

# Study on the Event Framework with the Headlines of Local English News Reports on COVID-19 Vaccine

-Taking the WeChat official account *DongguanToday* as an example

Yuhao Mao

Guangdong University of Science and Technology, Guangdong, China.

[lucaslearning@foxmail.com](mailto:lucaslearning@foxmail.com)

**Abstract.** The digitization of news media is greatly accelerated due to the impact of COVID-19. The dissemination of local English news on vaccination makes a great contribution to the effective implementation of national epidemic prevention and control for foreign nationals. As a practical means, it is necessary to study the English news of local WeChat official accounts during the epidemic period. News headlines are an important application of event framework in semantics. Through sorting out and analyzing event types, event elements, and event structures, this paper tries to understand the event framework of news headlines of the COVID-19 vaccine and how they convey media views, attitudes, and values. In sum, the event types under this theme are mainly existential events and relational events, and the most important event element is the participant. The event structure presents a progressive structure of the scene.

**Keywords:** local news; English WeChat official account; COVID-19 vaccine report; event framework.

## 1. Introduction

The official English news released by the local government or official media is generally aimed at conveying local policies, events, and situations to local residents, foreigners, and the international community. The communication effect of news reports not only depends on the content and quality of the reports, but also is influenced by many factors such as readers' background, culture, values and societal conditions. Event frames are descriptions of subject motion and its spatial displacement. When describing the subject's movement, the event framework presented by different linguistic verbs are not the same. In order to interpret the influence of different factors on readers' understanding and acceptance of news reports, this paper combines the real scene factors with the language resources in the headlines by means of the event framework in discourse, and further deconstructs its conceptual framework to achieve better communication effects.

## 2. Research Background

### 2.1 *DongguanToday*

According to the introduction of Dongguan's WeChat official account, *DongguanToday* is the first English website for foreign publicity in Guangdong province, which is hosted by the Publicity Department of the Municipal Party Committee. In order to enable foreign nationals in Dongguan to timely and accurately know the latest situation of epidemic prevention and control and health service management, *DongguanToday* has issued daily English epidemic notifications since February 2020, timely transmitting effective and transparent real-time epidemic dynamics, promoting and popularizing epidemic knowledge, and helping foreign nationals participate in joint prevention and control. This article will screen out the samples of its WeChat official account *DongguanToday*'s reports on the COVID-19 vaccine from January 2021 to January 2023. The reason for this time scope is because the first news event about the COVID-19 vaccine can only be traced back to January 2021. It will use the framework analysis method to explore how news reports use cognitive methods and language to convey information, how to construct specific event frameworks, and how these frameworks affect readers' understanding and response.

## 2.2 Event Type

The event framework theory in cognitive linguistics argues that language is not a static symbol system, but is composed of a series of dynamic events and concepts [1]. News headlines, as an important part of news reports, can convey information, guide readers, shape discourse meaning, and influence reader attitudes. As the main manifestation of headlines, clauses are the most basic grammatical unit that represents experience, and can inspire readers to connect the content of the text with their social experience. This article is based on the research results of Professor Gao Yanmei from Peking University. By reviewing the research history of modern linguistics on discourse semantics, Professor Gao introduced the concept of frames and frame analysis methods into discourse semantic analysis, and developed seven frame systems: referential frames, event frames, evaluation frames, stance frames, relation frames, negotiation frames, and information frames. These systems not only connect micro-semantic structures with macro ones, but also show the bottom-up development process of various discourse semantic systems [3]. Among them, event frames can be used to describe and understand the semantics in news headlines, and summarize the event structure of COVID-19 news headlines by identifying their components such as environmental factors, event types, word information, and event participants. Based on Halliday's six process classifications (1994), Professor Gao explored the following six event types as follows:

Table 1. Exploration of the six incident types

Event Type	Component	Meaning
Material Event (E1)	Actor+Processing	Spatial displacement and personal actions and other activities; Concrete changes in the material world that can be perceived
Existential Event (E2)	Process +Existent +Circumstance	The existence and factual situation of thi
Mental Event (E3)	Senser +Process +Phenomenon	Cognition (thinking); Desire (wanting); Emotion (feeling); Perception and other human conscious activities
Relational Event (E4)	Carrier/Token +Relationship + Attribute/Value	Attribution; identity; human characteristics
Behavioral Event (E5)	Actor + Process+ (Goal/Client/Recipient/Scope)	all human physical activities except psychology and speech.
Verbal Event (E6)	Sayer + Process+Target/Receiver) + Verbiage	Record, paraphrase and reflect on human speech and thinking

The above six event types basically cover all human activities and objective changes in any discourse. On the basis of this research, the author makes a further supplementary explanation to these event types in order to better conform to the classification of news discourse. For example, E1 emphasizes the change of news events; E4 combines news participants, and its identity object is foreign nationals in Dongguan; E5 refers to the causative actions of actors, which appeals to voluntary activities.

## 3. Event Elements

By searching the *DongguanToday* WeChat official account with keywords (vaccine, vaccination), 40 reports related to COVID-19 vaccine were screened, of which E1 accounted for 17.5%, E2 for 30%, E3 for 10%, E4 for 25%, E5 for 5%, and E6 for 22.5%. Since various types of events may co-

exist in one theme, it can be seen intuitively that the most adopted types of events are existential events and the least commonly used is behavioral events. According to news subjects of COVID-19

Vaccine, the event participants under this theme include the public, the government, foreign nationals and vaccine institutions; The environmental factors affecting the news of COVID-19 vaccine include media opinion, social culture, epidemic situation and scientific progress. Although the sample size of this study is limited, the value of this news, in terms of event processes, participants and configurations, highlights the modeling experience of change, collectively forming a distinctive semantic framework. Below, select typical news headlines from E1 for framework display, and provide examples for analysis of each event type:

Table 1. Examples of how each event type is analyzed

Event Date	News Headline	Type	Configuration	Participant
2021/1/15	COVID-19 Vaccination begins for people going abroad	E1	policies	the public
.....				

### 3.1 Material Event

e.g. COVID-19 Vaccination begins for people going abroad

January 15, 2021 is the first English news about COVID-19 vaccine released on the official account. 'begins' is a verb that represents a change from static to dynamic. In English, it is usually used to describe the beginning of an action, process, or event. The components of this material event: Actor (people going abroad)+Processing (be about to take vaccination). Here Actor is the event of vaccination, which tells that Dongguan citizens who need to go abroad can start to get the COVID-19 vaccine. It is a typical material event because of including the dynamic changes of process actions or activities. The factors of configuration that affect news information include immigration policies. The verbs that express material events are generally transitive verbs, and the action does not involve the receiver or target, indicating that the COVID-19 vaccination is officially carried out locally.

### 3.2 Existential Event

e.g. Over 1 mln in DG complete 2 doses of COVID-19 vaccine

On May 24, 2021, the news headline announced that over a million people have completed two doses of vaccination. Although the existential event describes something that has already occurred, it does not use the past tense and emphasizes the state and fact of the event. Its components are: Process (vaccination)+Existing (over a million people)+Circumstance (eager to complete). Within the theme of COVID-19 Vaccine news, the existential events usually refer to the media's reports on the past epidemic situation, policy documents and other facts, which will involve participants and configuration factors. When describing the existence or appearance of an entity or phenomenon, the existential event framework is usually closely related to the concepts of space and time with other frameworks. For example, the complete here is the representation of behavioral events, which together make the context more vivid and establish contextual connections with the core event, that is, the mutual promotion between completion and vaccination status.

### 3.3 Mental Event

e.g. City to focus on 2nd dose COVID jabs June 10-30

On June 2, 2021, the news headline informed the public that the recent COVID-19 vaccination in Dongguan has been carried out in an orderly manner, and the first dose of vaccination has been completed. From June 10th to 30th, the government will focus on completing the second dose of vaccination for people aged 18-59. The components of this mental event components are: Senser (City)+Process enon (lake of jabs). Although the original English does not use verbs to express psychological ideas such as understand, hope and think, the Actor is the city or the public and the

process (focuses) understands the public's desire for COVID-19 vaccine. Interestingly, the Chinese translation that also appears in the title position as a reference is: Can't get the 2nd dose? Do not worry!, which implies anxious emotions and encourages the public to complete the second dose as others do. In the news headlines about COVID-19 vaccine reports, *DongguanToday* uses less emotional content of this event type. Although excluding the mental event can maintain the objectivity and authority of the news, with the popularity of the media, news headlines can appropriately increase the proportion of E3 in order to attract readers and improve the affinity between officials and people.

### 3.4 Relational Event

e.g. Updates on Vaccination Appointments for Expats in DG

On June 23, 2021, Dongguan released a new method of vaccine appointment for foreign nationals. In the news theme of COVID-19 Vaccine, all news released for a specific population - expats in Dongguan are classified as relational events. The word 'foreigner' also can be found in other headlines, but 'expats' is much adopted because it usually refers to a person who has left their own country and moved to another country for work, study or other reasons, which is more suitable to stand out the participant. The components of this news title: Carrier/Token (Appointments) +Relation (identity)+Attribution/Value (Updates). Because one of the features in relational events, identity, can help determine the attributes of participants or things, and put reader focus easily on the association between news headlines and objects. The relational event here indicates the identity by the term 'for exports', and the update of the vaccine appointment method is exclusive to this group of people. The validity of this news is influenced by the reader's social and cultural background, therefore there may be resistance or misunderstanding for excluded people that do not align with the identity.

### 3.5 Behavioral Event

e.g. Dongguan lifts lockdown on some communities

On June 25, 2021, the news headline informed the Dongguan government to lift the lockdown of some areas. The news headline seems to have nothing to do with vaccination, but in fact, the lifting of lockdown occurred thanks to the active vaccination of the public. The components of the event are: Actor (Dongguan)+Process (lift lockdown)+((Scope) communities). Among the news topics of COVID-19 Vaccine, the probability of behavioral events is the lowest. The lift in this behavioral event is a daily term that refers to overcoming gravity to 'up' something, which is consistent with the relief of the epidemic situation. However, due to the exclusion of psychological and verbal activities by relational events, and causative verbs are mandatory and obligatory, sole behavioral event may have negative effects on news, including reader aversion, limiting the diversity and inclusiveness of news, weakening the objectivity and neutrality of news, and affecting the balance of news reporting. At the same time, it is necessary to avoid subjective and biased actions, which can reduce authority and credibility.

### 3.6 Verbal Event

e.g. Chinese medical experts on key COVID-19 concerns through FAQs The news headline on January 10, 2023 aims to provide answers to relevant epidemic prevention questions by paraphrasing the words of Chinese medical experts. This news sample is the latest news about COVID-19 vaccine. Although the title does not directly refer to vaccines, as the public knows that key COVID-19 concerns will contain vaccine information, there is no need to point it out. The verbal process components of this news title are: Sayer(Chinese medical experts)+Process (answer)+Verbiage (concerns). The features of this event are obvious to list it as verbal one, but the title directly indicates the participants and has the attribute of presenting identity, so it also belongs to relational events; At the same time, the term 'concern' also evokes readers' emotional cognition so it belongs to mental events. However, the core concept that affects this news is FAQs, which are projected by the relationship between the verbal verbs 'ask and answer' and 'concerns'. Often, the validity of this type

of event is influenced by the reader's socio-cultural background, as the speaker's authority directly affects the value of the event.

#### 4. Event Structure

The structure of event can vary according to different types of events and descriptive purposes. During the pandemic, the news about COVID-19 vaccine released by *DongguanToday* focused on one major event - vaccination and its dissemination, and other related events centered around the main line. The distribution of events time is as follows: there were 26 events in 2021, reaching a peak of 62.5%, 14 events in 2022, and only 1 event in 2023 (as of August). It has the 'outbreak' period of vaccine information flow in the year 2021, and has remained stable or occasional since 2022. From the perspective of time distribution, it indicates that its news value highlights the news characteristics of freshness and authenticity; In addition, considering that the original purpose of the official account is to serve the masses, the proportion of news targeted at foreigners in Dongguan accounts for 20%, which indicates that the local media has made accurate targets and localization services, which is in line with the accuracy. Although the proportion of titles with participants as the public is as high as 62.5%, it is beneficial to reduce one's identity as an event 'outsider'.

Although the core event is the vaccine, not all titles are labeled with it, but rather taking it as the main theme, gradually unfolding at different levels. Meanwhile the elements are interspersed with other related events or details, applying the scenario-based hierarchical structuring, such as vaccine knowledge(55%), epidemic dynamics (22.5%), and policy documents (22.5%). In addition, although these three major parts are integrated throughout the entire event, the development of the entire theme still follows the main line of plot development, from the introduction of the vaccine at the beginning to the epidemic dynamics at the climax, and finally to scientific Q&A. By constantly changing the scene to showcase different aspects and angles of the event, readers can feel a gradually changing sense of hierarchy and satisfaction during the reading process or following-up to the event, leading them to a overall understanding of the theme.

#### 5. Summary

When studying local English news, the event framework can be used to describe and explain the event structure by constructing it with semantics frames. Through conducting statistics on its event elements and event types, the core content of the news can be figured out. For example, in the official English news of COVID-19

vaccine released by Dongguan, the official account skillfully uses existential events and relational events as its main event types and builds a progressive structure by changing the scene layer by layer based on the local participants in Dongguan. However, it is worth noting that multiple event types should be further integrated to consolidate the event chain, such as combining mental events with behavioral events. In addition, the diversity of participants still needs to be enriched to attract more scene factors, such as the participation of vaccine institutions and media cooperation. By analyzing the event framework of news headlines of COVID-19 vaccine, this paper is conducive to better explaining and understanding the key element in vaccine news, and helping foreign nationals more comprehensively understand the relevant knowledge and situation of vaccination. In addition, more cognitive linguistics methods can be used in news reporting from the perspective of semantics frames in the future study, such as metaphors, metonymies and illustrations to present news items and concepts in a more vivid and easy-to-understand manner. By that, it will help readers better grasp the core of news and improve the quality and dissemination effect of news.

#### References

- [1] Fillmore, C.J., Frame semantics and the nature of language [J]. *Annals of the New York Academy of Sciences*, 1976, 280 (1): 20-32.

- [2] Fillmore, C.J., Frame Semantics[J]. Linguistics in the morning of 1978, 1977:22-34.
- [3] Gao Yanmei. A study of discourse semantic framework [M]. Peking University Press, 2015: 84-85.
- [4] Zhu Bingqing, Wu Juan. Analysis of the reporting framework of COVID-19 epidemic in short video news of local mainstream media--Taking My Shangrao as an example [J]. Media Forum, 2022, 5 (22): 61-64.