

Круглый стол
«ЛИНГВИСТИЧЕСКИЕ, ДИДАКТИЧЕСКИЕ
И КУЛЬТУРОЛОГИЧЕСКИЕ АСПЕКТЫ ПРЕПОДАВАНИЯ
ДИСЦИПЛИН ПРОФЕССИОНАЛЬНО ОРИЕНТИРОВАННОГО
МОДУЛЯ»

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APOCALYPTIC FIRES IN AUSTRALIA AGAINST DISASTROUS FLOODS
IN AFRICA: THE PHENOMENON LINK

There are a lot of natural disasters plaguing the Southern Hemisphere nowadays, such as devastating bushfires in Australia and catastrophic floods in eastern Africa.

Australia's fire season in 2019–2020 was hellish, and the outcomes are catastrophic: at least 17.9 million acres have burned, 28 people have died, and an estimated 1 billion animals have been lost. Melbourne, Sydney and Canberra were covered in smoke for weeks. But while Australia burns, East Africa has been grappling with record-breaking rainfall leading to catastrophic floods. Both have a common cause which lies in the Indian Ocean.

The unusual weather can be attributed to the Indian Ocean Dipole – the difference in sea surface temperatures between the eastern and western tropical Indian Ocean. That's to explain, in Kenya when warmer sea surface temperatures are experienced, heavy rainfall occurs, while hot dry conditions (conducive for wildfires) are experienced in Australia. When warmer sea surface temperatures are experienced off the West Coast of Australia, the country is likely to experience heavy rainfall, while Kenya experiences drought conditions. The larger the difference in temperatures between the eastern and western tropical Indian Ocean, the more severe the climatic effects will be.

This event is similar to the El Niño Southern Oscillation that occurs in the tropical Pacific Ocean. Sea surface temperatures are measured by the Interagency Global Climate Observing System just off the coasts of Kenya and Western Australia. In some years, temperatures will be warmer in the western half of the Indian Ocean and in other years they will be warmer in the eastern half. This dipole cycles between these extremes over three to five year periods, ordinarily with a 1°C difference in sea surface temperature. Between these extremes, temperatures will be fairly uniform across the tropical Indian Ocean.

When sea surface temperatures off Kenya are warmer than those off Western Australia, it's called *a positive Indian Ocean Dipole event*. When sea surface temperatures off Australia are warmer than those off Kenya, it's referred to as a negative event. The 2019 to 2020 dipole has been unusually strong, with a *temperature differential* of 2°C. This is more than double the intensity of the average event. As a result there have been very strong low pressure systems

over parts of the region, such as Kenya, inducing heavy and prolonged rainfall. It is also, in part, responsible for the very hot, dry conditions over Western Australia which have contributed to the conditions suitable for wildfires.

The Indian Ocean Dipole is caused by changes in trade wind strength which can make the ocean cooler. Trade winds are permanent winds that blow from east-to-west in the Earth's equatorial region. When trade winds blow, they push the surface water of oceans westwards. This causes upwelling – when deep, cold water rises towards the surface – off the west coasts of all southern hemisphere continents. Essentially, water is pulled away from the coastline, leaving a void which is filled by bottom water which moves up to the surface. This upwelled water is not exposed to sunlight until it reaches the surface, and is therefore much colder than the surrounding surface water. So, the water is colder along the western coast of Australia. If the trade winds relax, the strength of upwelling is significantly reduced. This increases the temperature of these western coast areas, as the cooling effect of water from lower regions of the water column is reduced, and the sun has a larger impact in warming the sea surface. The changes in trade wind strength can therefore result in the formation of tropical ocean dipoles.

The Indian Ocean Dipole can affect the weather as sea surface temperature in large water bodies affects the temperature and dynamics of the atmosphere above and adjacent to them. Cold waters cool down the air directly above them, causing the cool, dense air to “sink” downwards and the formation of a high pressure system. By contrast, warm water heats up the air directly above it. It results in air molecules expanding, becoming less dense, and rising. This uplift brings on a low pressure system. Then these systems influence the surrounding continental and oceanic regions. Low pressure cells, caused when oceans are warmer, are atmospherically unstable, resulting in moist air rising, condensing to form clouds, and precipitating as rainfall. High pressure cells, caused when oceans are cooler, inhibit rainfall, and result in hot, dry conditions due to the subsidence, when air “sinks” downwards. The stronger the Indian Ocean Dipole, the stronger these pressure cells.

As of the end of January 2020, the Indian Ocean Dipole index returned to 0. This means that temperatures in the western and eastern tropical Indian Ocean are approximately equal, and that the low and high pressure systems will lose intensity. This would signal the end of Indian Ocean Dipole-driven floods in eastern Africa and the very hot, dry conditions in Australia, likely for the rest of the season.

However, under climate change the frequency and intensity of extreme climatic events is increasing. We can therefore expect to experience strong 2°C Indian Ocean Dipoles more often in the years and decades to come.

The effects of the disaster spread well beyond its geographical limits. Australian ash was deposited on New Zealand's glaciers, turning them brown, and accelerating their melting. The smoke from the fire made a round trip across the world, stopping off on the way in South America to pollute the air of countries like Chile and Argentina. East Africa has more rains than usual in the recent two years due to this weather coupling. Djibouti, Ethiopia, Kenya, Uganda, Tanzania,

Somalia and South Sudan have been badly affected by floods, with over 2.8 million people displaced by landslides and flash floods. We don't read as much news about this disaster, equally horrific, perhaps because this affects poor countries, not a rich prosperous nation like Australia.

But the unfolding climate crisis in these two countries tells us something. Climate change is not in the future. It is just here and now. We do not have eight years to fix the problem. We are living in the problem. The world's weather systems are interconnected. The amount of damage that the Australian, Amazonian and Californian wildfires have done to the climate in 2019 is incalculable. It will only get worse. And it will impact us all. The era of climate change is the era of unpredictability. Of unknowability. We need to double down on precaution. And act. Now.

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ОСОБЕННОСТИ ФУНКЦИОНИРОВАНИЯ ГЛАГОЛОВ ЧУВСТВ ПРИ ВВЕДЕНИИ НЕАВТОРСКОГО ПОВЕСТВОВАНИЯ В МЕДИАТЕКСТАХ

Неавторское повествование и способы его репрезентации в пределах текста, созданного определенным автором, тесно связаны с проблемой субъектности в речи, которая является одной из центральных в лингвистике. Если в лингвистическом фокусе находится медиадискурс, то с учетом количества эксплицитно представленных говорящих субъектов публицистический текст, как правило, является полисубъектным. Очевидно, что для большинства современных медиатекстов характерно сочетание авторского повествования и неавторской речи, что обусловлено стремлением журналиста передать новость или прокомментировать ситуацию не только посредством собственного повествования, но и путем уместного использования чужого высказывания. Таким образом в медиадискурсе создается полифония голосов, одним из которых является авторский. Именно некоторые особенности введения чужой речи в полисубъектном медиатексте находятся в центре внимания данной работы.

Известно, что конструирование полисубъектного медиатекста детерминировано разными причинами: от стремления придать объективность сообщаемым сведениям до желания убедить в правильности единственно излагаемой точки зрения посредством ссылок на авторитет. Каковы бы ни были коммуникативные намерения автора, в существующем временном срезе все они сопряжены с фактором адресата, массового читателя, которому характерны такие черты, как критичность, недоверие к сообщаемому и сомнение в точности, непредвзятости при освещении события. Снизить недоверие и сомнение аудитории посредством освещения позиций множества сторон, нивелировать субъективность при подаче информации журналисту позволяет полифония голосов говорящих субъектов в медиатексте, т.е. множество субъектов речи.