

Rozan Abdulrahman

Sulaymania, Iraq (presently live in New York City)

Biology and Cross-Cultural Studies

Thesis Advisor: Don Roeder

Man and Nature: The Story of the Iraqi People and the Tigris River

Our connections with the places we inhabit can be just as strong as the bonds we form with one another. The symbiotic relationship between those surrounding the Tigris River and the river itself, for instance, is a model for the interdependence between man and nature. The river was a major factor in the development of the first civilization in Mesopotamia, or present-day Iraq, because not only did it provide a source for drinking, cooking, and cleaning but the navigable water also allowed for trade, and thus interaction, among various groups of people. Furthermore, the populations near the river have affected the Tigris River just as much as the river has affected them. During the 1990 Gulf War, Iraq's water treatment plants were destroyed and thus, the quality of the water drastically decreased.

The Tigris River is inhabited by various microorganisms that have contributed both to the wellness and destruction of the natural resource. Such microorganisms have served as pathogens to man because



many of the harmful ones were allowed to reproduce in the aqueous environment, causing illnesses of various severities to those who depend on it. The Iraqi people no longer had access to essential treatment products, such as chlorine, due to sanctions since it was concerned a potentially dangerous element. The lack of concern for the quality of water inevitably led to the deteriorating health of the people. This parallel between the well-being of the Tigris River and that of those around it is symbolic of the symbiotic relationship between the environment and its inhabitants.

In an effort to combine my interests in biology and cultural studies, I would like to research the health concerns that the Tigris River poses to the Iraqi population. My thesis will be centered at the quality of the Tigris River and the interdependence between the population near the river and river itself for one another's well-being. Therefore, there will be scientific, cultural and political aspects to the project. I will also incorporate the role the river plays in the people's lifestyle. This thesis, therefore, encompasses my thirst for scientific knowledge and my passion for cultural studies.

I strongly believe that science cannot exist in its entirety without its relationship to people. Anthropological and political studies will thus be essential to the project since I will be studying the lifestyles of those who have inhabited the areas around the Tigris River, as well as those who currently occupy the land. Furthermore, I will be researching the effects of the recent wars in Iraq, specifically the Gulf War in 1990, on the quality of the river and the health of the Iraqi population relying on the natural resource. In addition to the social science fields, there will also be a biological and ecological component: I will explore the microorganisms, plants, and aquatic animals inhabiting the river and their role in both the maintenance and deterioration of the water quality.



The first chapter will be a brief history of the role of the Tigris River in the civilizations that surround it. For this task, I will need to research the structure of past societies and their uses and abuses of the water. The second chapter will be strictly scientific: I will dive into the biological importance of the natural resource, the organisms that inhabit it, and current water quality of the river. Considering the scientific nature of the section, I will use statistics and graphs of data already collected by others. I will explore the variety of plants and animals, specifically fish, which inhabit, or once occupied, the Tigris River and their significance in terms of the water quality. The third section will consist of the modern controversy surrounding the Tigris



River, particularly the significance of it in the political realm. International policy will be central to the last chapter since I will discuss the effects of the chemical wastes that are being thrown into the river, the result of the sanctions on water treatment materials, and most importantly, the impact of the current political situation on the natural resource. The fourth and last chapter of the thesis will consist of remediation: How can we reverse, or at least lessen, the diminishing water quality of the Tigris River? How can we protect the population around the river from the contaminations of the natural resource?