

A Comparative Study of Fire and Water Metaphor in COVID-19 Reports in Chinese and English

Na Luo

Foreign Languages College, Jiangxi Normal University

No. 99 Ziyang Avenue, Nanchang, Jiangxi, China

Tel: 86-183-7087-2877 E-mail: L0208T1005@163.com

Xiangyong Jiang (Corresponding author)

Foreign Languages College, Jiangxi Normal University

No. 99 Ziyang Avenue, Nanchang, Jiangxi, China

E-mail: xiangyongjiang@163.com

Received: November 7, 2023 Accepted: December 1, 2023 Published: December 14, 2023

doi:10.5296/ijl.v15i6.21529

URL: <https://doi.org/10.5296/ijl.v15i6.21529>

Abstract

The outbreak of COVID-19 came suddenly at the end of 2019, and soon swept the world. People used war metaphor, journey metaphor, water metaphor, fire metaphor etc. to conceptualize COVID-19. This paper aims to compare the universality and variation of the use of water and fire metaphors on COVID-19 reports in Chinese and English websites, by resorting to MIP for quantitative data collection from the *People's Daily Corpus* and *The Coronavirus Corpus*, trying to explore the universality and variation of metaphors for COVID-19. From the perspective of resonance value, the situation of the water and fire metaphors of the epidemic in English and Chinese is entirely similar, and the difference in the water metaphor is greater than that of fire metaphor. The variation is reflected in the selection and distribution of keywords. The roots of these differences can be attributed to the characteristics and structures of the two cultures themselves, as well as the national ideology and emotional attitudes towards the same worldwide event. Therefore, with regards to the style and connotation of metaphorical expression, Chinese tends to use static descriptions that portray the atmosphere and emphasize the subjective initiative of people, while English tends to rely on dynamic depictions that state objectively and illustrate the resistance of the epidemic.

Keywords: Conceptual metaphor, Fire and water metaphors, Comparative analysis, COVID-19

1. Introduction

Metaphor is a special figurative language phenomenon, although the definition criteria for metaphor differ (Lakoff & Johnson, 2008; Ungerer & Schmid, 2008). Nevertheless, they all emphasize that metaphor is a significant conveyor of potential ideology in language, and metaphor discourse plays a constructive role in shaping people's thoughts and establishing national image (Fan & Zou, 2021; Xia & Lin, 2020; Musolff, 2011). Metaphor, as a fundamental means for cognitive expression, runs through every aspect of our life. It is a set of correspondences, or mappings, between the elements of two mental frames. Based on life practice, one thing or event is mapped by another more familiar and specific one, so as to achieve a fast and as accurate understanding as possible, which is the operation mechanism of metaphor and its realistic role in life.

Water is one of the basic substances for biological survival; fire is an important tool and symbol of human survival, development and the evolution of civilization. Both of them have their fixed physical and chemical attributes as well as the cultural connotation internalized in men's accumulated social practice. They are easy to obtain in daily life and are relatively fixed in use, so people have basically consistent and objective physiological feelings about them. However, due to the diversity in language and culture, different nations have various specific uses and taboos of water and fire in their communities, so the subjective impression and expression preference of fire and water of those countries are not the same naturally.

The Chinese idiom "be in deep distress" (shui shen huo re), which literally means the water is deep and the fire is hot, is supposed to describe the extreme hardship of life; In western, there is a relative phrase "in hot water" meaning "in trouble". The sudden emergence and rapid spread of COVID-19 at the end of 2019 has plagued the world. Under the abuse of the epidemic, the situation of people around the world perfectly applies to these two phrases. The two expressions intuitively reflect the similarities and differences in the concrete expression of the same abstract suffering in different cultures.

Previous studies on water metaphor and fire metaphor are most overlapped, mainly distributed in the fields of art, literature, translation, ideology, and medicine, discussing its operation mechanism and influence. Some scholars have conducted database research (Zhao, 2018; Wu, 2016) or comparative studies of various countries about them (Huang & Tan, 2010). Given that most of the metaphorical research of epidemic-related reports is focused on war metaphors, disease metaphor or multimedia metaphor, and that few people start with "fire and water" metaphors, therefore, based on the theory of conceptual metaphor, this paper compares the use of water and fire metaphor in epidemic related reports in Chinese and English, and tries to answer the following questions: Are all Chinese and foreign epidemic reports using metaphors of water and fire? If so, what are the similarities and differences between the use of these metaphors? What are the factors that cause these similarities and differences?

According to the essence of the mapping from the initial source domain to the target domain, the metaphor can be divided into the following three categories. Structural metaphor, where the conceptual system of the origin domain can be transferred to the target domain, is a metaphor for the structure of a system. For example, the substances "water and fire" domains are systematically mapped into the "epidemic" domain, and the various attributes and functions of "water and fire" can be systematically used to express the "epidemic". Orientational metaphor, also known as spatial metaphor refers to the use of up and down, front and back, distance and depth of space to understand another conceptual system. Ontological metaphor refers to the use of the concept of objects to understand human experience, that is, the use of concrete objects to metaphor abstract concepts. In the author's opinion, the metaphors of COVID-19 in Chinese and English mostly contain the first structural metaphor and the third physical metaphor.

From the perspective of the cognitive function of metaphor, the epidemic is compared to fire and water, where the root metaphor is "the epidemic is a flood or fire (as a disaster)", emphasizing the urgency and seriousness of the virus attack. Based on the structural nature of the metaphor, other derived metaphors can be derived around this central concept with the characteristics of the flood and fire parts.

2. Methodology

This article investigates water and fire metaphors of Covid-19 in two languages, English and Chinese, based on Lakoff & Johnson's conceptual metaphor theory.

The data for the analysis were drawn from Chinese website (<http://paper.people.com.cn>), and the English one (<https://www.english-corpora.org/corona>), both of which are corpora. In line with the theme, the content of collection centers on the coronavirus and the date covers from Jan. 1st, 2020 to Dec. 31st, 2022. Since the corpus is derived from press reports, they offer a reasonably stable form of educated language (Burnes, 2011). And the nature of news discourse is of considerable importance as well, which provides a great deal of ideological, micro-sociological and linguistic information. (Reza Kazemian & Somayeh Hatamzadeh, 2022). Therefore, by choosing newspapers as the object of comparative research, we can see the cognitive similarities and differences of different countries, languages and cultures for the same popular event, so as to better understand their behaviors and attitudes.

First of all, the author set the time to the period between the outbreak of the beginning of 2020 and the end of 2022 when China has basically let go of the epidemic, to extract all the reports related to the COVID-19 from the People's Daily website to make a small corpus. At the same time, the preliminary reading of the corpus made it clear that the coronavirus metaphor includes "war metaphor", "disease metaphor", "water metaphor" and "fire metaphor". So with a focus on water and fire metaphors, a list of metaphor trigger keywords according to the expression of water and fire in the corpus is compiled. The list includes such terms as rain, water, wave, fire, firewall, etc. In the second step, these words are retrieved in the corpus to find the examples support. In order to have finer granularity accessible and to attest the most precision in identifying water and fire metaphors, the four-step Metaphor Identification Procedure or MIP (Pragglejaz Group, 2007) is performed:

(1) read through the whole text in the corpus to establish an overall understanding of the meaning of corona-related water and fire metaphors;

(2) determine the lexical units in the text;

(3) analyze the meaning of each lexical unit in the text, the contextual meaning (how it refers to the object, relationship, attributes), and the position of it, making sure other basic meanings of it out of the context are considered as well.

(4) in case of more basic contemporary meaning in contexts other than the one in the examined context, the lexical unit was marked as metaphorical.

Since the selected English and Chinese websites are databases, the keywords collected in Chinese first are directly converted into corresponding English words to be search terms for examples retrieving in the website. And then by following the process of MIP to identify the retrieved content, the frequency of each keyword is sorted to compare the two corpora.

3. Comparison of Water and Fire Metaphor for the Pandemic Between Chinese and English

Given that COVID-19 is a global epidemic, affecting both English and Chinese countries, the Chinese and Western media always have similar expressions of it on the basis of common bodily experience. Combined with the special national conditions and cultural preferences of different language countries, even if the same metaphor is used, the emphasis may be different.

3.1 Universalities in the Use of Water and Fire Metaphor Between Chinese and English

Through the collection and sorting of metaphor keywords, it can be clear that water and fire metaphors are used in the related reports of the epidemic both in Chinese and English, showing the situation of human beings facing the virus. The concept of "resonance value" proposed by Charteris-Black is an important reference when analyzing the conceptual metaphor. The so-called "resonance value" is to use a quantitative standard to measure the frequency of a certain type of source source domain in a corpus, multiplied by the sum of the number of metaphorical expressions and the sum of the number of expression occurrences. All the information collected in the two sites can be intuitively seen in the two summary tables below. Table 1 lists all the collected Chinese and English water and fire metaphors and their frequency of use while Table 2 summarizes the data of the two metaphor types in terms of lemmas, forms, resonance value and proportion.

Table 1. The trigger words and their frequency of water and fire metaphor

Chinese	English
冲击(1212)	wave(n.) (2565),
船(1094)	surge(n. & v.) (1010),

源(551)	source(n.) (251),
水 渡(495)	swell(n. & v.) (111),
浪(360)240 惊涛骇浪+3 巨浪+117 劈波斩浪	spill (n. & v.) (65),
涛(240)	Inundate(adj. & v.) (54),
波(202)85+117	overflow(v. & adj.) (49),
汹汹(173)	deluge(v. & adj. & n) (41),
溢(116)	flood(n. & v.) (31),
堤坝(82)	water(n.) (23),
水(63):逆水(54), 水火(9)	swirl(v.) (11),
激流(53)	billow(v. & adj.) (8),
狂澜(35)	drift(n. & v.) (5),
汹涌(7)	vortex(n.) (4), boat(n.)
舟(5)	(4), Torrent(n.)(4),
漩涡(1), 洪流(1), 泛滥(1)	vessel(n.) (2),
	dam(1),

蔓延(1554)	flare(n. & v.) (555)
火 火(total 222.):烈火(57), 水火(9)	Spread (v. & n. & adj.) (145),
扑灭(42)	burn(n.&v.) (35),
防火墙(32)	fire(n.) (28),
死灰复燃(10)	infest (v. & n. & adj.) (27)
	ablaze(adj.) (13),
	flame(n.) (10),
	blaze(n. & v.) (9),
	ember(n.) (7),
	firewall(n.) (1), ash (n.) (1),

Table 2. The resonance value of water and fire metaphor in Chinese and English

隐喻类型	Chinese media				English media			
	lemma	form	resonance	%	lemma	form	resonance	%
疫情是洪水	18	4691	84438	71.61%	18	4239	76302	83.61%
疫情是火灾	5	1860	9300	28.39%	11	831	9141	16.39%
=	23	6551	150673	100%	29	5070	147030	100%

Seen from the number of lemma and the form of metaphor keywords in table 2, obviously we can find that both Chinese and English, the use of the water metaphor is more common than the fire metaphor, and that the difference is even more pronounced in English. As shown in table one, the Chinese and English keywords are both rich in parts of speech, including nouns, verbs and adjectives, and the number of adjectives is the least. On the view of the specific content of keywords, the Chinese and English keywords generally overlap, that is to say, basically the corresponding words and usage of fire and water metaphors in Chinese can also be found in English, such as the nominal terms “*shui*”- “*water*”, “*lang*”- “*waves*”, “*xuan-wo*”- “*vortex*”, “*chuan*”- “*boat*”, “*yuan*”- “*source*”, “*di-ba*”- “*dam*”, “*huo*”- “*fire*”, “*fang-huo-qiang*”- “*firewall*”, and the dynamic description of these two substances, “*xiong-yong*”- “*surge*”, “*yi*”- “*overflow*” and “*ran*”- “*burn*”, and the state modifiers “*xiong-xiong*”- “*billowing*”. In other words, the perception of epidemics, floods and fires is generally the same in these two language countries. And from the perspective of high-frequency keywords, in field of water metaphor, the expression of waves enriches in both two sides where there are “*bo*”, “*lang*”, “*tao*” and “*lan*” in Chinese and “*wave*”, “*surge*”, “*swell*” and “*billow*” in English, accounting for a relatively large volume. In addition, the word in high frequency on both sides includes the “*yuan*”- “*source*”, emphasizing the rigorous attitude and firm determination to fight the epidemic. In the fire metaphor, fire and “*man-yan*”- “*spread*” are high frequency words, “*fang-huo-qiang*”- “*firewall*” and “*si-hui-fu-ran*”- “*ember*” and “*ash*” are words in low

frequency, emphasizing the speed of disaster transmission and imperfect preventive measures in the grim situation. Another obvious commonality that can be seen from table 1 is that the word frequency of water and fire metaphor keywords is in a state of fault. Therefore, that is to say, based on the concept that "epidemic is flood or fire", both sides have their own relatively usual fixed mapping, which is reflected in the top entries of the high-frequency list, the "chong-ji" and "chuan" in Chinese and "wave" and "surge" in English.

3.2 Variation in the Use of Water and Fire Metaphors

3.2.1 Preference for Static Description in Chinese and Dynamic Depiction in English

From the summary table, what we can notice first is the part of speech of the keywords, especially the words used as both noun and verb in the English part, which account for a large proportion of this party. Although the highest frequency of Chinese keywords is the verb and the English one is the noun, which seems to be different from the trend of English and Chinese culture recognized by the general public, in terms of the proportion of verbs and nouns in all their terms and types, noun category is still in dominance in Chinese while verbs dominate in English. A major characteristic of verbs is their strong dynamism, which gives readers a stronger sense of visual compared to nouns. A large number of vocabularies in English have both noun and verb parts of speech, which adds dynamic demonstration effects to static attributes, giving much stronger bodily feelings than that of single noun or single verb parts of speech.

3.2.1.1 Variation in Noun Metaphor and Verb Metaphors Between Chinese and English

Even if both sides have noun and verb categories, the difference is quite obvious. English is a much flexible language than Chinese in terms of changing part of speech of single word. It has a large proportion of words that can be both nouns and verbs in English, which is also reflected in the table 1 that 19 out of 29 keywords totally collected by foreign websites have both nouns and verb attributes themselves, and 11 of them, that is to say more than one third, are used as both verbs and nouns in actual reports examples — "surge", "swell", "spill", "flood", "deluge", "infest", "drift", "spread", "flare", "blaze" and "burn". By comparing Chinese and English keywords according to the meaning we can draw out Table 3, from which the different vocabulary choices between English and Chinese in synonymous expression can be clearly seen.

Table 3. The comparison of the form and frequency of keywords of water and fire metaphor

隐 喻 类 型	Chinese			English		
	Lemma	Form	F	Lemma	Form	F
	冲	冲击	1212			
	船	船/小船/大船 同舟共济/风雨同舟	1099	boat(n.), vessel(n.)	boat, vessel	6
	源	溯源/来源	551	source(n.)	source	251
	渡	渡过/共渡难关	495			

	浪、涛 波、澜	惊涛骇浪、巨浪、 劈波斩浪、狂澜	837	wave(n.)	wave/ waves	2565
水 隐 喻	汹	汹涌而至/来势汹汹	180	surge (n.&v.&adj.), billow(v.&adj.), swell(v.&n.)	surge/ surging/ surged, billows/ billowed/ billowing swell/ swells/ swelling	1129
	溢	外溢/溢出	116	spill (n.&v.), overflow(v.&adj.)	Spill/ spillover/ spillbacks, overflow/ overflowing/ overflowed	114
	堤坝	堤坝	82	dam(n.)	dam	1
	水	逆水/水火	63	water(n.)	water	23
	流	洪流/激流	54	flood(n.&v.), torrent(n.)	flood/ floods/ flooded torrent/ torrents	35
	漩涡	漩涡	1	vortex(n.), swirl(v.)	vortex(n.), swirl(v.)	15
	泛滥	泛滥	1	inundate(v.&adj.), deluge(n.&v.&adj.)	inundate/ inundated, deluge/ deluged	95
				drift(n.&v.)	drift/ drifted	5
	蔓延	蔓延	1554	spread(n.&v.&adj.)i nfest(n.&v.&adj.)	spread/ spreading, infested/ infestation	172
	火 隐 喻	火	烈火、水火 浴火、趁火打劫、赴 汤蹈火	222	fire(n.), flare(n.&v.), flame(n.), blaze(n.&v.)	fire, flare/ flares/ flared/ flare-up/ flared-up/ flareups, flame/ flames, blaze/ blazes/ blazed
灭		扑灭	42			
防火墙		防火墙	32	firewall(n.) ablaze(adj.)	firewall ablaze	1 13
灰，燃		死灰复燃	10	ash(n.), ember(n.), burn(n.&v.)	ash, ember, burn/burnout/bur n-out	8

In Table 3, the one-to-many situation is obvious. This case not only refers to the number of synonymous keywords but also the number of parts of words of keywords. Relatively speaking, the variation and richness of Chinese keywords are not as good as English keywords. In the collected example sentences, Chinese keywords are mostly used as a single fixed part of speech for many times, while English words are mostly deformed actively in sentences as different parts of speeches. The key word "yi" in Chinese is a pure verb, and the corresponding English word "overflow" and "spill" has the attributes of both verb and noun. Although the examples of "overflow" only appear the verb usage consistent with "yi", "spill" also serves as a noun in sentence, such as example 1 shows. A verb used as a noun can condense the dynamic into a static state for a more calm and profound description. The word "spillover" in sentence 1 is a noun that indicates the result of the action of spilling. Compared with the verb attribute alone, it directly displays the results on the basis of covering the evolution process of the spilling, emphasizing the crisis of the epidemic. The opposite is to use the noun as a verb, emphasizing the significance and momentum of the object. The word "flood" is mostly used as a noun, which matches the Chinese keyword "hong-liu". However, in the collected examples, there is also the condition where "flood" play a part as a verb, such as in example 2. As a noun, "flood" only represents a factual concept, and readers obtain this information from the perspective of a bystander. Compared with the verbal expression, it lacks a strong sense of real-time and interaction. The word "flood", used as a verb in sentence 2, can vividly reproduce the situation of the virus surging into the hospital. It not only presents the form and activity trajectory of the virus, but also gives readers a sense of participation of being an insider, which can stimulate readers' feedback and response to this fact. This kind of situation is also reflected in the Chinese keyword "yuan", which is used as a noun. But it appears in reports as "su-yuan", actually a phrase of the moving object, which can be used as a verb and a noun respectively. When used as a noun, its function is qualified with the other Chinese keywords "yuan-tou" and "lai-yuan" and the English keyword "source". But when used as a verb, there is no examples of "source" can be found in the western website.

(1) A few images hit me especially hard, none more so than an excursion into the conservation woes of pangolins, another possible intermediary mammal for coronavirus **spillover**. (<https://www.theatlantic.com>, 2022.11.21)

(2) As the coronavirus outbreak continues to **flood** hospitals in the U.S., governments, businesses, and communities have rallied to provide overburdened emergency care staff with Personal Protective Equipment (PPE). (<https://www.cbsnews.com>, 20-04-03)

The same rules about the trigger words' attribute of noun and verb are also in operation in the fire metaphor, as example 3 shows. The word "blaze" can be an alternative for fire as a noun, but acting as a verb here it directly poses the state of burning and spreading of flames, vividly showing the severity of the abuse of the epidemic.

(3) In the early months of the pandemic, while the coronavirus **blazed** through China, even veteran disease experts seemed to misjudge the odds that the epidemic would become a full-blown pandemic. (<https://www.theatlantic.com>, 20-04-30)

In Chinese, this kind of nominal words with both strong reference function and action properties is much less in number than English. The “water” and “fire” in the Chinese keywords themselves have only noun properties, so if it needs the motion meaning to realize the metaphorical stimulation, they need additional verbs to match or another noun with acting meaning as an alternative. Therefore, in terms of quantity, although all serve as the trigger words of water metaphor, the number of Chinese ones is composed of the number of nouns plus verbs, while English ones will look less because of this overlap.

Verb metaphor refers to the metaphor formed by the semantic conflict between the verb used in the language and the logical subject or object, such as "the crowd poured into the station." In this sentence, the act “pour into” is a metaphorical verb, behind which is a metaphor “the crowd is water”. From the perspective of verb class alone, the verbs of water metaphor collected from English websites basically have noun usage themselves as well, but only the relevant sentences in which the words “overflow”, “billow” and "swirl" used as nouns are not found. The first two of these three verbs are not used as nouns, but as adjectives. That is to say, there are 15 keywords with verb usage collected from English websites, among which only one "swirl" is used as a verb. Because most of these verbs are in the same forms as the nouns that mirror the morphology and attributes of water and fire, so even in the use of verbs, these words describe the acts of epidemic as a substance similar to water and fire in people's eyes, which is the natural physical change of them, emphasizing the uncontrollability and irresistibility of nature. So even if there are no direct nominal examples to add to them, the noun properties of these verbs have already been internalized in the reader's experience and thinking.

Noun metaphor can also be called naming metaphor, referring one thing to the other to achieve a mapping. The one-to-many case is also obvious in noun keywords. In terms of water metaphor, the expression of wave is obvious many-to-one that there are four ways in Chinese: "lang", "bo", "tao" and "lan", while only one "wave" in English. In terms of fire metaphor, the situation is reversed that the word for the concept of fire is only one "huo" in Chinese, while in English there are four "fire", "frame", "flare" and "blaze". Actually, in semantics, the Chinese word “huo” and English one “flare” are representatives. Although there is a more specific "lie-huo"(ragubg fire) in the Chinese keywords, and the "fire", "blaze" and "flame" in English, they are used much less frequently than the first two representatives. In fact, the “lie-huo” is semantically more similar to the “blaze”, but the frequency of use is unbalanced between them.

3.2.1.2 Variation in Adjective Metaphor Between Chinese and English

Adjective metaphor refers to the metaphor formed by the semantic conflict between the adjectives used in the language and the logically modified subject. Considering the nature of speech, it is obvious that there is a category of adjectives as keywords in English, accounting for nearly a third of the total number of keywords, such as examples 4-5, where both the word “billow” and “ablaze” directly act as modifiers of the epidemic. Except for the specific adjectives, there is no other word evidence can attest the achievement of epidemic metaphor. That is to say, it is simply a metaphor triggered by purely adjectives with fire and water

nature. Adjective metaphors are more obscure and more novel than noun metaphors or verb metaphors as there are only the modifiers without a clear direct interaction between the subject and the object. In fact, in addition to "ablaze", which is used as an adjective, other keywords have both verb or noun attributes, and even three attributes at the same time. In water metaphor, only "xiong" in Chinese keywords can be counted in the adjective category, and it is only used as an adjective component. The corresponding English keywords are "surge", "billow" and "swell", among which only the last one without any adjective use. The "billow" also has a verb usage, and the "surge" is typical carriers of three attributes, as showing in examples 6-7. In these three sentences, "surge" is used as a noun, adjectives and verb respectively, showing the status, state and sport of the virus. Once having seen the complete three expressions, then whenever readers see one of them, they will stimulate the attributes of the other two unmentioned. In this way, can impose much profound understanding of the epidemic to readers, whose sense of defeating the outbreak will be more alert and firmer.

In fire metaphors, the number of adjectives keywords is far less than in water metaphors that there are three English keywords and two of them meaning "spreading" are both with three attributes, while none is in Chinese. Therefore, in general, compared with nouns and verbs, although the key words of adjectives seem to have more items, in fact, the overall number of word frequency is not large at all and concentrated in English reports.

(4) releasing the 2015 MVP into an unforgiving quarterback job market further crippled by the **billowing** COVID-19 pandemic. (<https://www.freep.com>, 20-06-30)

(5) Survey shows big reluctance to travel with coronavirus **ablaze**. (<https://www.reviewjournal.com>, 20-06-23)

(6) Daily new case counts now rival those seen in the winter **surge**. (<https://arstechnica.com>, 2021.7.31)

(7) The coronavirus subvariant **surging** in China may be evolving to attack the brain feel researchers according to a media report. (<https://www.indiatvnews.com>, 2022.12.30)

(8) All five international games were moved back to home team stadiums as the coronavirus **surged**, and the league released a full regular-season schedule. (<https://www.sfgate.com>, 2021.7.23)

3.2.2 Highlight of Emotional Atmosphere in Chinese and Objective Statement in English

From the point of the structure of the keywords, although in the commonality part mentioned the reports about the outbreak choose the same things as the source domains for mapping, looking closely will find that these common words relatively belong to the upper category, and Chinese keywords also include a third belonging to the scope of a relatively more specific vocabulary. This kind of keywords are either in structure of "adjectives + noun" which can be seen from both parties, or "noun + noun" which only occurs in Chinese, used as nouns to refer to the epidemic, such as "ju-lang" "ji-liu" (torrent), jing-tao-hai-lang (frightful billows and terrible waves) and kuang-lan (wild waves) for the former, while "hong-liu",

tao-lang (billow and swell), bo-lang (wave and swell) and feng-lang (wind and wave) for the latter. Therefore, in fact, this kind of Chinese keywords are not a pure single term of concrete substance, but with other elements added to render the atmosphere of the overall event, and highlight the impact of the epidemic in a more specific situation.

(9) 突如其来的新冠肺炎疫情，犹如一个激流漩涡。

(The sudden outbreak of COVID-19 is like a whirlpool of **rapids**.) (《人民日报》2020.9.18)

(10) 筑起了抗击疫情的钢铁长城，谱写了力挽狂澜的英雄赞歌。(It has built a Great Wall of steel to fight against the epidemic and composed a heroic hymn to turn the **roaring waves**.) (《人民日报》202.8.20)

(11) 疾风知劲草，**烈火**见真金。疫情防控是没有硝烟的战场，也是检验党员初心使命的考场。(Sturdy grass withstands high winds; true gold stands the test of **raging fire**. Epidemic prevention and control is a battlefield without smoke of gunpowder, but also a test room to test the original mission of party members.) (《人民日报》2022.04.13)

(12) 通过这场抗疫斗争，我们更加深切地认识到，中华民族伟大复兴绝不是轻轻松松、敲锣打鼓就能实现的，在前进道路上我们面临的风险考验只会越来越复杂，甚至会遇到难以想象的**惊涛骇浪**，实现伟大梦想必须进行伟大斗争。(Through the fight against the epidemic, we have become more keenly aware that the great rejuvenation of the China will not be easily achieved by beating drums. Going on the way forward, we will only meet more and more complex risks, and even encounter unimaginably **frightful billows and terrible waves**. And to realize our great dream, we must fight a great struggle.) (《人民日报》2020.9.8)

(13) 战胜疫情，必须准确认识全局与一域之间的辩证关系。“事实再次表明，在全球性危机的**惊涛骇浪**里，各国不是乘坐在190多条**小船**上，而是乘坐在一条命运与共的**大船**上。(To defeat the epidemic, we must accurately understand the dialectical relationship between the overall situation and the same region." Facts once again show that in the stormy waves of the global crisis, countries are not riding in more than 190 **small boats**, but in a **big boat** with a shared fate.) (《人民日报》2022.1.20)

In examples 9-11, the reporters chose "ji-liu" (torrent), "kuang-lan" (turbulent waves), and "lie-huo" to refer to the COVID-19, which is a historic crisis in human history like the rip currents, tempestuous waves, and rampant raging fire. These words either describe the physical features of the epidemic—great momentum, strong power, large volume and rush spread, or the attitude of men—fear, worry, and vigilance, which is the supplementary information to the state of the source domain. In another example, sentence 13, "big" and "small" are used to limit the size of the ship, which in fact is a parlance of the individual and the collective, emphasizing the importance and necessity of global solidarity against the epidemic.

On the other hand, add other elements to expand the body group of water is also a kind of information supplement. As in example 9, in addition to comparing the epidemic to rapids, the "vortex" is another image to form a continuum of events, highlighting the imminence and peril of the Covid-19, and indicating the suffering and aftermath. The "hong-liu" in sentence

11 is of the same structure, but its role is supplied with a specific atmosphere. Because in terms of sentence structure, this word is not in the same sentence with the epidemic, so the mapping relationship between the two is realized through the context correlation. And the sentence in which the word is located has been used as a common saying, with the function of a fixed metaphor. In other words, the mapping is so internalized in the minds of readers, that the role of the sentence itself is emotion agitation. In addition, the key word "jing-tai-hai-lang" in example 12 (frightful billows and terrible waves), is essentially the result of the combination of two core nouns and modifiers, which is a synonymous reproduction, helping enhance the feelings and the atmosphere. On the contrary, the number of keywords in adjective category seems much more in foreign websites than in Chinese ones. But differing from the Chinese rules of word connection, here the keywords that trigger metaphors are either nude words going straight to describe the event itself —those common trigger words mentioned above, that themselves have their own modification, as "blaze" in example 14 meaning "a very large fire, especially a dangerous one with strong bright flames" and "flare ups" in 15 meaning "a bright but unsteady light or flame that does not last long", or the adjectives are added in front as Chinese part does. Except for the similar examples in English, such as example 16, the adjectives added here are applied to show the objective order relationship or frequency limit, mostly in the structure of "ordinal number+ n." or "qualifier + n.", such as the following examples 17-19 where there put "the second", "the latest" and "another" before "wave".

(14) Trump fiddled while the coronavirus **blaze** spread.
(<https://www.washingtonexaminer.com>, 20-04-18)

(15) A wave of mass protests across the U.S. in the wake of the death of George Floyd at the hands of police could trigger coronavirus outbreaks and **flare ups**.
(<https://www.bostonherald.com>, 20-05-31)

(16) Otherwise, it has been navigating the coronavirus crisis's **choppy waters** rather well.
(<https://www.fool.co.uk>, 20-07-01)

(17) In the second **wave** of Coronavirus state government streamlined supply of essential drugs availability of beds with or without oxygen and set up oxygen plants which helped curb deaths(<https://deccanchronicle.com>, 22-12-28)

(18) as this measure was lower and the latest coronavirus (COVID-19) **wave** more elevated than in the other two also don't help in controlling prices, (<https://intellinews.com>, 21-11-15)

(19) and Special Initiatives Asad Umar urged people to show caution and follow standard operation procedures (SOPs) against the coronavirus, as another **wave** of Covid-19 was in the offing. (<https://www.brecorder.com>, 22-01-02)

3.2.3 Emphasis of People's Subjective Initiative in Chinese and the Resistance of the Epidemic in English

In terms of the emotional attitude contained in the key words, China pays more attention to the guidance of the response attitude and the implementation of action than the western description of the impact of the epidemic. In the water metaphor, in terms of emotional

attitude, both sides describe the state of the epidemic. The combination of common keywords can be described as "surging waves is inundating", but the frequency of keywords in English-speaking countries is much greater than that in Chinese. This is a passive attitude in the face of the epidemic, aiming to emphasize the great momentum of the outbreak based on objective facts. In terms of response measures, both two sides have keywords involving "dam", "source" and "ship", but these words are all used more frequently in Chinese than in English. The metaphor of these specific measures to deal with the epidemic can show China's leadership awareness and strong determination to take the initiative. Additionally, of the unique keywords "du"(cross) and "chong-ji"(scour) in Chinese and "drift" in English, can the latter two indicate the state of the epidemic as examples 20-21 show. The "chong-ji" contains greater momentum and in bigger quantity than that of "drift". And "du" also directly expressed the concern for the victims of the disease and the resolution of mutual rescue. In order to express the determination to defeat the epidemic, the proportion of the key words "ships" in English and Chinese is seriously unbalanced that China part far exceeds the western, which greatly highlights China's great power style and humanistic concern.

(20) 面对疫情冲击，我们顶住了，有效守护了人民生命安全和身体健康。（《人民日报》2022.12.30）(In the face of the scouring of the epidemic, we have withstood it and effectively protected people's lives and health.)

(21) The coronavirus had drifted into Houston like a gentle rain -- floating over the city, collecting here and there. (<https://www.newyorker.com>, 2020.7.3)

In the fire metaphor, the key words that compare the epidemic to the spread of fire are among the top two in the word frequency of both sides, and the consistency of emotional tendency is self-evident. It is worth mentioning that, both in two sides, there is a structure of "v. + huo" to describe people's actions in the face of the epidemic. The action here is artificially issued, rather than the personification of the epidemic, so in this structure, the simple term "huo" is the direct key of metaphor triggering. Expressions belonging to this construct include "yu-huo" (bath fire), "cui-huo" (quench), "fu-tang-dao-huo" (go into boiling water and walk on fire), "ge-an-guan-huo" (watch a fire from the opposite bank) and "chen-huo-da-jie" (plunder a burning house) in Chinese, and "extinguish/put out the flame" of the coronavirus, "reignite the flames of a coronavirus epidemic" and "fan the flames of the virus". In Chinese side, in addition to the latter two words expressing criticism of people who ignore the epidemic or take use of it to make a fortune, the other words depict the positive efforts of people to fight the disease. These expressions, reflecting each other, are the pros and cons of calling for a common fight against the epidemic, with the aim to drive those who are not active by highlighting the brilliance of those who are active. But in English side, looking at the structure and words alone, the emotional color does look similar to Chinese, but in the complete sentence, they are just a simple description of the event, lacking the rendering of the effort as Chinese does. In addition, there is a Chinese actions, "pu-mie-yi-qing"(put out the epidemic), that interact with fire alone, so as to imply that the epidemic is fire, while no English examples of this type have been looked out.

4. Factors Affecting the Use of Fire and Water Metaphor for the Pandemic

Cognitive linguistics and experiential philosophy suggest that mind, meaning and human thinking are based on physical experience. Although the East and the West live in different geographical environments and have unique customs, there are quite the same or similar conceptual metaphor projections in English and Chinese due to the same experience.

The form, color, temperature, taste and function of water as well as the color, temperature, form and function of fire have a set of standards in the world, and people's cognition of this objective material attribute is generally fixed. The first-hand experience or learned ones of fire and water in daily life is enough to make a person who has not seen the sea understand the threat of huge waves, and let a person who has never seen the open fire have the awe of fire.

The human brain has a similar cognitive structure, and their survival experience is roughly the same. But each culture also has its own characteristics, which determine that the metaphor of fire and water in Chinese and English must be something different (Jiang & Zhong, 2006). The characteristics of culture are influenced by national geography to some extent. Qiu (2012) stated that "metaphorical expressions in different nations are constrained and influenced by peculiar geological environments because they provide a physical and psychological basis for people to produce and understand metaphors". The Western maritime civilization is integrated into their bones and blood, so there is a unique "sea" in the western key words, while China, as a landlocked country, is not so sensitive to the ocean. In addition, as the first large-scale outbreak area and the first major country to find out a reasonable and effective way to respond to the epidemic, China has resolutely shouldered the great responsibility. While providing assistance to the world, China calls to all the people to take the initiative in their own hands, to travel over the lands and rivers, resist the waves, extinguish the flames, and tide over the difficulties smoothly, so as to defeat the epidemic.

In addition to the source factors that affect the cultural differences, the formed English and Chinese culture themselves are also very different. China is deeply rooted in Confucianism, so it has a heavy humanistic atmosphere; And the West is deeply influenced by ancient philosophy, so it is more objective and rational, which is vividly reflected in the words. The number, types and structure of words used in Chinese are richer than those used in English, so the details and the overall atmosphere will be shaped more vivid, taking readers into a fuller reading mood. A very important point of Confucianism lies in the "ren", the universal love and compassion for the world. In the Chinese example, the keyword "chuan" accounts for the second largest proportion, next to the "wave". Between the lines are the empathy and sympathy for the sufferings of the world under the ruthless epidemic and the tenacity in the face of difficulties.

Besides, the cultural performance is also greatly influenced by the social background. Although in the same epidemic environment, the specific national conditions of different countries are still different. In the early days of the epidemic, as the first country to have a large-scale outbreak, China faced it bravely, following the principle of putting the people first, and took active measures to minimize casualties. However, due to the lack of objective

understanding of the virus, the United States underestimated its harm and implemented the policy of liberalizing control early, so the words used to report on the epidemic are relatively flat. Language is the most iconic feature of a nation and the most explicit symbol of a culture. Chinese and English are very different in the language themselves. English is characterized by hypotaxis with much word transformation while Chinese is parataxis with many habitual collocations. And the continuation of Chinese culture for five thousand years, the use preferences of various ancient rhetoric and folk adage will affect the choice of key metaphors as well.

5. Conclusion

From two Chinese and Western websites, the use of fire and water metaphor in epidemic reports are selected, and the frequencies of keywords and example sentences that trigger metaphors are extracted for comparison in this paper. In terms of the nature, emotion and attitude of metaphor expression, the situation of water and fire metaphors in Chinese and English is compared by means of the part of speech, structure and connotation of keywords. The data suggest that the numbers of keywords and examples of water metaphor in epidemic report both in Chinese and English are far greater than that of fire metaphor. The keywords of two sides are roughly the same in semantics, including verbs and nouns in form, but the proportion of English verbs is higher. However, there is a relatively special tape in western, the adjectives, which can be found just a few similar examples in the Chinese side. In terms of structure, the differences between two parties are obvious, but they are equivalent in semantics. This is determined by the characteristics of the two languages themselves, their own specificity. From the perspective of content, although the general selection of mapping objects tends to be consistent, China and the West have different initiatives in the fight against the epidemic. The West emphasizes the importance of the critical situation, while China focuses on encouraging people to take the initiative to fight, which is the result of different national cultures and consciousness. This paper compares the descriptions, attitudes and actions of Chinese and English cultures towards the same public event based on two specific types of metaphors during the special period of the epidemic, which not only greatly narrows the scope of the comparison and improves the local accuracy, but also provides a space for the comparison between the two types. The shortcoming of the study is that the two databases do not cover an equal number of media, making quantitative comparisons impossible, and can only try to strike a balance on a macro level by limiting the types of metaphors and time periods. Later research could be extended to other metaphor types or languages for aggregating or comparing, to explore the impact of cultural communication on sudden international events.

Acknowledgement

This work was supported by grants from the Education Department of Jiangxi Province *Humanities and Social Sciences Project* “A Critical Cognitive Linguistics Study of Metaphors for COVID-19”(YY22107) and Jiangxi Provincial Innovation Foundation for Postgraduates for project “A Critical Metaphor Analysis of COVID-19 Reports in China and the United States” (YC2022-s291).

References

- Burnes, S. (2011). Metaphors in press reports of elections: Obama walked on water, but Musharraf was beaten by a knockout. *Journal of Pragmatics*. <https://doi.org/10.1016/j.pragma.2011.01.010>
- Cai, N.-N. (2023). A comparative study of metaphor in the news reports of public health events in China and Japan. *MA thesis*, Beijing International Studies University.
- Chen, M., & Tan, Y.-S. (2010). A Corpus-based Study of “Merger and Acquisition” Metaphor in English and Chinese. *Foreign Languages and Their Teaching*. <https://doi.org/10.13458/j.cnki.flatt.000227>
- Deng, Y.-F. (2021). A comparative study of the conceptual metaphor of COVID-19 speeches by Chinese-Japanese leaders from the perspective of critical metaphor. *Information Engineering University*. <https://doi.org/10.27188/d.cnki.gzjxu.2021.000143>
- Fan, W.-Q., & Zou, F.-R. (2021). Diplomatic Discourse and the Construction of National Identity from the Perspective of Critical Metaphor Analysis: A Case Study of Chinese Leaders’ Special Addresses at the Opening Ceremonies of the Summer Davos(2007-2018). *Journal of Beijing International Studies University*.
- Lakoff, G., & Johnson, M. (2008). *Metaphors We Live By*. Chicago: University of Chicago Press.
- Ma, Y. (2022). A comparative study of the conceptual metaphor of "water" in Chinese and Indonesian proverbs. *Sinogram Culture*. <https://doi.org/10.14014/j.cnki.cn11-2597/g2.2022.07.050>
- Meri, T. (2021). A Comparative Study of Chinese and Armenian Idioms Containing the Words “Wind”, “Water” and “Fire”, and Strategies of Teaching Idioms. *MA thesis*, Central China Normal University.
- Qiu, Y. X. (2020). A contrastive study of English and Chinese conceptual metaphors involving “water”. *MA thesis*, Hunan Agricultural University.
- Ungerer, F., & Schmid, H.-J. (2008). *An Introduction to Cognitive Linguistics* (2nd ed.). London: Pearson Longman.
- Wang, D.-S. (2010). FIRE/HUO Metaphors and Metonymies in English and Chinese. *MA thesis*, Guangxi Normal University.
- Wu, M.-P. (2017). A Corpus-based Contrastive Study of “FIRE” Metaphors in English and Chinese. *MA thesis*, Hunan Agricultural University.
- Xia, S.-Z., & Lin, Z.-J. (2020). Current Situation and Prospects of Critical Metaphor Studies in China. *Foreign Languages Research*. <https://doi.org/10.13978/j.cnki.wyyj.2020.01.006>
- Zhang, J. (2013). A Contrastive Study of Conceptual Metaphors of FIRE and HUO. *MA thesis*, Hunan Normal University.

Zhao, F.-L. (2018). A Corpus-based Contrastive Study of the Conceptual Metaphors of “Water” in English and Chinese. *Nanjing University*.
<https://doi.org/10.27235/d.cnki.gnjju.2018.000968>

Copyrights

Copyright for this article is retained by the author(s), with first publication rights granted to the journal.

This is an open-access article distributed under the terms and conditions of the Creative Commons Attribution license (<http://creativecommons.org/licenses/by/4.0/>)