CORPUS

Researchers have been studying disasters for more than a century, and for more than forty years disaster research. The studies reflect a common opinion when they argue that all disasters can be seen as being human-made, their reasoning being that human actions before the strike of the hazard can prevent it developing into a disaster. All disasters are hence the result of human failure to introduce appropriate emergency management measures. Hazards are routinely divided into natural or human-made, although complex disasters, where there is no single root cause, are more common in developing countries. A specific disaster may spawn a secondary disaster that increases the impact. A classic example is an earthquake that causes a tsunami, resulting in coastal flooding.

A natural disaster is a natural process or phenomenon that may cause loss of life, injury or other health impacts, property damage, loss of livelihoods and services, social and economic disruption, or environmental damage. Various phenomena like earthquakes, landslides, volcanic eruptions, floods, hurricanes, tornadoes, blizzards, tsunamis, and cyclones are all natural hazards that kill thousands of people and destroy billions of dollars of habitat and property each year. However, the rapid growth of the world's population and its increased concentration often in hazardous environments has escalated both the frequency and severity of disasters. With the tropical climate and unstable land forms, coupled with deforestation, unplanned growth proliferation, non-engineered constructions which make the disaster-prone areas more vulnerable, tardy communication, and poor or no budgetary allocation for disaster prevention, developing countries suffer more or less chronically from natural disasters. Asia tops the list of casualties caused by natural hazards.

Human-instigated disasters are the consequence of technological hazards. Examples include stampedes, fires, transport accidents, industrial accidents, oil spills and nuclear explosions/radiation. War and deliberate attacks may also be put in this category. As with natural hazards, man-made hazards are events that have not happened—for instance, terrorism. Man-made disasters are examples of specific cases where man-made hazards have become reality in an event.

"Disaster" is the fifth episode of the fifth season of the American science fiction television series Star Trek: The Next Generation, the 105th episode overall. It was originally released on October 21, 1991, in broadcast syndication. Set in the 24th century, the series follows the adventures of the crew of the Federation starship Enterprise.

The Disaster Research Center (DRC), was the first social science research center in the world devoted to the study of disasters. It was established at Ohio State University in 1963 and moved to the University of Delaware in 1985. The Center conducts field and survey research on group, organizational and community preparation for, response to, and recovery from natural and technological disasters and other community-wide crises. DRC researchers have carried out

systematic studies on a broad range of disaster types, including hurricanes, floods, earthquakes, tornadoes, hazardous chemical incidents, and plane crashes. DRC has also done research on civil disturbances and riots, including the 1992 Los Angeles unrest. Staff have conducted nearly 600 field studies since the Center’s inception, traveling to communities throughout the United States and to a number of foreign countries, including Mexico, Canada, Japan, Italy, and Turkey. Faculty members from the University's Sociology and Criminal Justice Department and Engineering Department direct DRC's projects. The staff also includes postdoctoral fellows, graduate students, undergraduates and research support personnel.

There are over 109 different definitions of terrorism. American political philosopher Michael Walzer in 2002 wrote: "Terrorism is the deliberate killing of innocent people, at random, to spread fear through a whole population and force the hand of its political leaders". Bruce Hoffman, an American scholar, has noted that

A Disaster Mortuary Operational Response Team or DMORT is a team of experts in the fields of victim identification and mortuary services. DMORTs are activated in response to large scale disasters in the United States to assist in the identification of deceased individuals and storage of the bodies pending the bodies being claimed.

Disaster recovery (DR) involves a set of policies, tools and procedures to enable the recovery or continuation of vital technology infrastructure and systems following a natural or human-induced disaster. Disaster recovery focuses on the IT or technology systems supporting critical business functions, as opposed to business continuity, which involves keeping all essential aspects of a business functioning despite significant disruptive events. Disaster recovery can therefore be considered as a subset of business continuity

Rainfalls of diamonds have been suggested to occur on the gas giant planets, Jupiter and Saturn, as well as on the ice giant planets, Uranus and Neptune. There is likely to be rain of various compositions in the upper atmospheres of the gas giants, as well as precipitation of liquid neon in the deep atmospheres. On Titan, Saturn's largest natural satellite, infrequent methane rain is thought to carve the moon's numerous surface channels. On Venus, sulfuric acid virga evaporates 25 km (16 mi) from the surface. Extrasolar planet OGLE-TR-56b in the constellation Sagittarius is hypothesized to have iron rain.

The National Disaster Medical System (NDMS) is a federally coordinated healthcare system and partnership of the United States Departments of Health and Human Services (HHS), Homeland Security (DHS), Defense (DOD), and Veterans Affairs (VA). The purpose of the NDMS is to support State, local, Tribal, Territorial authorities following disasters and emergencies by supplementing health and medical systems and response capabilities. NDMS would also support the military and the Department of Veterans Affairs health care systems in caring for combat casualties, should requirements exceed their capacity.

RESULTS

1. Query 1 : "natural disaster"

Relevant Document Numbers : 2

Cos Ranking

DocId	Score
2	0.0833241272525
8	0.0593420103661
1	0.0509728132716
5	0.0314224386204
3	0

recall@5 = 1/1 = 1
precision@5 = ¼ = 0.25

Proximity Ranking

DocId	Score
2	0.856534090909
8	0.238461538462
1	0.0889328063241
5	0.0626959247649
3	0

recall@5 = 1/1 = 1
precision@5 = ¼ = 0.25

2. Query 2 : "disaster research"

Relevant Document Numbers : 1,5

Cos Ranking

DocId	Score
5	0.204140439438
1	0.0890968202122
2	0
3	0
4	0

recall@5 = 2/2 = 1
precision@5 = 2/2 = 1

Proximity Ranking

DocId	Score
5	0.584126984127
1	0.525641025641
2	0
3	0
4	0

recall@5 = 2/2 = 1
precision@5 = 2/2 = 1

ANALYSIS

Both cosine and proximity give similar results. The scores are in similar order, recall and precision values are same as well. For the second query, there is a big difference between 1st and 2nd score of cosine though both documents are almost equally relevant. This is because 1st document has more terms present in the query. Proximity has given similar scores to both the documents which should be the case. Proximity seems to be slightly better with the set of documents and query used in my experiments.