages of the analytical framework;

A. Are the treaties mapping the uses and needs of water of the countries and are they using a management plan? (Ohlsson 1998:4-5).

B. Do the treaties try to reach for trust and cooperation and do they try to shape a shared collective identity? (Conca & Dabelko:2002:57-58).

C. Are the treaties using a proportional distribution instead of fixed strategies? (Gleick 1994:46).

D. Do the treaties take in consideration the countries positions to the water and their economic and military strength? (Ibid).
5. Methodology

This methodology chapter will consider the research design and include a comprehensive discussion of the method and of the material analyzed. It will also include a section on source criticism and reflection on the positionality of the author.

5.1 Research Design

The research design will be a Case study, since a Case study allows an in-depth analysis of the research topic, through focus on the complexity of the topic and the specific nature of it (Bryman 2008:52). At the same time it is powerful when investigating subjects such as international relations (Yin 2009), which water treaties is a crucial part of. Furthermore Case studies have been defined differently by scholars, Robert Stake viewed it as a choice of what to study. While John Creswell has defined it as a type of design in qualitative research (Creswell 2007:73). In this thesis Case study will be treated as a research design as well.

When conducting a Case study, one examines an issue through one or more cases within a bounded system (Ibid). There are three types of Case studies, the single instrumental, the collective and the intrinsic. The type of case study that will be employed to this research is a single instrumental Case study, since the aim is to focus on one issue and to delineate this issue through one bounded case (Creswell 2007:74). Here a strong advantage is that it allows a detailed analysis of the water treaties. Case study research does also aim to understand the underlying meaning,
which is essential when researching the linguistic formation of the three water treaties between Iraq and Turkey (Lindvall 2007).

Additionally the analysis of Case studies are arranged in two different categories, holistic and embedded analysis. Here holistic analysis, refers to an analysis of a full case, while the embedded refers to an analysis of a certain aspect of a case (Creswell 2007:75). The single instrumental Case study of this research will be of the embedded analysis type, where the case will be the water dispute between Iraq and Turkey, hence what will be studied is an aspect of this case, namely the water treaty writing, where it will be examined through analysing the three water treaties between Iraq and Turkey. Finally the Iraqi-Turkish relationship on water with all of its political moves and demarches will be viewed as the bounded system.

When it comes to disadvantages with Case study research, a consensus among scholars is that the findings of a Case study is not generalizable (Bryman 2008:57). Still the argument of non generalizable findings, is only valid if the aim of a research is to generalize to other cases. The intentions of this particular research is rather to examine the research issue in-depth and draw conclusion on this individual case. Also Siggelkow highlights that a narrow sample could be positive as well since one case or one interesting finding can be enough for a strong and powerful example (Siggelkow 2007).

5.2 Method

The method used in this research is Discourse Analysis, this is a textual analysis method, popular among International Relations scholars because it is concerned with meaning and discourse in politics (Düzgit & Rumelili 2018:1). Here fitting for conducting a research on international agreements. Discourse Analysis is a wide term referring to ways in which language is used, in different texts in a wide range of contexts. Lynda Nead describes discourse as a specific form of language with rules and conventions of its own, where the discourse is produced and spread
(Rose 2001:136). The fact that Discourse Analysis can be considered as a method that places great weight on language, makes me consider it as highly relevant for analysing water treaties between Iraq and Turkey in order to examine the linguistic formation of them.

Further, one social theorist whose work has been of crucial importance for this method is Michel Foucault, for Foucault’s method the notion of discourse is essential, referring to a number of related statements or a particular knowledge which shapes the way we perceive the world and how we think about certain phenomenon and therethrough or action based on that thinking (Ibid). Foucault also explained discourse as a sort of discipline related to power or rather powerful in itself through its productiveness (Rose 2001:13).

Apart from this there are several types of Discourse Analysis, where Foucault's complex theoretical legacy has generated two of those methods, Discourse Analysis I and Discourse Analysis II. Rose separates those two methods firstly through the different kinds of research work they produce and secondly since Discourse Analysis I focuses on the notion of discourse as expressed through verbal texts and visual images as well as discursive formations. While Discourse Analysis II focuses on the practices of institutions and issues of power and regimes of truth (Rose 2001:139-140).

Therefore Discourse Analysis I (hence forward referred to as DAI) as accounted for by Gillian Rose will be the method of this research. This for the reasons that DAI is mainly concentrated with language (Rose 2001:140), allowing the researcher to go in-depth in the research material, exploring the expressions, themes and the underlying structure of the research topic, as well as their effect of truth. Here Fran Tonkiss places weight on how language is the research topic itself, with weight on how the language is used and formulated in order to create accounts of the social world (Rose 2001:159).

When it comes to the process of conducting this method, Foucault makes clear that the point is to examine the relation between social or political groups of statements or events, whether the relation of them are intentionally or
unintentionally connected (Rose 2001:150-151). While Rose also emphasizes that another crucial point to focus on, is the production of truth through claims of truth, the scientific certainty and what is laid out as the natural way of things (Rose 2001:154). Here discourses could also be found in what is left unspoken (Rose 2001:158).

Addressing weaknesses and challenges with DAI, there are four commonly identified. The first issue concerns sampling, DAI is more a qualitative method meaning that validity and reliability is determined in other ways than in quantitative approaches. Here a challenge is the selection of material for the analysis, where Düzgit and Rumelili highlights that one ideal way to strengthen the validity and reliability would be to gather new data until there are no new findings, but since it in practice is impossible, they explain that an alternative way is to aim for that representations are repeated in a wider textual network (Düzgit & Rumelili 2018:16-17).

Another challenge with DAI is where to restrict the intertextual connections of an analysis. Here Rose points to Gilman’s essay, which uses an unrestricted number of sources to demonstrate a case, but where the impression of the essay is that discourses become independent meanings, disconnected to social practices. There are no clear solution to this challenge but Rose suggests that a restriction in sources analysed can help limit and focus the analysis. When it comes to both those challenges, the low number of treaties on water that existed between Iraq and Turkey helped set the boundaries for the selection of data for this research.

Another weakness is that the connection between discourse and its context is unclear, here Rose outlines the neglect of the social practices of discourse in DAI which is more interested in the text or images analysed, instead of the institutions constructing them (Rose 2001:162). Finally Discourse Analysis has also been perceived as unclear when it comes to applying it on the material, since it does not include a specific plan of action. Therefore I will here clarify how it will be conducted through Rose’s summarized steps of DAI in Foucauldian tradition, together with explanations of the definitions of themes, expressions and
discourses, through Ryan and Bernard’s article “Techniques to identify themes”. This since those terms are crucial to this research and to DAI.

Below are Rose seven steps of conducting a Discourse Analysis:

**Step 1.** To look at the sources with fresh eyes, namely without preconceptions in order to better understand what might be overlooked.

**Step 2.** Become acquainted with the sources through reading them repeated times carefully (Rose 2001:150).

**Step 3.** Identifying key-themes, this step is conducted in a process which partly is connected to the method Content Analysis, where the researcher among other looks for recurring words. Therefore the analysis will briefly contain calculation of the number of occurrences in the treaties (Rose 2001:150-151). Furthermore Ryan and Bernard underlines that the definition of a theme and how to recognize one has long been a problem (Ryan & Bernard 2003:86). This since themes are both fuzzy and abstract.

Here the authors explain that themes are constructs that link expressions found in texts or images, in other words, they are conceptual linking of expressions, where expressions among scholars also have been referred to as categories or codes (Ryan & Bernard 2003:87-88). Some expressions of a theme are easy to detect and culturally agreed upon on, while some are indirect or symbolic. Finally, how valuable a theme is depends on its frequency (Ryan & Bernard 2003:86-87), and this is also a way to recognize a theme through the repetition of concept (Ryan & Bernard 2003:89).

**Step 4.** Examines how discourses produce their effect of truth, through recognizing what the sources claim is natural or real and the images they shape (Rose 2001:154-158). Here Bryman explains discourses as a form of action where language is a practice on its own and where attributing blame or presenting oneself in a particular way, can be accomplished through the language use (Bryman 2008:501).
Step 5. This step is connected to the previous step with a focus on claims of truth, where one needs to consider contradictions and complexity in the discourses (Rose 2001:158), in search for persuasion. An example is how scientific tools included in statements such as a map to a declaration, could reveal claims of truth (Rose 2001:154).

Step 6. Lookin for what is visible but also what is invisible (Rose 2001:158), instead of the question what is here? We can ask what is missing? Here Ryan and Bernard highlights that one can learn a lot from what is silenced in sources (Ryan & Bernard 2003:92).

Step 7. Paying attention to details to fully understand the sources and to not miss important information (Rose 2001:158).

Last word on this, step 1, 2 and 7 are steps connected to how to read the material and will hence be applied to all section of the analysis, and thereby not mentioned individually in the analysis.

5.3 Material

The material that will be analysed are three forms of water treaties between Iraq and Turkey, all legally binding. The choice to analyse water treaties stemmed from the wish to go in-depth examining the very core of the Iraqi-Turkish water relations, because of the current water situation and the water dispute of Iraq and Turkey. The number of treaties included in the analysis, springs from the fact that there has only been three treaties between Iraq and Turkey dealing with the water after the independence of Iraq (Von Bogdandy & Rüdiger 2012:3).

Following list presents the material;

Material 1: Von Bogdandy, A and Rüdiger, W (2012). Max Planck Compilation of International Treaties and Other Documents Relative to the Euphrates and


The first material, is a treaty of friendship and neighbourly relations from 1946 (hence forward referred to as Treaty 1). This treaty includes six protocols that makes up an integral part of the treaty, where the first protocol treats the water and will therefore together with the treaty be treated as one material, excluding the five other protocols. The second material is a MoU between Iraq and Turkey from 2009 (hence forward referred to as Treaty 2). While the third material is a MoU from 2019 (hence forward referred to as Treaty 3). Both the MoU’s consists of 12 articles.

Both Treaty 1 and 2 are excerpted from “Max Planck Compilation of International Treaties and Other Documents Relative to the Euphrates and Tigris”. This is a compilation from 2012 that has compiled several treaties between the riparian countries of the Tigris and Euphrates rivers. While Treaty 3 was accessed through the Iraq Civil Society Solidarity Initiative (ICSSI) webpage,
where it was described to be leaked from private sources and at the time of writing was at the ratification stage (Dawood 2019).

5.4 Source Criticism

As mentioned in the delimitations section, the inclusion of Treaty 3 could be viewed as both a strength and weakness since this treaty is not yet officially published, this could mean that the treaty might be revised before published and the outcome of it might look different than the draft analysed. Still the advantages to include the third treaty is considered to outweigh the disadvantages because even if the final draft might turn out different, the reflections and recommendations would still be highly relevant since the ambition of this research is to analyse the existing treaties.

Finally when it comes to the language of the treaties, Treaty 1 is an original translation to english, while Treaty 2 is an unofficial english translation according to the Max Planck Compilation (Von Bogdandy & Rüdiger 2012:3). Treaty 3 is at the writing moment available in two versions at ICSSI webpage, one Turkish version and one english version (Dawood 2019). Lastly for the reason that translation processes can result in small errors, one should keep in mind that the treaties analysed are all english copies, and not in the original language.

5.5 Positionality

Lastly, objectivity in research is something that the researcher always should strive towards, but the ontological position of objectivism among many similar assumptions, indicates that social phenomena confront us as external components that we can neither affect or control (Bryman 2008:18). For this reason a researcher needs to acknowledge that her research is just as discursive as any other form of knowledge production (Rose 2001:160). Hence it is of crucial
weight that the researcher reflects on and state her own potential biases (Creswell 2009:267), to allow the reader to weight this information into the research.

Concerning the context of the Iraqi-Turkish water dispute, both of my parents descend from Iraq. Even if I am born and brought up in a European country, my parents origin is still a vital part of my identity and updates of the socio-political situation of Iraq, including the water situation of the country, have followed my daily life through Iraqi news channels. I have also witnessed the difficult water situation in Baghdad during the summer, through visits in 2015 and 2017. Still due to the aim of this research to go in-depth in the existing water treaties between Iraq and Turkey, I assess that my personal viewpoint will not affect the analysis inappropriately, instead such experience allows me to understand the seriousness of this water issue, and I believe that this reflection on my background will remind me of the importance to examine the data open-minded.
6. Analysis

This chapter will provide an in-depth analysis of the three water treaties between Iraq and Turkey, examining the linguistic formation of them in regard to the theories on water cooperation. The chapter will be divided into three sections in accordance with the three water treaties. Those three sections will in turn be divided into three subsections in accordance with three first operational questions. The first subsection will identify expressions and key-themes within the treaties and discuss those findings, the second subsection will reflect on how the Tigris and Euphrates rivers and their tributaries are addressed in the treaties. Those two subsections will also consider the fourth operational question. While the third subsection will look at underlying discourses based on the findings in the first subsection and provide a comprehensive discussion on the meaning of those findings.¹

6.1 Treaty of Friendship and Neighbourly Relations between Iraq and Turkey (signed 29 March 1946; entered into force 10 May 1948)

6.1.1 What themes and expressions can be found in the treaties?

¹The following analysis will contain underlined and bold words and sentences. The bold will illuminate when a discussion of a theme starts, while the underlined will highlight the main points of quotes.
This section will identify key-themes and expressions in Treaty 1, focusing on step three of Rose's steps of DAI. Immersing oneself in Treaty 1 it is established around four key-themes based on the frequency of their appearance. To start with the first theme Future, it occurs the most along the treaty, and could be found in sentences written in future tense to explain what was due to happen, and was also communicated through sentences addressing time such as “every five years” or “daily” (Von Bogdandy & Rüdiger 2012:5-7). Another way this theme occurred were through the repeated use of the word “shall”.

These expressions could be examples of a belief in future and the ability to respond to the contemporary challenges. Also most of the times the theme future appeared, it did in an optimistic way, such as in this sentence; “The High Contracting Parties being anxious, in keeping with the spirit of the present Treaty, to achieve co-operation in all aspects of their relations”(Von Bogdandy & Rüdiger 2012:6). This could indicate hopefulness and could display Iraq and Turkey's attitude towards each other, reflecting their trust in future cooperation. This impression was strengthened through the good attitude in the treaty between Iraq and Turkey in connection to the team future.

The second theme Unification, could be identified through expressions such as; “friendly and neighbourly relations”, “sympathy and bonds of brotherhood” and “closer ties” (Von Bogdandy & Rüdiger 2012:4). Through this theme I asses that the treaty has accomplished part of stage B of the analytical framework, trying to reach for trust and cooperation. It also seems that through such expression, the two countries tried to strengthen their bonds and demonstrate to each other their good will over conducting this agreement.

Moving on to the third theme Fear & Precaution, it could be found in some of the cases together with the first theme Future, connected to future tense as in what might happen such as; “in case of dispute” (Von Bogdandy & Rüdiger 2012:5). This theme did also occur through words that could be related to past events, for instance in the reappearing words “conservation works” (Ibid). This does firstly
express future concerns but could also reflect security measures or precaution due to past incidents. Also this could express an interlinked past between Iraq and Turkey, where the two countries connection to the same water sources goes back in history and creates an understanding of the water conditions, here possibly facilitating agreements on security measures.

Lastly the fourth theme, also the second biggest theme identified was the theme of **Common self-identity & Solidarity**. In this theme, phrases such as “us” and "them” separating Iraq and Turkey were not used but instead replaced by common phrases such as “confirming their own aspirations” where “their own” addressed both Iraq and Turkey (Von Bogdandy & Rüdiger 2012:4). Hereby, the treaty also made a strong attempt to shape a shared collective identity, this in agreement with stage B of the analytical framework. Such attempt to unite, is a successful approach to adopt to a treaty, by high chance contributing in making both countries feel satisfied with signing the treaty and to view it as a step towards solidarity, where both nations could feel united together.

6.1.2 How is the water of the Tigris and Euphrates rivers and their tributaries addressed in the treaties?

This section examines the way the Tigris and Euphrates rivers and their tributaries are addressed in the treaties, the step that was found to be most relevant for this section was step six of Rose’s steps of DAI, to pay attention to the visible as well as the invisible in the material. This because of the little information the three treaties provided on this question. The water of the Tigris and Euphrates rivers and their tributaries are in this treaty, addressed in the exact same words I have used in this research; “waters of the Tigris and Euphrates rivers and their tributaries”, other times they were referred to shortly as; “the two rivers” or “these rivers” (Von Bogdandy & Rüdiger 2012:6).

This way to address the Tigris and Euphrates rivers is a very neutral way and for such expressions, researchers have identified that there are much to learn from
qualitative data by paying attention to what is not mentioned instead (Ryan & Bernard 2003:92), (Rose 2001:158). The points identified to have been left out from this treaty concerns Iraq’s and Turkey’s position to the water and economic and military strength of those countries, making up stage D of the analytical framework. Additionally the Tigris and Euphrates rivers have many tributaries throughout both Iraq and Turkey, therefore one would expect descriptions of the concerned water for the different purposes, which is left out. The intentions of this could be to avoid disputes through not mentioning what specific tributaries, or inside what land's borders the measures would be conducted.

But, such gap of important details could create disputes and complications later in the process, when the agreed measures would be carried out. Those gaps does also raise the question if the negotiation environment were stressed in some way or in lack of time, even if the friendly attitude of the treaty and the weight and space of it placed on the relationship of the two countries suggests the opposite.

Moreover another noteworthy part missing from the treaty, underlined by stage A of the analytical framework is the inclusion of the countries uses and needs of the water and a management plan. Especially the different measures and plans of dam constructions did highlight this absence, since here information on specific water and water allocations would clarify their ambitions. Also here an explanation could be that Iraq and Turkey could not agree on including such point. But on the other hand it could also suggest that the water needs and distribution of water was not the main issue at the time of this treaty, instead the issue of uncontrolled water flows seems to has been a greater concern by that time.

The absence of discussions on how to manage the water in Treaty 1, could further strengthen the argument that a shortage of water resources was not the main issue in 1946. Still examining the treaty with the analytical framework in mind, the treaty fails to address stage A to map the uses and needs of water of the countries and include a management plan and step C to include proportional distribution of the water. Still this is only a failure if the attempts of the treaty was to reach a fair and sustainable distribution of the shared water resources, which do not seem to had been the main attempt.
6.1.3 What are the underlying discourses reflected in the treaties?

This section will examine underlying discourses through the themes and expressions identified above and in accordance with Rose’s fourth and fifth step, it will explore how those discourses produce their effect of truth (Rose 2001:154). To start with a discourse identified in relation to both the theme Fear & Precaution and Future, it was the discourse of a threat in sentences such as;

“...ensure the maintenance of a regular water supply and the regulation of the water-flow of the two rivers with a view to avoiding the danger of floods during the annual periods of high-water” (Von Bogdandy & Rüdiger 2012:5).

Here the floods are portrayed as a threat together with uncontrolled water flows. This image of a threat could in turn has provoked a reaction for the need to take action, where the two parties of the treaty, Iraq and Turkey are portrayed as the responsible actors with the power to act towards this threat. Here the action the discourse of a threat implies is needed, is this treaty in itself but also the construction of conservation works and dams the treaty suggests. This discourse could also have strengthened the countries feeling of responsibility and obligation to sign the treaty.

Another discourse recognized is connected to both the themes Unification and Common self-identity & Solidarity. This is the discourse representing Iraq and Turkey as actors of the treaty. In this discourse Iraq and Turkey are portrayed as progressive, visionary with solidarity. This discourse is especially produced by expressions such as “...with the legitimate ambition of being the first to put into effect the above mentioned principles of the United Nations Charter” (Von Bogdandy & Rüdiger 2012:4). Where the countries are illustrated as somewhat ahead of their time through wanting to ambitiously be the first taking on the principles of the charter. This image does likely also bolster Iraq’s and Turkey’s self image and thereby their will and responsibility to fulfill the treaty in a graceful way. Finally this discourse accomplished to mediate a very positive and
democratic image of Iraq and Turkey, and was at the same time used to present the actors of the treaty in a desired way.

While looking at claims of truth in connection to Rose’s fourth step, following could be found

“...desire to strengthen further the friendly and neighbourly relations happily established between Iraq and Turkey and to reinforce the sympathy and bonds of brotherhood which have existed for centuries between the two peoples considering that their foreign policy is firmly based on the conviction that the ideal of peace and security...” (Von Bogdandy & Rüdiger 2012:4).

Here “strengthen further” and “reinforce” asserts an already strong relationship, sympathy and bonds, while the continuation of that sentence claims that relationship have existed “for centuries”, and makes claims about their foreign policy. The compiled image of those claims suggests a positive solid relation between Iraq and Turkey that goes back in time. Such claims could also had provided a strengthen belief in future relation between them, as well as empowered the treaty and relations of that time.

6.2 Memorandum of Understanding between the Ministry of Environment and Forestry of the Republic of Turkey and the Ministry of Water Resources of the Republic of Iraq on Water (15 October 2009)

6.2.1 What themes and expressions can be found in the treaties?

This section will recognize key-themes and expressions in Treaty 2, focusing on step three of Rose's steps of DAI. There are also four key-themes identified in this treaty, starting with the theme Future concerns, in contrast to the previous treaty where the theme Future was identified, here the majority of times expressions
concerning the future appeared, they were connected to anxiety and concerns about the future. This theme was additionally expressed through sentences such as; “... assessment of water resources which tend to diminish because of increase in water use and as a result of climate change...” (Von Bogdandy & Rüdiger 2012:52).

Furthermore the appearance of the theme Future concerns, in this later treaty could testify of concerns on the worsened water situation of the current time. Such worries could also have caused pressure for both countries, forcing them to take action such as signing this treaty. Also tensions caused by the water situation could affect Iraq’s and Turkey’s attitudes towards each other and therethrough the character and style of the treaty. Here a dissimilarity from the previous treaty was the less tactful phrases and that it instead more directly moved on to the main points of agreement. On the other hand this could also be affected by the political changes Iraq and Turkey encountered in the time period between 1946 and 2009.

When it comes to the theme Vigorousness & Determination, it was perceived to dominate the treaty through it’s high frequency, this through expressions of suggested actions such as “Cooperation will be further enhanced in water resources management...” (Ibid) and “Joint studies will be conducted to prevent water losses in domestic water supply and provide safe water” (Von Bogdandy & Rüdiger 2012:53). Therethrough this theme reflected the activity ambitions of Iraq and Turkey, embodied through the treaty. This theme did also to some extent demonstrate the two countries determination for cooperation over the water resources, which also here could be additionally compelled by the concerns over the water situation.

Additionally the third theme Cooperation ambition appeared in two forms, the first was expressed through the desire of cooperation between Iraq and Turkey, which could be described as internal cooperation, since it is between only the two parties of the treaty. Here through this theme, this treaty did also partly meet stage B of the analytical framework - try to reach for trust and cooperation. The second form of this theme; external cooperation, was manifested through the two countries repeated inclusion of Turkish companies, non governmental
organisations (NGO) and private actors to cooperate and engage in the projects. Those invitations to the Turkish side, did pose a question on the absence of Iraqi companies and NGOs in the treaty, opening up for reflections on the situation of the Iraqi companies and NGOs and their stability during this period and if that was the reason for their exclusion.

Finally the theme **Sustainable awareness** was the second biggest theme in the treaty and was often linked with the theme Future concerns. It did appear through words and expressions concerning climate change and in sentences such as

“importance of sustainable development approach” and “...protection and utilization of water resources for the health and wealth of present and future generations” (Von Bogdandy & Rüdiger 2012:52).

Also this theme could be a result of negative changes affecting the common water resources, such as water decreases. The inclusion of this theme could underline the criticalness about the water situation Iraq and Turkey were facing, and possibly shedding light on their fear and concerns of that the situation could worsen.

6.2.2 How is the water of the Tigris and Euphrates rivers and their tributaries addressed in the treaties?

This section will explore how the Tigris and Euphrates rivers and their tributaries are addressed in Treaty 2, and therethrough follow Rose’s sixth step. Also in this treaty the water was addressed in a very general way, the Tigris and Euphrates rivers were only mentioned two times. The rest of the times the water was referred to simply as “the water resources”. In this treaty the uses and needs of water of the countries were not included and neither were proportional distributions nor the countries poison to the water or their economic or military strength. Therethrough, this treaty did not reach stage A, C or D of the analytical framework. But those parts left out, does in this treaty not reflect that a water shortage was not in the
center of the treaty, because in this treaty in contrast to Treaty 1, a water shortage issues Iraq and Turkey were facing were discussed. Therefore those gaps are likely a result of that Iraq and Turkey could not agree on those points.

6.2.3 What are the underlying discourses reflected in the treaties?

This section will explore underlying discourses in Treaty 2, through the themes and expressions identified in the first subsection of this treaty, following Rose’s fourth and fifth step. Also in this treaty discourses of threats were defined, this time in connection to the theme Future concerns and Sustainable awareness. Here the increased water use, climate change and drought periods were depicted as threats in sentences such as; “...water resources which tend to diminish because of increase in water use and as a result of climate change...” and “Mechanisms will be developed to solve problems arising during the drought period” (Ibid). Those images of threats were further strengthened through the repeated use of the word “protection” throughout the treaty. Also here this could had provoked the impression that Iraq and Turkey needed to take strong action, which could have pushed them towards this treaty and towards closer cooperation.

Another discourse was identified based on the theme Cooperation ambitions, this discourse displayed a hierarchical structure in the relationship between Iraq and Turkey indicating a periphery - semi periphery or victim - saviour relationship. This through sentence such as;

“Concerning the construction of irrigation networks in Iraq, Turkish companies will join in bidding, and the companies will provide necessary construction services, supplies and systems.” (Ibid).

This discourse could also demonstrate a claim of truth, where Iraq is portrayed as dependent on Turkish side and aid by Turkey. This in turn could have affected the self image of Iraq and their way to view Turkey in the negotiations as superior or the ruler of the negotiations.
6.3 Memorandum of Understanding in the Field of Water between the Ministry of Forestry and Water affairs of the Republic of Turkey and the Ministry of Water Resources of the Republic of Iraq 2019

6.3.1 What themes and expressions can be found in the treaties?

This section will recognize key-themes and expressions in Treaty 3 with focus on step three of Rose's steps of DAI. There are four main key-themes identified in this treaty, whereby some recurring from the previous treaties. To start with the theme **Drinking-water issues**, in contrast to the previous treaties this treaty did focus more on the lack of drinking water than just freshwater resources, especially in the suggestion of actions.

Some of the expressions that are examples of this theme are; “joint studies will take place to prevent the loss of drinking water” and “...cooperation in the field of drinking water...” (Iraqi Civil Society Solidarity Initiative 2019:3). This theme does show that the water issue, escalated to an issue of drinking water shortage. The repeated usage of the term drinking water, indicates that Iraq and Turkey were here highly stressed by the fear that it would escalate, which once again might been the factor bringing them to the negotiation table.

Additionally the theme **Cooperation ambition** was a noticeable theme appearing several times, and therethrough partly fulfilling stage B of the analytical framework, to try to reach for trust and cooperation. Also in this treaty it appeared in the two forms of internal and external cooperation, where only the Turkish companies and NGOs were mentioned in the part of external cooperation. The
absence of Iraqi companies and NGOs was discussed in Treaty 2 as a possible result of Iraq’s instability during 2009, but the social and political situation of Iraq is to some extent more stable today. Therefore another explanation for this absence could be that Turkey might have dominated the negotiations and driven them in this direction for economical purposes. Also the Iraqi government might have felt themselves inferior in the negotiations, to a wealthier Turkey with the advantages of a beneficial position on the rivers.

Lastly, the theme **Sustainable awareness** in this treaty was the most apparent, through expressions such as; “keeping in mind that natural resources and environment protection necessitates scientific, technical and technological close cooperation” (Iraqi Civil Society Solidarity Initiative 2019:1). This is viewed as examples of sustainable awareness. Once again this theme could be a reflection of not only future concerns but also the contemporary water situation with decreases of freshwater resources.

### 6.3.2 How is the water of the Tigris and Euphrates rivers and their tributaries addressed in the treaties?

This section will explore the way the Tigris and Euphrates rivers and their tributaries are addressed in Treaty 3, following Rose’s sixth step. Also in this treaty the freshwater resources of the rivers were addressed in very broad terms, with two association to the rivers Tigris and Euphrates. This treaty did not consider the countries positions to the water and their economic and military strength, and it did not include proportional distribution of the freshwater resources either. Similar to the previous treaties it hence failed to meet stage C and D.

On the other hand something that did strongly strike out in the way the freshwater resources were addressed in this treaty, was that this treaty referred to it as drinking water. This does reflect the theme identified above of Drinking water
issues and the importance of it for Iraq and Turkey at that time, and logically their fear of that the drinking water shortage would escalate.

When it comes to the previously identified failure in addressing distribution strategies in the previous treaties, this treaty made an attempt to address this issue in the following sentences; “This cooperation will include the assessment of water resources and the increase in water use agricultural, industrial, municipal, and drinking water and climate change…” and “Turkey will release equitable and reasonable river water to Iraq according to the above assessment. (Iraqi Civil Society Solidarity Initiative 2019:2).

The wish to conduct an assessment of the uses and needs of water in this treaty, makes Treaty 3 the closest to reach stage A of the analytical framework. Still no specific amount of the water agreed to be released is included in the treaty nor the assessment of the uses and needs of water, therefore this treaty did not fulfill stage A of the analytical framework either. Further the ambitions of Treaty 3 demonstrates that the water situation of Iraq and Turkey did get worse in between the treaties, and if the drinking water issue continues to move in the same direction, one will by high chance find the assessment of the needs and use of the water included in the next water treaty.

6.3.3 What are the underlying discourses reflected in the treaties?

This section will explore underlying discourses through the themes and expressions identified in earlier the first section of this treaty, in accordance with Rose’s fourth and fifth step (Rose 2001:154). One discourse identified in this treaty in relation to the theme of Drinking-water issues, is the image of a potential risk of drinking water shortage. The image appeared among other in the expression ”...studies will take place to prevent the loss of drinking water...” (Iraqi Civil Society Solidarity Initiative 2019:4).
Also in this treaty the underlying discourse of periphery - semi periphery or victim - saviour relationship could be identified, in the theme Cooperation ambitions, in sentences such as;

“Turkish companies will be able to take part in the tender process of construction works of the irrigation nets in Iraq and supply the necessary contractor services, materials and supplies” (Iraqi Civil Society Solidarity Initiative 2019:4).

Here the most prominent claim of truth concerned the Iraqi dependence on Turkish support as in the previous treaty. Still as mentioned earlier it is more remarkable in Treaty 3, because Iraq were more stable at the time of Treaty 3 in comparison to the time of Treaty 2, therefore one would expect a change in the formulation in this later treaty.
7. Conclusion

This conclusion chapter will conclude the main findings of the analysis sections, and answer the research question; How are the three water treaties between Iraq and Turkey linguistically formulated in regard to the theories on water cooperation? This will finally be followed by a proposition of further research.

7.1 Answering the Research Question

Defining how the three water treaties between Iraq and Turkey are linguistically formulated, in regard to the theories on water cooperation, there are nine different key-themes identified in the three treaties: Future, Unification, Fear & Precaution, Common self-identity & Solidarity, Future concerns, Vigorousness & Determination, Cooperation ambition, Sustainable awareness and Drinking-water issues. Of the themes identified in the treaties, three were directly related to the stages A-D of the analytical framework and therethrough the theories on water cooperation.

To start with the treaty from 1946 it provided an unexpected finding. In contrast to two later water treaties, the main focus of the water issues in Treaty 1 was not the freshwater resources of Iraq and Turkey or a shortage of them. Instead Treaty 1 was concerned with the control of the water flows and the floods especially during high water periods. In regard to the analytical Framework, Treaty 1 did not cover stage A, C or D, but did succeed to include stage B of the analytical framework; to
try to reach for trust and cooperation and try to shape a shared collective identity. This through the themes Unification, Common self-identity & Solidarity. With other words one could say that Treaty 1 was to 1/4 formulated in regard to the theories on water cooperation, this is considered successful, since the main concern of the analytical framework is water cooperation, focused on sharing freshwater resources, while the main issue of Treaty 1 was how to control the shared waters.

Treaty 2 from 2009, did similar to Treaty 1 also fail to address stage A, C and D, even if the main focus of this treaty was the sharing of the freshwater resources of the Tigris and Euphrates. On the other hand Treaty 2 did partly achieve stage B through striving for trust and cooperation through the theme Cooperation ambition. Still it did not completely achieve stage B, since no theme in this treaty aimed to create a shared collective identity. Treaty 2 is therefore to an extremely low extent formulated in regard to the theories on water cooperation.

Treaty 3 from 2019, did in contrast to the previous treaties reach a part from stage A, through the aim to assess the water resources of the Tigris and Euphrates together with the increased water usage. But it did not include the assessment or a management plan in the treaty, therefore it did not fulfill stage A. Treaty 3 did in similarity to Treaty 2, meet a part of stage B through also here the theme Cooperation ambition, but it did fail to address stage C and D. Therefore Treaty 3 is also to a very low extent formulated in regard to the theories on water cooperation.

When it comes to the discourses identified in relation to the themes found in the treaties, they did concern the two main topics; threats and risks and the representation of Iraq and Turkey. The first topic of threats and risks that could be identified in all three treaties, was produced through the discourses depicting floods and uncontrolled water flows as threats in Treaty 1, and climate change, drought periods and the increased water usage as a threat in Treaty 2 and Treaty 3, while also the drinking water shortage was additionally depicted as a threat in Treaty 3. Those images were strengthened further through the repeated use of
words such as “conservation works” in the first treaty and “protect” in the two later treaties.

The second topic of discourses concerning the representation of Iraq and Turkey identified in Treaty 1, was defined firstly by the discourse that portrayed Iraq and Turkey as progressive actors with high ambitions and high solidarity, where also claims of truth were made concerning the Iraqi-Turkish relationship and the two countries foreign policies. On the other hand the second discourse which could be found in both the treaties from the 2000’s century, was the periphery - semi periphery or victim - saviour relationship. Supplementary in both these later treaties, the Iraqi dependence on Turkish support was recognized as claim of truth.

In conclusion, the three water treaties between Iraq and Turkey are to a low extent found to be linguistically formulated, in regard to the theories on water cooperation. Treaty 1 from 1946 was to 1/4 formulated in regard to the water cooperation theories, through the inclusion of stage B of the analytical framework; Reach for trust and cooperation and shape a shared collective identity. While Treaty 2 and Treaty 3 did not completely reach any part of the analytical framework, but Treaty 2 did partly reach stage B of the analytical framework and Treaty 3 did reach a part from both stage A; Map the countries water use and need of water through a management plan, and stage B.

Finally, the water cooperation theories, are almost entirely conspicuous by their absence in the three water treaties between Iraq and Turkey. This absence seems to be a result of a neglect of the theories on water cooperation and research on that area. Through taking the water cooperation theories but also other relevant research in serious consideration, when formulating a water treaty, Iraq and Turkey could transform the negotiation environment from political to scientific. Hence Iraq and Turkey will be much more likely to succeed in developing a sustainable water treaty, and therethrough lasting water cooperation on the joint water resources of the Tigris and Euphrates, as a step in the process of reaching positive peace between Iraq and Turkey.
7.2 Further Research

This research did awake many questions and thoughts about possible further research on this topic. Firstly a further research without the size and time-limitation of the present thesis, could include other neighboring countries that partly share the freshwater resources of the Tigris and Euphrates, such as Syria or even Iran. While another approach could instead examine the process of implementing the three treaties in practice. Yet another research could take in consideration the effect of the treaties on the current water situation of Iraq and Turkey. Also a comparative study which includes treaties on water from similar cases, could be an interesting future research subject.
8. References

8.1 Analyzed Material


8.2 Literature


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