Similar arguments have been made about the idea of eating fish on Fridays. In Europe, grazing land is scarce and as a result, large herds of cattle are not easily maintained. The injunction to eat fish on Friday has some relevance to the fact that red meat would have perhaps been put under a strain without such a prohibition.

Mary Douglas in her book on Natural Symbols makes further argument, one of which is that there are people in the middle east that do deal with pigs and that this is a symbolic way of being different.

Mary Douglas, another anthropologist approached the problem symbolically and points out that people classify animals based on a number of things. Generally, for example, things that live in the water are called "fish". Her argument is that "fish" become the "proper kind of animal" and things which lack the criteria of "fish" - gills, fins etc. are seen as "improper' hence unclean and should not be eaten. There is little doubt that the debate is not yet over.

Interestingly enough, many animals are rather "picky" eaters and have rather restricted diets although this is obviously not seen as cultural.

Although not having to do with water, other cultures, like some in places like India, reject the killing of cattle and there is also a lively debate about why this should be. These arguments are often based around the idea that culture is "adaptive" and there seem to be many places where it seems maladaptive (until someone finds a way to show it is adaptive). So the arguments continue and so the battle continues on.

Some might argue that the shorter term prohibitions, like restriction of specific days of the week (meatless Fridays) or seasons (like lent) when certain foods should not be eaten might be good for preserving the animals population.

Similarly, there are many things in the ocean that are edible, but people do not want to eat.

Other problems with food deal with matters outside (to some degree) of culture. In the Viking case, the weather change is outside of Viking control, but the religious problems complicated the issue.

Mini Ice Age and the Vikings. 1300 – 1850 (alternately some feel it was from the 16th to the 19th centuries) temperatures in Greenland dropped about 7 degrees F or 4 degrees C. This led to longer periods of sea ice making travel and trade difficult. Shorter growing seasons impacted the food supply and fish moved south into warmer waters. Eskimo did OK fishing through the ice. Vikings couldn't learn because they had become Christians and Eskimos had rituals to animals they were about to kill or killed which seem to have been anathema to the Christian Vikings who went to church, prayed and died, while the pagan Eskimos did OK.

Movement of fish in Greenland is not the only problem of this sort based on weather change. The Greenland one was rather long lasting and came once. Others are more complex.

So prohibitions might involve a day (try not to eat meat on Friday) to a couple of weeks (Lent) or a few months. In America there is a nice saying that indicates a cultural (but not religious) prohibition against eating oysters in months without the letter "R"

DON'T EAT OYSTERS IN MONTHS WITHOUT THE LETTER "R"

Other forms are dangerous only at certain times. The phrase "Do not eat oysters in months without "r's" may sound silly but has some validity. R-less months are in the summer when algal blooms are likely. Many of these contain a toxin and oysters filter feed on the algae, thus becoming somewhat toxified themselves. Through "bio magnification" (in which a toxin, for example, increases in the body as each higher animal up the food chain eats the one below) can cause serious illness in humans eating oysters with high levels of toxicity.

So, while religion is also involved in tabuing food, no culture has been found where all edible resources are utilized. Some aversion seems to be just cultural in the sense that the object is not seen as food. In America, insects are not considered food, but in other places in the world, they are. There are no supernatural proscriptions against eating insects, just an aversion that insects are not food.

Other taboos may be related to objects associated with fishing and specifically the foods involved. On the NW Coast, fishing equipment is stored indoors during the winter. This brings with it a tabu about having sex in the

houses since the equipment is stored there. When spring arrives and days become warm enough, people have sex outdoors and hence the birth rates are much higher starting 9 months after the first warm days a spring.

FOLKLORE

Folklore is another aspect of culture. Any bit of folklore is generally defined as not having an "authentic" version. That is to say there is no known "author" or definitive version which can be cited as correct or not.

Generally, folklorists may make technical distinctions between different kinds of narratives (called "oral literature"). For example, some folklorists define three types "myths", "tales" and "legends".

Technically, myths are stories which are believed to be true and sacred (thereby making them something quite different than the dictionary use of the word where it means something untrue).

Legends are stories believed (more or less sometimes) to be true about real people but are not sacred (George Washington and the Cherry Tree).

Tales (as in fairy tales) are stories not believed to be true at all. Many of these have specific forms. For example, in the West, Fairy Tales begin "Once upon a time", and end "and they all lived happily ever after". In Japan they begin "mukashi, mukashi" "A long time ago, a long time ago"

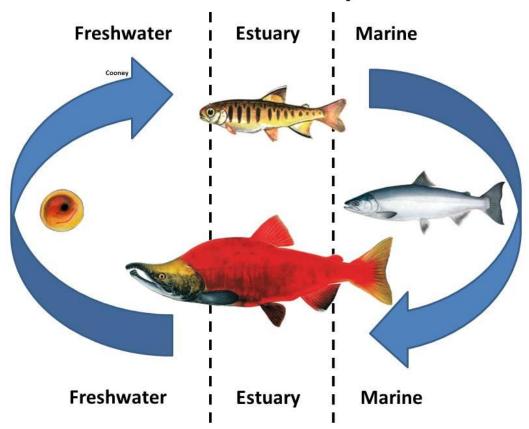
Within different cultures there are many folkloric stories about the ocean and the creatures (real and imaginary) that live in it. The idea that the manatees inspired the concept of the mermaid is not a narrative, so it isn't any of the three. But stories about mermaids catching people and drowning them are. The Japanese have a critter called a Kappa that looks something like a turtle with a dish on its head. There must always be water in the dish or it will die. There are stories about these creatures drowning people.

The indigenous people on the NW Coast have a belief about animals. Each animal is a kind of person – salmon people, otter people who dress in the skins of that animal. Salmon people swim up the rivers from the ocean where they are caught. The fishermen must be careful to return all the bones of the fish to the river so that they may return to the "salmon home" where they redress as salmon fish and can return up the rivers again. In some stories all the bones are not returned and a person appears in a

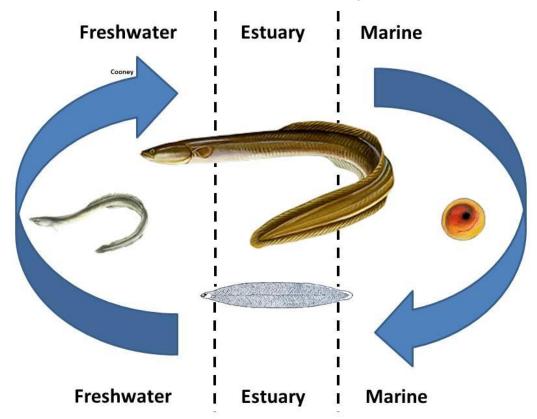
village, who is missing some body part. The people recognize the person as one of the animal people all of whose bones have not been returned to the water and are now missing the part of the body which lacks the bone. There is often a frantic hunt to locate the bone and return it to the water. Once done the animal-person disappears and can regain their full body.

Salmon by the way are known as anadromous (anadromous) fish (as opposed to catadromous fish). Anadromous fish live in the ocean but spawn in fresh water. Catadromous (catadromous) fish reverse the process and live in fresh water but spawn in the ocean. The American eel is catadromous.

Anadromous Life Cycle



Catadromous Life Cycle



The salmon are born in the streams and then head out to the ocean where they live most their lives. They finally return to the stream of the birth where they spawn and die.

Some comparative psychologists (animal behaviorists) have thought that the chemicals in the bones of the fish may clue the offspring later as to which stream to come up to spawn, since the salmon return to the streams of their birth.

The Mohawks, an Iroquoian speaking nation located in upstate New York and Canada have stories in which creatures that are half human and have fish appear – a kind of mermaid. In the stories they can be dangerous and often lure men into the water. In some cases the men turn into mermen (or whatever male mermaids are called – merbutlers?). The creatures are usually female but occasionally they are male.

There are also many stories about ghost ships and mystery ships. Ghost ships are generally supernatural, like the Flying Dutchman, which appears and disappears. The story has many forms as expected in folklore, but in general, it involves a captain who swears to round a stormy cape if it take all eternity. For a kind of blasphemy, he is punished for having to sail forever and it is considered very unlucky to meet the ship. The story has become the subject of an opera by Richard Wagner (Der fliegende Holländer) and of some films like Pandora and the Flying Dutchman. An excerpt from the overture to the opera can be heard on the web site for the course.



In Chile, a ghost ship called the Caleuche.



There are stories that deal with it carrying the people who have died at sea and who now revel in constant parties. The workers are deceased sailors (no rest for the weary). It is one of the most well known legends of the Chilota mythology of southern Chile describes the Caleuche, a ghost ship that appears every night near the island of Chiloe. According to local legend, the ship is a kind of conscious being that sails the waters around the area, carrying with it the spirits of all the people who have drowned at sea. When spotted, the Caleuche is said to be strikingly beautiful and bright, and is always accompanied by the sounds of party music and people laughing. After appearing for a few moments, the ship is then said to disappear or submerge itself under the water. According to Chilota mythology, the spirits

of the drowned are summoned to the ship by the Sirena Chilota, the Pincoya, and the Picoy, three Chilota "water spirits" who resemble mermaids. Once aboard the phantom ship, the drowned are said to be able to resume their life as it was before they died. It is unusual in that the ship is thought to be conscious. People are invited on board

A glow on ships can be caused by "St. Elmo's Fire" an atmospheric condition that cause as "glow" on masts and yard arms.



Another famous "phantom ship" is the Mary Celeste which left the East River in NYC bound for Genoa.



A ship, the Dei Gratia, which had also left NY (before the Mary Celeste) found the Mary Celeste sailing with no crew and everything on board as though the crew had suddenly vanished. The captain, his wife and daughter and crew members were never heard of again. The story was made famous by Sir Arthur Conan Doyle J. Habakuk Jephson's Statement, which veered off from the facts and led to much of the confusion about what actually happened. Recently it has been concluded that the ship had only one chronometer (clock) on board – which appears to have been in error. Most ships carried many – up to 20 and more. Why would this have been? What problems would a damaged clock been to the Mary Celeste?

Also involved in folklore are interesting "creatures" like Mermaids, Giant Krakens and Sea serpents.

Mermaids are thought to be the result of sailors (being at sea so long) seeing manatees and believing them to be women.





It seems to me you would have to be at sea a pretty long time to mistake these for this:



On a more realistic note, however, the sailors may have seen or heard about manatees from other sailors who sailed along the coast of Africa where they are also found. More significantly though, there are many half animal half human critters in western mythology: Satyrs (1/2 goat ½ human), centaurs (1/2 horse ½ human), minotaurs (1/2 bull ½ human) and so on.







There are many cultures in which there are these mixed human/animal creatures. The Apache have a deer woman who is human (upper) and deer (lower). Mohawk has a kind of mermaid that inhabits the St. Lawrence River. Transformers or shape shifters who can alter their appearance often from human to animal as happens with werewolves, and the occasional vampire who seems able to change into a bat or other animal are also found in many cultures.

Anthropologists Victor Turner points out that some African masks exhibit creature which are half human and half other animal and in some cases half human half plant or thing. He suggests that this is a "questioning" of

boundary categories – in what ways are humans like other animals and in what ways different?

Other mystical sea beasts include the "kraken" an animal believed to have been inspired by the appearance of a giant squid.