Is Obesity Just a Health Issue? Metaphorical Framings of Obesity in the People's Daily

XIANG HUANG

Universitat Pompeu Fabra, Spain

xiang.huang@upf.edu

MARIO BISIADA

Universitat Pompeu Fabra, Spain

mario.bisiada@upf.edu

Abstract

Obesity has become a major health concern in China, as it is elsewhere, and so health communication on obesity in Chinese discourse deserves more scholarly attention. In this paper, to investigate how obesity is metaphorically framed in the People's Daily, one of China's major official media outlets, we use the Discourse Dynamics Approach to identify evaluative positionings towards obesity in 98 obesity-related editorials. Based on our analysis, we posit three groupings of linguistic metaphors in the editorials that frame different aspects of obesity: JOURNEY, WAR and MONEY. Within the groupings, our analysis finds three systematic metaphors surrounding weight-loss, i.e., LOSING WEIGHT IS A NATIONAL JOURNEY TOWARDS HEALTH; LOSING WEIGHT IS A FIGHT FOR NATIONAL SECURITY; LOSING WEIGHT IS AN INVESTMENT BOTH AT THE INDIVIDUAL AND NATIONAL LEVELS. All represent obesity and obese individuals negatively and are embedded in specific Chinese sociocultural contexts, jointly framing obesity as a matter of national collective social character rather than just an individual health issue. While JOURNEY and WAR express a collectivist view of the issue, the MONEY grouping seems to indicate a neoliberal, individualist perspective emphasising the maintenance of health as part of citizenship. By comparison, similar stories on health issues surrounding obesity in Western media show differences in their discourse models.

Key words: obesity; health communication; metaphorical framing; the People's Daily; Chinese

1. Introduction

While the controversy surrounding the role of the individual in the so-called 'obesity epidemic' (Saguy & Almeling, 2008) has been around for a while in Western countries, it is relatively new to Asia (Ehlert, 2019, p. 105). In this paper, we examine how obesity is metaphorically framed in Chinese official media. We show that metaphor provides useful analytical and conceptual insights into the ways in which the media understand, communicate and evaluate obesity. We also suggest that these insights may have important implications for health communication practices surrounding

obesity in China. To this end, we analyse 98 obesity-related editorials, taken from the Chinese language edition of the *People's Daily* (henceforth the *Daily*), one of the major official media outlets in China. The research questions addressed are:

1. What metaphors have been used to frame obesity in the *Daily*?
2. What evaluations of obesity do the metaphors convey?

Answering these questions lets us reflect on the presence, patterns and functions of metaphors within the sociocultural context of obesity in China. By shifting attention to the less-studied Chinese context, our study contributes to the expanding scholarship of discourse studies on obesity (which are mainly conducted in Western contexts, e.g. Atanasova, 2018; Barry et al., 2011; Brookes & Baker, 2021; Flint & Snook, 2014; Hilton et al., 2012; Kim & Willis, 2007; Lawrence, 2004; Saguy et al., 2010; van Hooft et al., 2018). We begin with an introduction to obesity in China.

2. Obesity in China

Naming obesity a 'disease', or even an 'epidemic', has given it social ramifications that have made the individual's body an object of scrutiny for all of society (LeBesco, 2010). The effect of this is that individuals with obesity are perceived 'not to be making appropriate lifestyle decisions and thereby abandoning their responsibilities (and therefore their rights) as citizens contributing to the general good' (Wright, 2009, p. 3). A wealth of research exists on the social (de)construction of the self-indulging body as abject and morally transgressive – the incapacity of a person's self-discipline, the lack of individual responsibility towards his- or herself and society as a whole reflected in the fat body (e.g., LeBesco, 2011; Metzl & Kirkland, 2010; Wright & Harwood, 2012).

However, research has mainly focussed on Western contexts, while little attention has been paid to Asian countries (see Ehlert, 2019). The case of obesity in China merits particular attention. On the one hand, over 43 million men and more than 46 million women had obesity-related health issues in China in 2019 (Thomala, 2021). On the other hand, China is undergoing profound changes, which involve changing views of the human body both at the individual and national levels. Looking at discourse allows us to better examine obesity, as discourse analysis 'focuses attention on the processes whereby the social world is constructed and maintained' (Phillips & Hardy, 2002, p. 2). At the individual level, we may refer to a 'discourse of deviance' in the popular condemnation of obese individuals, typically shown through humiliating descriptions like 死胖子 [dead fat men] and 肥猪 [fat pigs] cast on them by society. The public, especially young females, have developed an unprecedented obsession with thinness in China (Teng et al., 2017), which equates thinness with beauty, goodness and self-discipline, adding ways of measuring the individual's value.

At the national level, we can witness several subtly paradoxical discourses around obesity. On the one hand, a 'discourse of national pride' can be observed, as obesity is seen as proof of China's achievement in food security

with reference to centuries of food shortage and insecurity in its history. For instance, 减肥/成为/ 了/ 幸福/的/烦恼 [Losing-weight has become <u>a happy annoyance</u>][1] from the *Daily*, implies that losing weight has a dimension of happiness in that it shows sufficient food supply. On the other hand, a 'discourse of national security crisis' emerges, with an increasingly Westernised lifestyle in Chinese society signalled by an expanding obese population in China (Gilman, 2010, p. 131) and worries about the condition of the Chinese people's health (Fan & Zhang, 2020). Obesity has put a heavy burden on China's national development (Qin & Pan, 2016; Zhao et al., 2008), reducing China's competitiveness (Popkin, 2011) and invoking a consciousness of it as a national-level health security crisis. A good example of such crisis discourse can be seen in the state-directed launch of 健康中国2030 [Healthy China 2030], China's latest and largest national public health plan, which explicitly states the health agenda of 超重、肥胖人口增长速度明显放缓 [an obvious decline of the overweight and obese population] (The State Council of the People's Republic of China, 2019: [online]).

Therefore, obesity in China is intertwined with different discourses, giving us perhaps one of the most complex cases of health communication, which could thus open up new understandings of possible relations between health and discourse. Studies of obesity discourse in China deserve more scholarly attention (see the paucity of related research in Sun et al., 2020; Yi et al., 2012). We want to contribute a more in-depth analysis of the discourse surrounding obesity in China, choosing metaphor as our entry point. In the next section, we review relevant literature on health communication, metaphor and evaluation.

3. Metaphorical Framing in Health Communication

Health communication, i.e., 'the study of messages that create meaning in relation to physical, mental, and social well-being' (Harrington, 2015, p. 9), has received increasing attention within Applied Linguistics. It is generally agreed that scrutinising language in use can offer a means of understanding the complexities of health communication (Harvey & Koteyko, 2013), as 'language can shape the ways in which matters pertaining to health and illness are experienced and understood by society' (Baker et al., 2020, p. 1). A proliferation of studies has turned to linguistic methods to explore communication surrounding various health issues (e.g., Bailey, et al., 2021; Baker, et al., 2019; Brookes et al., 2018; Demjén, 2016), proving the 'discursively constituted nature of health-related concerns' (Baker et al., 2020, p. 1). Investigating linguistic features such as metaphors in discursively constituted health communication will improve our understanding of how complex health issues are conceptualised.

Metaphors are the act of describing, and potentially thinking about, something in terms of another, where the two things are different but some similarities or correspondences can be perceived between them (Semino, 2008). In everyday life, people use metaphors to construct connections between ideas, explain thoughts, and convey their feelings, attitudes and

emotions. As the 'night-side of life, a more onerous citizenship' (Sontag, 1978, p. 3), illness is often talked about in metaphorical expressions (Demjén et al., 2016; Sopory, 2017). Extensive research has looked into how metaphors have been used to describe various illnesses and related experiences (e.g., dementia by Castaño, 2019; depression by Charteris-Black, 2012; and cancer by Demmen et al., 2015). These studies suggest that metaphors are not only used to denote illness (providing propositional information), but they often add value, for example, through expressing an evaluation of a certain illness, arousing emotional and persuasive appeals among patients, or persuading the public that a certain health problem can be dealt with in familiar ways, for example, by treating it as a public health enemy to be fought against. Such a value-adding effect is closely linked to the evaluative potential of metaphors.

Summarising the literature, Deignan (2010, p. 358) discusses four mechanisms through which metaphors carry out evaluations: 'the use of metaphor to create entailments; the use of metaphorical scenarios; the choice of source domains that are meaningful to particular language users; and the exploitation of the connotations of a word's literal meaning'. This indirectly evaluative potential of metaphors can be particularly useful in health communication involving sensitive topics or stigmatised people, as is the case with obesity.

There has been a burgeoning number of studies looking at evaluation through metaphors in health communication (e.g., Demjén et al., 2019; Hendricks et al., 2018; Ho, 2020). The studies find that the evaluative function of metaphors is primarily accomplished through their framing function, which can reflect and facilitate particular understandings and evaluations about problems and solutions (Semino et al., 2018). Furthermore, along with the framing function, metaphors are often linked to issues of agency, or perceptions of empowerment and disempowerment in health communication; Semino et al. (2018, p. 637) define empowerment and disempowerment as 'an increase or decrease in the degree of agency that patients have, or perceive themselves to have, as manifest in the metaphors and their co-text'. For example, Littlemore and Turner (2020) analyse metaphors used by people who have experienced pregnancy loss, finding that the embodied nature of pregnancy affects the relationship that people have with their own bodies, which contributes to feelings of isolation and self-blaming among the parents.

As for obesity, it is often referred to in the media as an 'enemy of public health', a metaphor that evokes an interpretive frame that constructs a win–lose dichotomy where obese individuals are positioned as 'fighters' in the obesity 'war'. Those who cannot lose or control their weight are referred to as 'losers', feeling guilty, inadequate, disempowered and open to stigmatisation (Antanasova & Kokeyko, 2020). However, despite the prevalent metaphor use surrounding obesity in the media, only a few studies have explored the metaphorical framings of obesity via a linguistic approach (as most research generally follows the content analysis paradigm, e.g., Hilton et al., 2012; Nimegeer et al., 2019; Yoo & Kim, 2012). Among the few metaphor studies, Atanasova (2018) conducts a critical metaphor analysis on posts from obesity blogs in *Healthline*, finding JOURNEY is the dominant metaphor in bloggers' writings about their weight-loss experiences. JOURNEY metaphors challenge

the mainstream before–after weight loss narratives and reflect positive implications for doctor-patient communication. In a later study, instead of JOURNEY, Atanasova and Koteyko (2020) find that WAR metaphors are predominantly used in English news to report obesity, which contribute to stigmatisation and unfavourable views of obese individuals. Their study argues that, as opposed to infectious diseases where there are clearly identifiable pathogens causing the disease, in the case of obesity, the 'enemy' in the 'war' easily becomes the self. Thus, obese individuals are framed as the 'targets' of public measures against obesity and are being 'othered' and constructed as a threatening outgroup – 'them' vs 'us' (Atanasova & Koteyko, 2020, p. 238). Such a conceptual weakness of the WAR metaphor when applied to obesity is also found by Cotter et al. (2021), who show that military references can either position the obese individuals as strategists/tacticians or as passive targets, linking an individual's agency to personal control of the war situation.

While these studies have offered valuable insights into the metaphorical framings of obesity in the English media, some unsolved questions remain. Firstly, as Deignan (2010) suggests: 'evaluations of metaphorical expressions are specific to each context rather than being predictable from conceptual mappings at a general level' (as cited in Yu, 2019, p. 5). Similarly, Semino et al. (2018, p. 3) argue that 'the framing effects of metaphors are a context- and usage-dependent phenomenon'. Evaluations of obesity cannot be delivered free from the values and beliefs held by discourse groups belonging to their distinct socially, culturally or otherwise defined context. The Chinese media, given their specific socio-cultural context, are expected to present different metaphor uses around obesity. Secondly, existing studies mainly adopt the approach of critical metaphor analysis (CMA, Charteris-Black, 2004) within conceptual metaphor theory (CMT, Lakoff & Johnson, 2003). As metaphors are qualified to be research objects themselves, we believe a better choice for metaphor analysis could be metaphor-led discourse analysis within the Discourse Dynamics Approach (Cameron et al., 2009). The Discourse Dynamics Approach is inspired and informed by CMT, but rejects CMT's formulation of 'metaphors in terms of highly generalised and abstract conceptual domains that pre-exist actual uses of metaphor in language' (Cameron et al., 2010, p. 77). Instead, it regards 'discourse as a complex dynamic system leading to new ways of seeing and understanding how people use metaphor in talk or text' (Cameron & Deignan, 2006, p. 688). In particular, its proposal of metaphor-led discourse analysis through finding systematic metaphors (Cameron et al., 2010) is especially useful for our study. A systematic metaphor is a set of connected linguistic metaphors which serve as evidence for ideas, attitudes and values of participants in discourse. It is helpful for us to look into the evaluations of obesity through systematic metaphors in Chinese media.

All that said, our study, to the best of our knowledge, is the first attempt to study the use of metaphor in Chinese discourse on obesity through the Discourse Dynamics Approach. It continues the line of research on the evaluative function of metaphors in health communication, but it develops prior work by looking into the under-explored area of obesity discourse in the Chinese media. In the next section, we explain our research methods.

4. Data and Methodology

We collected 98 editorials or opinion articles (95,928 Chinese characters; the longest article has 1,819 characters and the shortest one has 144 characters) on the topic of obesity from the editorial website of the *People's Daily* newspaper (http://opinion.people.com.cn/). The *Daily* is one of the most dominant and widespread media outlets in China. We chose editorials as they more explicitly express views towards obesity, and thus more adequately reflect our interests. We focus on the time period between 1 January 2010 and 31 December 2020, so as to explore only recent discourse. In detail, we searched the website with keywords, i.e., 肥胖 [obesity/fat], 超重 [overweight], and 减肥 [losing-weight]. All editorials in the corpus contain one of these keywords, convey a relevant topic (human weight matters, not animal obesity, or 'slimming' in governmental institutions) and discuss obesity in a thorough way (rather than just mention it in passing as some editorials on regulating slimming pills do).

Not all of the editorials are originally from the *Daily*, some are reprints from other regional media like *Beijing Daily*, *Guangzhou Daily*, etc. As they were reprinted, we assume they reflect the *Daily*'s position towards obesity. The 98 editorials are written by 80 journalists (10 journalists have contributed to more than one editorial; every journalist contributes around 1,063 characters on average), so the study is representative of the style of editorials on obesity in the *Daily* in general and the chance of individual stylistic preferences skewing the results is minimised. Further, as journalists produce editorials in accordance with national policy lines in China, and their writings are copyedited and adjusted by editors with higher authority (Huan, 2018), in our analysis we do not pay close attention to individual differences among journalists (like their individual preferences in metaphor uses). Instead, we explore the overall framings of obesity delivered through the editorials.

After collecting the editorials, the Discourse Dynamics Approach was applied in order to uncover the uses of metaphor, along with their potential evaluations of obesity. The approach consists of the following steps (see Cameron et al., 2009): (i) identifying metaphor vehicle terms (linguistic metaphors); (ii) building metaphorical groupings of the vehicles; (iii) finding systematic metaphors in each grouping; and (iv) analysing illustrative examples of each systematic metaphor to explore potential evaluations. Due to the dynamic and recursive process in metaphor identification and classification (Cameron & Maslen, 2010), quantitative reliability measures were not used in steps (i) and (ii) (see the similar practice adopted by Tay, 2019). Calibration of the coding was conducted between two coders (one is the first author and the other is a PhD candidate majoring in Translation Studies with training in Chinese metaphor analysis) through independent identification and discussions on different coding results to reach a consensus.

As our particular interest is in obesity, during our identification process, vehicle terms were considered relevant only if they referred to (i) what obesity is (including its causes, consequences and actions or policies towards it); (ii) what obese individuals are and do (including their attributes, such as their lifestyle and mentality) and (iii) how obese individuals are viewed by others. Although we only counted metaphors related to obesity, other related terms

(e.g., health and body) were also taken into consideration in explanations of the wider metaphorical framing of obesity.

After setting our identification scope, as we became familiar with the editorials, we kept to the following identification rules:

1. Including content words (i.e., nouns, verbs, adjectives, adverbs), similes (e.g., 像/一头/猪 [look like a pig]), personification (e.g., 肥胖/是/健康杀手 [obesity is a health killer]), fixed compound words or phrases in Chinese (e.g., 生龙活虎, the four characters respectively mean 'living', 'dragon', 'alive', and 'tiger', and the unit conventionally means [full of vitality and energy]); while

2. Excluding some very fixed phrases like 生气 (which means [angry] with a literal translation of 'produce gas') and 马上 (which means [right away] with two characters respectively meaning 'horse' and 'up'). Although the phrases have figurative roots, they are dead metaphors and are very common in every genre and hence do not bear much significance to our study (other studies have done the same, e.g., Tay, 2015).

Based on these preliminaries, we adopted the guidelines of the Metaphor Identification Procedure Vrije Universiteit (MIPVU, Steen et al., 2010) to identify the metaphor vehicle terms (i.e., the linguistic metaphors), or the metaphorical words or phrases.[2] Wang et al. (2019, p. 247) have offered a number of key operationalisation and linguistic issues in applying MIPVU to identify metaphor-related words (MRWs) in Chinese discourse. Our detailed procedure involves: (i) using the Chinese Lexical Analysis System developed by the Institute of Computing Technology, Chinese Academy of Sciences (ICTCLAS) to demarcate lexical units as our identification unit. The segments are further checked by the first author and indicated by slashes (/) throughout the examples shown in the paper; (ii) reading the entire editorials for a general understanding; (iii) identifying obesity-relevant lexical units and establishing their meaning within their discourse context as well as whether there is a 'more concrete, embodied, precise, and historically older meaning' (Pragglejaz Group, 2007, p. 3) of the unit in 新华字典 [*Xinhua Zidian Dictionary*, 2012], one of the most authoritative Chinese dictionaries; (iv) noting whether the context-specific meaning can be understood as different to the literal or basic meaning, if so the unit is marked as metaphorical.

After identification of metaphor vehicle terms, the identified terms were categorised into different groupings based on the semantic fields to which they belonged. The Discourse Dynamics Approach has taken an 'emergentist approach' (Cameron & Deignan, 2006), which means the categories emerge during data analysis, or in a recursive procedure with 'principled flexibility' (Cameron, et al., 2010, p. 126). The categories evolve along with our analysis and each new category coded may lead to adjusting of our previous categories. As Cameron et al. (2009, p. 75) indicate, 'there is no right answer to the question of how to assign and label a particular metaphor', and so the metaphor classification process relies on our interpretation of the discourse context and we accept a degree of subjectivity in the classification.

To illustrate the process of metaphor identification and classification, here are two examples from our data:

(1) 肥胖/本来/就是/很多/病症/的/始作俑者。
Obesity / original / just is / many / disease / DE / person who first made tomb figures
[Obesity originally is the <u>initiator</u> of many diseases.]

(2) 形成/全社会/的/运动/补课/共识/。唯有/如此/，才能/增强/所有/人/的/免疫力/，在/下一次/新冠肺炎/和/其他/疾病/来临/时/，更/有效地/战胜/疾病。
Form / whole society / DE / sport / supplement course / consensus /. Only / this /, can / strengthen / all / people / DE / immunity/, PROG / next-time / Covid-19 / and / other diseases / come / PROG /, more / effectively / defeat / disease.
[(We need to) form a consensus on <u>supplementary sports courses</u> among all society. Only in this way can we strengthen the immunity of all. When Covid-19 or other diseases come next time, we can effectively <u>defeat</u> them.]

In example 1, the basic meaning of 始作俑者, according to the *Xinhua Zidian Dictionary* is 开始制作俑 （古代殉葬用的木制或陶制的俑人） 的人。比喻首先做某件坏事的人 [The first person who made tomb figures (pottery figures of people and animals made in ancient China as grave goods to be placed in tombs)]. The phrase is used to refer to the initiator of bad behaviour. In this example, the vehicle 始作俑者 refers to obesity, causing incongruence between the basic and the contextual meaning (people and disease). It is further assigned to the vehicle grouping of personification. In example 2, the basic meaning of 课, according to the dictionary is 有计划的分段教学 [sectional teaching under plan]. In this example, the vehicle 课 describes doing exercise as taking planned courses and receiving education, and its contextual meaning is thus more abstract than its basic meaning. Hence it is counted as metaphorical and assigned the grouping of education. A similar comparison occurs with the vehicle 战胜, which is defined as 在战争中取胜 [winning in a war] in the dictionary and therefore is placed into the war grouping.

Once all the linguistic metaphor vehicles are coded and grouped, the next step is to find systematic metaphors, the larger groups of metaphors found in the discourse data. Within the vehicle grouping we have done, all the linguistic metaphors related to a particular topic were collected into a set to form systematic metaphors. Hence, 'a systematic metaphor is not a single metaphor, but an emerging group of closely connected metaphors' (Cameron, 2010, p. 91). For example, in the journey grouping, losing weight was characterised as 减肥/之路 [journey of losing weight], involving 同行 [walking together] among all members of society. One editorial observed that there are cases where some people 掉队 [fall behind the group] and stressed the

importance of togetherness among all members. Thinking of it from the perspective of the national health plan of *健康中国2030* [Healthy China 2030], some editorials proposed *一个/都/不能/少* [no one gets left behind]. What all these metaphors have in common is not just that they relate to a journey, but that the journey is lifted to a national-level group journey where the destination is health. Following Cameron et al. (2010, p. 17), these individual metaphors allow us to formulate a systematic metaphor as:

<p style="text-align:center">LOSING WEIGHT IS A NATIONAL JOURNEY TOWARDS HEALTH</p>

Systematic metaphors provide us with useful insights to observe the diverse framings and evaluations of obesity in our data. In the next section, we explain our findings through illustrative examples.

5. Findings and Discussion

5.1 Vehicle Groupings and Systematic Metaphors

In Table 1 we show the vehicle groupings we have built from our data. Although we also show their rough percentages, our study is conceived to be qualitative and interpretive, and therefore we consider these numbers as descriptive of the data, rather than as contributions to our study (a similar practice is adopted by Gustafsson & Hommerberg, 2018). JOURNEY, WAR and MONEY are the top three groupings in our data (these three account for around 50% of all the metaphor vehicles) and we therefore focus our following systematic metaphor analysis on them. Table 2 summarises the systematic metaphors within the three groupings. Even though our topic is obesity, we find the editorials are focused on the remedy to obesity, i.e., losing weight. Our systematic metaphors thus all include the phrase *losing weight* rather than *obesity*.

Vehicle groupings	Observed instances (%)	Examples
JOURNEY	21	*减肥/之/路* [journey of losing weight]; *半途而废* [given up half-way]; *走/弯/路* [make a detour]; *险/途* [a dangerous path]
WAR	15	*腰围/的/战争* [war on waistlines]; *预备役* [reserve duty]; *警觉* [vigilance]; *搏斗* [fight];
MONEY	12	*成本* [cost]; *偿还* [pay back]; *弥补* [compensate]; *代价* [price]
ENVIRONMENT	7	*雷声大，雨点小* [Loudly as the thunder roars, little rain falls]; *阳光* [sunshine]; *封闭* [closed]; *严峻/形势* [grim situation]
ARCHITECTURE	6	*建设/健康/中国* [build a healthy China]; *国/之/栋梁* [a pillar of the nation]; *规划* [plan and design]; *建构* [build and construct]
DEHUMANISATION	6	*投/喂 [throw food to feed]; 宽/屏 [wide-screened]*

PERSONIFICATION	5	杀手 [killer]; 抓住/孩子 [catch the kids]; 国家/臃肿 [the nation is cumbersome];
MACHINE	4	人体/这/台/精密/机器 [the delicate machine of the human body]; 平衡/运作 [balanced operation]
DISEASE	4	职业/病 [occupational disease]; 病恹 [sick];
EDUCATION	3	运动/补/课 [making up for physical education]; 健康/课 [health course];
Others³	17	悲剧 [tragedies]; 福音 [gospel];
Total	100	

Table 1. Vehicle groupings and observed instances for framing obesity

1.	LOSING WEIGHT IS A NATIONAL JOURNEY TOWARDS HEALTH
2.	LOSING WEIGHT IS A FIGHT FOR NATIONAL SECURITY
3.	LOSING WEIGHT IS AN INVESTMENT BOTH AT THE INDIVIDUAL AND NATIONAL LEVELS

Table 2. Systematic metaphors for framing weight-loss

In the following sections, we discuss the systematic metaphors through case studies. The quoted examples are indicative, not exhaustive. We start with the JOURNEY grouping.

5.2 LOSING WEIGHT IS A NATIONAL JOURNEY TOWARDS HEALTH

JOURNEY metaphors have been popularly used in discussing various health concerns, e.g., diabetes (Youngson et al., 2015), cancer (Hendricks et al., 2018) and dementia (Castaño, 2019). There is no exception in our data, with obesity-related topics, especially losing weight, being most frequently represented in a 'journey' frame, constituting the most relevant systematic metaphor in our data, i.e., LOSING WEIGHT IS A NATIONAL JOURNEY TOWARDS HEALTH.

On the one hand, this systematic metaphor is salient in framing the course of losing weight (or controlling bodily weight) as a national journey and representing various participants, typically including government institutions and the general public (including the obese individuals), etc. as common travellers on the same route. Meanwhile, the ideal destination, or the ultimate goal of the journey is health, suggesting obesity is deemed as a health risk which misdirects or slows down the group journey. This can be seen in example 3, where in discussing obesity as a serious public health problem, a path is constructed where different travellers walk at a potentially different pace, implying the potential difficulty for all travellers to keep up with the group, and thus calling for an agreement among travellers:

(3) 肥胖/是/一个/严重/的/公共/卫生/问题/……/让/我们/共同/约定/:
健康/路上/, 你/我/同行 , 一个/都/不能/少。
Obesity / is / one / serious / DE / public / hygiene / problem / ...Let / us / common / agree /: health / journey / on /, you / me / together / walk /, one / all / cannot / less.
[Obesity is a serious problem in public hygiene... Let's make an agreement: on the journey of health, you and me walk together and no one can be left behind.]

In example 3, obesity is problematised and a solidarity is built among travellers to reach the common destination. Such a group journey metaphor is shared across the editorials. For instance, in example 4, the editorial assigns responsibilities to parents and teachers, whose collaborative work is to help obese students get out of 'confusing barriers' and 'wrong areas' in order to keep them in the group:

(4) 老师/和/家长/也/要/负起/责任/, 正确/引导/"当局者"/树立/科学/的/减

肥/观/, 早日/走出/盲目/减肥/的/迷障/和/误区。
Teachers / and / parents / also / need / shoulder / responsibility /, correctly / guild 'chess players' / build / scientific / losing-weight / view, earlier / date / walk out / blind / losing-weight / DE / confusing barrier / and /wrong area.
[Teachers and parents also need to shoulder their responsibilities and correctly guide the 'chess players' (someone who takes part in a chess game and does not see the game clearly) to set up a scientific view on losing weight and step out of the confusing barriers and wrong areas earlier.]

Furthermore, what makes this systematic metaphor unique is that it has an element relating to the national memory of 东亚病夫 [Sick Man of East Asia] in Chinese history. The term conveys a collective sense of disgrace relating to national psychological trauma in China (Yang, 2020). Obesity has been deemed a new form of prevalent 'sickness' among Chinese, especially children and teenagers (Fan & Zhang, 2020). It thus incites an emotional response towards avoiding the old path and embarking on a new journey towards health. As shown in example 5, the editorials mark their highly positive evaluation towards exercise, suggesting insufficient exercise (with obesity as a possible result) can lead to the old path of national disgrace:

(5) 运动/习惯   /一定/要/从/小/建立, 绝/不能/   重/蹈/   "东亚病夫
"/的/老/路！
Exercise / habit / must / need / since / young / build /, never / can / again / step / 'Sick Man of East Asia' / DE / old / path!
[The habit of exercise must be set up from childhood; never should we re-step upon the old path of the 'Sick Man of East Asia'!]

Moreover, younger generations are expected to transform China from 'Sick Man of East Asia' to a 'Stronghold of Athleticism' [体育强国] (translation from Yang, 2020). For instance, in example 6, the editorial mentions a road map

for teenagers to lose their bodily weight and improve their body strength. It turns to charismatic appeals around a theme of contributing to national health and strength through individual exercise:

(6) 体育/强/国/建设/的/<u>目标</u>/和/<u>路线图</u>/已/定。

Sports / strong / country / build / DE / target / and / road-map / already / set
[The <u>target</u> and <u>road-map</u> for building a Stronghold of Athleticism have already been set.]

Apart from calling upon the domestic public, the editorials negatively evaluate the United States' wrong journey (seen in the high obesity rate among Americans). The use of the United States as a counter example implies China's determination to change its route and stop following the United States:

(7) ...肥胖/以及/与/肥胖/有关/的/各种/慢性病/的/激增/就/是/后果/，这/

一点/上/，中国/已经/在/<u>步/美国/的/后尘</u>。

...obesity / and / obesity / related / DE / various / diachronic disease / DE / soaring increase / just / is / result /, this / point / on /, China / already / PROG / step / the United States / DE / behind-dust.
[...the soaring number of obese individuals, along with diachronic diseases related to obesity is the result of it. For this point, China has been following the footsteps of the United States.]

In all, the systematic metaphor LOSING WEIGHT IS A NATIONAL JOURNEY TOWARDS HEALTH generally frames obesity as a health issue, but it depicts a group journey and stresses the togetherness of the journey participants and the direction towards health. In the following sections discussing the WAR and MONEY groupings, we will see similar cases where obesity is framed as a collective issue that goes beyond a mere matter of individual health.

5.3 LOSING WEIGHT IS A FIGHT FOR NATIONAL SECURITY

War metaphors have been described as deeply embedded in public discourse (Flusberg et al., 2018). In terms of obesity, WAR metaphors have been identified as a key description of obesity in the media (Saguy & Almeling, 2008), with a tendency for health militarisation surrounding obesity (Monaghan, 2008). These well entrenched WAR metaphors are confirmed in our data in that they have formed a systematic metaphor, i.e., LOSING WEIGHT IS A FIGHT FOR NATIONAL SECURITY.

Firstly, WAR metaphors are employed to define obesity prevalence as problematic by describing it as a 'timed bomb' threatening national security as in example 8:

(8) 肥胖/问题/将/成为/中国/未来/经济/发展/和/公共/卫生/系统/的/一/枚

/"<u>定时炸弹</u>"。

Obesity / issue / will / become / China / future / economy / development / and / public / sanitary / system / DE / one / MEI / 'fix-time bomb'.
[Obesity will become '<u>a timed bomb</u>' in China's economic growth and public sanitary system.]

A threat to national security is discursively constructed in the editorials. The WAR metaphor alludes to a sense of danger, threat and fear, effectively evoking emotions, imposing duties and requiring efforts. The general public, as participants in the national salvation from obesity, are called upon, for example, to take part in societal-level efforts in 'mobilisation' (example 9) and advance the frontline of health education to kids (example 10):

(9) 民众/也/需要/一次/"全民/<u>总动员</u>"/，了解/如何/正确/选择/食品/。
People / also / need / one-time / "whole people / collective-mobilisation" /, understand / how / right / choose food.
[The public also need a '<u>collective mobilisation</u>' to understand how to choose food in the right way.]

(10) 把/健康/教育/的/<u>战线/</u>提前/到/孩子。
BA / health education / DE / frontline / advance / to / kids.
[advance the <u>frontline</u> of health education to kids.]

As example 9 shows, in the WAR against obesity, the perceived cause of obesity is framed as a lack of knowledge about food (i.e., not knowing how to choose and have food in the right way). A health education campaign, which can be understood as a useful 'weapon', is called for to aid the general public, who are urged to modify their eating habits. In portraying the general public as warriors, a clear dichotomy between the country and obesity is set up to evoke a sense of responsibility among the public. Again, a stance of solidarity is thus constructed by emphasising a joint responsibility among the public in a national fight against obesity.

Further, negative evaluations are expressed towards obese individuals. As shown in example 11, the editorial takes a critical tone towards physically weak college graduates by labelling them as sub-healthy 秀才 [xiucai, which refers to poor scholars in ancient China]. It makes a juxtaposition between strong troops and sub-healthy college graduates, attributing a sense of shame and guilt to the latter:

(11) 从/高校/走/入/社会/的/，不/是/<u>生力军/</u>，而/是/一批批/亚健康/的/
秀才。
From / colleges / walk / into / society / DE /, is / not / produce power army/, but / are / batches /sub-healthy / xiucai.
[Those stepping into society from colleges are not <u>fresh and combat-worthy troops</u>, but batches of sub-healthy xiucai (scholars who passed the imperial examination at the county level in China's Ming and Qing Dynasties).]

The conceptualisation of college graduates as *'xiucai'* may imply unsuccessful college education and unfulfilled social expectations. Thus, to

some extent, because of the negative evaluations delivered towards them, the graduates are framed as the 'targets' of anti-obesity efforts and measures. Furthermore, unlike other health concerns such as cancer and flu, it is widely believed that bodily weight is under personal control. There is no obvious external entity such as a virus; the enemies to be fought are the obese individuals themselves (Atanasova & Koteyko, 2020), or certain body parts associated with holding fat (e.g., waistlines), which are targeted to be fought against, as in example 12:

> (12) 来/一/场/腰围/上/的/革命。
> Come / one / CHANG / waistline / on / DE / revolution
> [Let's have a revolution on the waistlines.]

This example places the general public into the active role of a fighter against the waistline, yet it also objectifies bodies of obese individuals as things to be targeted and tackled. This could lead to internalised body anxiety and shame, disempowering obese individuals with their expanding waistlines constructed as a 'target' in the war.

Based on the above examples, the war approach to dealing with obesity could imply that in the editorials there is a preference for militaristic language surrounding obesity, which may be entangled with China's historical experiences and memories of war against feudalism and capitalism, with the whole Chinese nation participating in the defence of national security and independence. In this way, the WAR metaphors need not be inherently bad, as in the Chinese context WAR metaphors help to provide clear roles and responsibilities for all participants in the given struggle (e.g., kids have health education while adults themselves participate in the war). The WAR metaphors have the potential to help the public make sense of, and take actions against, obesity, yet somewhat inevitably encourage negative views towards obese individuals (e.g., the sub-healthy graduates) who are deemed not actively involved in the war, thus being stigmatised.

In all, within the WAR grouping, the systematic metaphor again constructs a collective action in the national interest, defining what to fight against (e.g., waistlines), the goal of fighting (i.e., national security), specific responsibilities of the warriors, judging the fighting competence of different warriors, dividing good warriors from bad ones, and negatively evaluating obese individuals. In the next section, we turn to the MONEY grouping.

5.4 LOSING WEIGHT IS AN INVESTMENT BOTH AT THE INDIVIDUAL AND NATIONAL LEVELS

Compared with JOURNEY and WAR metaphors, which are popular in health communication (Sopory, 2017), the occurrence of MONEY metaphors in our data may seem surprising. By MONEY metaphor, we mean bodily weight (or weight-related physical health more generally) described in economic terms, which mainly deals with cost-benefit relations. The market logic has informed and transformed health communication in China and produced MONEY metaphors in health contexts. In our data, MONEY language has entered the discussion on obesity, or the pursuit of general physical well-being. They were

employed to describe not only individual-level investment but also national-level investment to address obesity. We thus formulate a systematic metaphor: LOSING WEIGHT IS AN INVESTMENT BOTH AT THE INDIVIDUAL AND NATIONAL LEVELS.

Firstly, losing weight is framed as an individual investment where health is commodified with high value, for example, *健康/很/贵，不要/浪费* [health is very expensive, so we should not waste it]. The prominently used expression of *健康/投资* [investment in health] reinforces health as a capital stock (example 13):

(13) 今天/年轻人/的/难处/尽管/有/许多/，要/生存/要/养/家/要/供/房、供/车/，但/最大/的/难处/是/，对/健康/的/投资/几乎/等于/零。

Today / young / people / DE / difficulties / despite / have / many /, need / live / need / feed / family / need / provide / house /, provide / car /, but / the biggest / difficulty / is /, towards / health / DE / investment / almost / equal / zero.

[Today's young men have a lot of difficulties in making their lives, supporting their families, paying mortgages for their flats and cars; however, the most difficult thing is that they invest almost nothing (zero investment) in their health.]

In example 13, an empathetic tone is taken up in referring to the difficulties young men face by rarely investing in their health. The editorial signals an awareness of how the young men feel. Such insider status of knowing or representing others' feelings implies an inclusive 'us' and thus aligns the editorials with the young men. However, in example 14, a warning tone towards young men is adopted in predicting the higher price they will pay for their insufficient health investment:

(14) 运动/不足/付出/的/"成本"/，最终/还/是/由/自己/的/身体、生活/以/更/大/代价/偿还。

Exercise / insufficiency / pay / DE / cost /, finally / still / is / through / self / DE / body /, life / use / bigger / price / pay.

[The cost of insufficient exercise in the end will be a higher price to pay through one's body and life.]

Resonant with investment at the individual level, a national-level investment can also be observed, where healthy human bodies are viewed as key capital for national development. It equates the unhealthy (here specifically obese) bodies with national losses, implying the nation will bear costs caused by people's failure to maintain good health as in example 15:

(15) 国家/为/培养/一个/大学生/付出/很大/代价/……，但/如果/身体/不好/，一切/都/等于/零。

Country / for / bring up / one / college student / pay / very big / price /…, but / if / body / not good /, all / total / equal / zero.

[The country has paid a lot for bringing up a college student…, if (his or her) body is not good, everything will become zero.]

Through measuring the efficiency of bodies, the investment metaphor stretches to the level where individuals are deemed as human resources and human capital (Rhodes & Garrick, 2002) for national development. To reduce the loss, bodily weight is called upon to be treated as if it were a stock market (example 16), and exercises for keeping a healthy bodily weight are metaphorically referred to as a form of 'work' aimed at producing value (example 17):

> (16) 像/关心/<u>股市</u>/一样/关心/国民/的/平均/身高/体重。
> Like / care / stock-market / the same / care / national / DE / average / height / weight
> [Paying attention to nationals' average height and weight is like paying attention to the<u> stock-market</u>.]

> (17) 锻炼/"<u>复工</u>"/也/是/当务之急。
> Exercise / 'return to work' / also / is / urgent.
> [It is also urgent to '<u>return to work</u>' in terms of exercise.]

To sum up, within the MONEY grouping, the editorials count the costs of obesity and encourage individuals to control their weight as a profit-driven act, both for themselves and for the nation. Within the grouping, the body is viewed as a good and as social capital both for individual and national development. Obese individuals are negatively evaluated as being unable to invest in themselves and also as failing to contribute value to the collective national development.

6. Conclusion

Our study explores how editorials in the *People's Daily* use various metaphors, especially within the groupings of JOURNEY, WAR and MONEY, to frame obesity and convey evaluations of obesity. Overall, we find that the editorials negatively represent obesity and obese individuals. In most cases, we find that the editorials generally construct weight as harmful for a healthy body, even though the themes of 'obesity' or 'weight loss' are not always explicitly mentioned. This is in line with Sun et al.'s (2020) finding that Chinese newspapers stress physical health risks brought on by obesity. This resonates with the medicalised discourse surrounding obesity seen in previous studies in Western contexts (e.g. Boero, 2007; Conrad, 2007; Hilton et al., 2012; Holmes, 2009; Wright & Harwood, 2012). Such medicalised discourse can be viewed as a symptom of an increasing concern about the declining health of the Chinese people along with China's urbanisation and development (Lee, 2004).

However, the editorials do not stop at framing obesity just as a health issue. In comparison to obesity being mainly seen as an individual (lifestyle) problem in Western contexts, we observe in our data that obesity in the *Daily* is generally treated as an issue highlighting national will, which aims to build alignment among the whole of society as seen in the systematic metaphors covering 'national journey', 'national security' and 'national investment'. This

is understandable given the collectivist orientation of Chinese culture, which is also demonstrated by the editorials' mentions of the responsibilities of various stakeholders (e.g., parents, teachers) in helping obese individuals. It constructs a sense of solidarity among all groups in the joint work of controlling bodily weight. Such a collective behaviour model is also found by Liu (2020, p. 348) who shows that narrative practices in Chinese political discourse usually stresses national or group factors, which may help to explain why Chinese official media and Western media have quite different discourse models when they tell the same story, like with obesity in our study.

Yet it is interesting to see that in stark contrast to the collectivist orientation of Chinese culture, of which the JOURNEY and WAR metaphors are representatives, MONEY metaphors promote an individualist strategy for profiting on the market. By using the MONEY metaphor, the editorials seemingly presume sympathy towards neoliberalism, which stresses 'individuals as self-governing, independent entities that are engaged in endless self-examination and improvement' (Petersen, 1997, cited in Moran & Lee, 2013, p. 374). The presence of MONEY metaphors may perhaps show that the editorials presume their readers to be open to neoliberal ways of thinking. Future research on health discourses in China should explore this apparent contradiction in our findings.

As obesity is a relatively new and emerging public health issue in China, the media play an important role in introducing and disseminating obesity-related information to the public, and to a large extent influence how obese individuals are treated and how weight is understood in society. We believe WAR metaphors in particular affect how obese individuals are viewed. We have discussed the positive aspects of WAR metaphors, taking into account China's public memory, especially the memories of past wars and humiliating experiences in China's recent history. The use of WAR metaphors is therefore effective and ready to motivate the public to fight against obesity. However, as WAR metaphors highlight the need to win the fighting through urgent, radical and swift actions, we believe they are more useful in situations where motivation is necessary (for instance, cancer, see Semino et al., 2017), but potentially inadequate in cases such as obesity, whose status as a health risk is dubious and whose definition is often affected by social constructs of the 'thin ideal' (Bessenoff, 2006). More importantly, WAR metaphors can reinforce the 'othering', disalignment or marginalisation of obese individuals given the negative image depicted of them. Therefore, we believe the negative evaluation of obesity in our data could have the potential to perpetuate a sense of stigmatisation and discrimination towards obese individuals.

Similar potentially adverse framing effects of WAR metaphors are found in a recent study on metaphor use surrounding Covid-19 by Semino (2021). This study doubts the elusive clear-cut victory suggested by WAR metaphors, which attribute guilt to patients who do not recover. According to the study, the use of WAR metaphors reinforces the conception that recovery solely depends on the character of patients, rather than 'a combination of demographic characteristics, genetics, circumstances, and medical treatment' (Semino, 2021). We believe that a similar issue could occur with obese individuals, who are visibly stigmatised (as it is hard to physically conceal obesity) and hence are even more subjected to social marginalisation if they are called into a war

on their own bodies, in which their characters are counted as the only cause of obesity. Research has also shown that stigmatisation of obese individuals may interfere with public efforts in obesity prevention (Puhl & Heuer, 2010).

Admittedly, our study has some limitations. Methodologically, the application of MIPVU to Chinese is in its infancy and future work can explore more methodological issues in doing metaphor analysis on Chinese discourse. For example, our analysis found numerous cases of specific Chinese idioms and cultural items. Future research could involve an analysis on the culture-laden metaphorical terms in cross-cultural and linguistic comparisons. Attention could also be paid to the historic changes of the metaphors to see how the changing socio-cultural circumstances impact on the use and evolution of different metaphors. Subsequent discourse studies could also look into more varied metaphors to see how they draw a more complete picture of obesity in the Chinese context.

In all, our study of metaphor uses in the *People's Daily* that are related to obesity provides fresh insights into how Chinese official media frames and evaluates obesity. Our findings add to our cross-linguistic and intercultural understanding of health communication surrounding obesity and also suggest improvements for communication practices on the issue of obesity and the role of weight in society in general.

Acknowledgements

Notes

1. Metaphorical expressions and their translations are underlined throughout this paper; all translations in this article are by the first author unless otherwise noted; numbered examples are given a gloss to clarify the translations.
2. Unlike Tay (2017), we believe that the MIPVU and the Discourse Dynamics Approach are compatible and can be jointly used for our paper.
3. Due to the space limit, we only listed the 10 most frequently occurring metaphor groupings. Other less frequent groupings include AGRICULTURE, SENSORY, OBSTACLE, ARTS, RELIGION and EMOTION.

References

Atanasova, D. (2018). "Keep moving forward. LEFT RIGHT LEFT": A critical metaphor analysis and addressivity analysis of personal and professional obesity blogs. *Discourse, Context and Media*, *25*, 5–12. https://doi.org/10.1016/j.dcm.2017.09.012

Atanasova, D., & Koteyko, N. (2020). Fighting obesity, sustaining stigma: How can critical metaphor analysis help uncover subtle stigma in media discourse on obesity. In Z. Demjén

(Ed.), *Applying Linguistics in Illness and Healthcare Contexts* (pp. 223–243). Bloomsbury Academic. https://doi.org/10.5040/9781350057685.0017

Bailey, A., Dening, T., & Harvey, K. (2021). Battles and breakthroughs: Representations of dementia in the British press. *Ageing and Society, 41*(2), 362–376. https://doi.org/10.1017/S0144686X19001120

Baker, P., Brookes, G., Atanasova, D., & Flint, S. W. (2020). Changing frames of obesity in the UK press 2008–2017. *Social Science & Medicine, 264* (September), 113403. https://doi.org/10.1016/j.socscimed.2020.113403

Baker, P., Brookes, G., & Evans, C. (2019). *The Language of Patient Feedback: A Corpus Linguistic Study of Online Health Communication*. Routledge. https://doi.org/10.4324/9780429259265

Barry, C. L., Jarlenski, M., Rachel, G., Schlesinger, M., & Gollust, S. E. (2011). News media framing of childhood obesity in the United States from 2000 to 2009. *PEDIATRICS, 128*(1), 132–145. https://doi.org/10.1542/peds.2010-3924

Bessenoff, G. R. (2006). Can the media affect us? Social comparison, self-discrepancy, and the thin ideal. *Psychology of Women Quarterly, 30*(3), 239–251. https://doi.org/10.1111/j.1471-6402.2006.00292.x

Boero, N. (2007). All the news that's fat to print: The American "obesity epidemic" and the media. *Qualitative Sociology, 30*, 41–60. https://doi.org/10.1007/s11133-006-9010-4

Brookes, G., & Baker, P. (2021). Fear and responsibility: Discourses of obesity and risk in the UK press. *Journal of Risk Research*, 1–16. https://doi.org/10.1080/13669877.2020.1863849

Brookes, G., Harvey, K., Chadborn, N., & Dening, T. (2018). "Our biggest killer": Multimodal discourse representations of dementia in the British press. *Social Semiotics, 28*(3), 371–395. https://doi.org/10.1080/10350330.2017.1345111

Cameron, L. (2010). The discourse dynamics framework for metaphor. In L. Cameron & R. Maslen (Eds.), *Metaphor Analysis: Research Practice in Applied Linguistics, Social Sciences and the Humanities* (pp. 77-94). Equinox.

Cameron, L., & Deignan, A. (2006). The emergence of metaphor in discourse. *Applied Linguistics, 27*(4), 671–690. https://doi.org/10.1093/applin/aml032

Cameron, L., Low, G., & Maslen, R. (2010). Finding systematicity in metaphor use. In L. Cameron & R. Maslen (Eds.), *Metaphor Analysis: Research Practice in Applied Linguistics, Social Sciences and the Humanities* (pp. 116-146). London: Equinox.

Cameron, L., & Maslen, R. (Eds.) (2010). *Metaphor Analysis: Research Practice in Applied Linguistics, Social Sciences and the Humanities*. Equinox.

Cameron, L., Maslen, R., Todd, Z., Maule, J., Stratton, P., & Stanley, N. (2009). The discourse dynamics approach to metaphor and metaphor-led discourse analysis. *Metaphor and Symbol, 24*(2), 63–89. https://doi.org/10.1080/10926480902830821

Castaño, E. (2019). Discourse analysis as a tool for uncovering the lived experience of dementia: Metaphor framing and well-being in early-onset dementia narratives. *Discourse and Communication, 14*(2), 115-132. https://doi.org/10.1177/1750481319890385

Charteris-Black, J. (2004). *Corpus Approaches to Critical Metaphor Analysis*. Springer. https://doi.org/10.1057/9780230000612

Charteris-Black, J. (2012). Shattering the bell jar: Metaphor, gender, and depression. *Metaphor and Symbol, 27*(3), 199–216. https://doi.org/10.1080/10926488.2012.665796

Conrad, P. (2007). The Medicalization of Society: On the Transformation of Human Conditions into Treatable Disorders. JHU Press. https://doi.org/10.1001/jama.298.17.2070

Cotter, C., Samos, D., & Swinglehurst, D. (2021). Framing obesity in public discourse: Representation through metaphor across text type. *Journal of Pragmatics*, *174*, 14–27. https://doi.org/10.1016/j.pragma.2020.12.015

Deignan, A. (2010). Evaluative properties of metaphors. In G. Low, Z. Todd, A. Deignan, & L. Cameron (Eds.), *Researching and Applying Metaphor in the Real World* (pp. 357–373). John Benjamins Publishing. https://doi.org/10.1075/hcp.26.10ter

Demjén, Z. (2016). Laughing at cancer: Humour, empowerment, solidarity and coping online. *Journal of Pragmatics*, *101*, 18–30. https://doi.org/10.1016/j.pragma.2016.05.010

Demjén, Z., Marszalek, A., Semino, E., & Varese, F. (2019). Metaphor framing and distress in lived-experience accounts of voice-hearing. *Psychosis*, *11*(1), 16–27. https://doi.org/10.1080/17522439.2018.1563626

Demjén, Z., Semino, E., & Koller, V. (2016). Metaphors for 'good' and 'bad' deaths: A health professional view. *Metaphor and the Social World*, *6*(1), 1–19. https://doi.org/10.1075/msw.6.1.01dem

Demmen, J., Semino, E., Demjén, Z., Koller, V., Hardie, A., Rayson, P., & Payne, S. (2015). A computer-assisted study of the use of Violence metaphors for cancer and end of life by patients, family carers and health professionals. *International Journal of Corpus Linguistics*, *20*(2), 205–231. https://doi.org/10.1075/ijcl.20.2.03dem

Ehlert, J. (2019). Obesity, biopower, and embodiment of caring: Foodwork and maternal ambivalences in Ho Chi Minh City. In J. Ehlert & N. K. Faltmann (Eds.), *Food Anxiety in Globalising Vietnam* (pp. 105–135). Springer Nature. https://doi.org/10.1007/978-981-13-0743-0_4

Fan, H., & Zhang, X. (2020). Alarming trends in severe obesity in Chinese children from 1991 to 2015. *Childhood Obesity*, *16*(4), 244–249. https://doi.org/10.1089/chi.2019.0171

Flint, S. W., & Snook, J. (2014). Obesity and discrimination: The next big issue. *International Journal of Discrimination and the Law*, *14*(3), 183–193. https://doi.org/10.1177/1358229114534550

Flusberg, S. J., Matlock, T., & Thibodeau, P. H. (2018). War metaphors in public discourse. *Metaphor and Symbol*, *33*(1), 1–18. https://doi.org/10.1080/10926488.2018.1407992

Gilman, S. L. (2010). *Obesity: The Biography*. Oxford University Press.

Gustafsson, A., & Hommerberg, C. (2018). 'It is completely ok to give up a little sometimes': Metaphors and normality in Swedish cancer talk. *Critical Approaches to Discourse Analysis across Disciplines*, *10*(1), 1–16.

Harrington, N. G. (2015). Health Communication: Theory, method and application. Routledge.

Harvey, K., & Koteyko, N. (Ed.) (2013). *Exploring health communication: Language in action*. Routledge. https://doi.org/10.4324/9780203096437

Hendricks, R. K., Demjén, Z., Semino, E., & Boroditsky, L. (2018). Emotional implications of metaphor: Consequences of metaphor framing for mindset about cancer. *Metaphor and Symbol*, *33*(4), 267–279. https://doi.org/10.1080/10926488.2018.1549835

Hilton, S., Patterson, C., & Teyhan, A. (2012). Escalating coverage of obesity in UK newspapers: The evolution and framing of the obesity epidemic from 1996 to 2010. *Obesity*, *20*(8), 1688–1695. https://doi.org/10.1038/oby.2012.27

Ho, J. (2020). "She Starts Breakdancing, I Swear!": Metaphor, Framing, and Digital Pregnancy Discussions. *Metaphor and Symbol*, *35*(3), 171–187. https://doi.org/10.1080/10926488.2020.1767335

Holmes, B. J. (2009). Media coverage of Canada's obesity epidemic: Illustrating the subtleties of surveillance medicine. *Critical Public Health*, *19*(2), 223–233. https://doi.org/10.1080/09581590802478048

Huan, C. (2018). *Journalistic Stance in Chinese and Australian Hard News*. Springer. https://doi.org/10.1007/978-981-13-0791-1

Kim, S. H., & Willis, L. A. (2007). Talking about obesity: News framing of who is responsible for causing and fixing the problem. *Journal of Health Communication*, *12*(4), 359–376. https://doi.org/10.1080/10810730701326051

Lakoff, G., & Johnson, M. (2003). *Metaphors We Live By*. The University of Chicago Press. https://doi.org/10.7208/chicago/9780226470993.001.0001

Lawrence, R. G. (2004). Framing obesity: The evolution of news discourse on a public health issue. *Harvard International Journal of Press/Politics*, *9*(3), 56–75. https://doi.org/10.1177/1081180X04266581

LeBesco, K. (2010). Fat Panic and the New Morality. In J. M. Metzl and A. Kirkland (eds.), *Against Health: How Health Became the New Morality* (pp: 72–82). New York University Press. https://doi.org/10.18574/9780814759639-007

LeBesco, K. (2011). Neoliberalism, public health, and the moral perils of fatness. *Critical Public Health*, *21*(2), 153–164. https://doi.org/10.1080/09581596.2010.529422

Lee, L. (2004). The current state of public health in China. *Annual Review of Public Health*, *25*, 327–339. https://doi.org/10.1146/annurev.publhealth.25.101802.123116

Littlemore, J., & Turner, S. (2020). Metaphors in communication about pregnancy loss. *Metaphor and the Social World*, *10*(1), 45–75. https://doi.org/10.1075/msw.18030.lit

Liu, L. (2020). Identity construction and negotiation in Chinese political discourse. *Journal of Language and Politics*, *19*(2), 331–351. https://doi.org/10.1075/jlp.18057.liu

Metzl, J. M., & Kirkland, A. (2010). 'Health' is not fit for purpose. *New Scientist*, *208*(2787), 28–29. https://doi.org/10.1016/s0262-4079(10)62873-4

Monaghan, L. F. (2008). *Men and the war on obesity: A sociological study*. Routledge. https://doi.org/10.1017/CBO9781107415324.004

Moran, C., & Lee, C. (2013). Selling genital cosmetic surgery to healthy women: a multimodal discourse analysis of Australian surgical websites. *Critical Discourse Studies*, *10*(4), 373-391. https://doi.org/10.1080/17405904.2013.813772

Nimegeer, A., Patterson, C., & Hilton, S. (2019). Media framing of childhood obesity: A content analysis of UK newspapers from 1996 to 2014. *BMJ Open*, *9*(4), 1–10. https://doi.org/10.1136/bmjopen-2018-025646

Petersen, A. (1997). Risk, governance and the new public health. In R. Bunton & A. R. Petersen (Eds.), *Foucault, health and medicine* (pp. 189–206). Routledge. https://doi.org/10.4324/9780203005347-22

Phillips, N. & Hardy. C. (2002). Discourse Analysis: Investigating Processes of Social Construction. Sage.

Popkin, B. M. (2011). Is the obesity epidemic a national security issue around the globe? *Current Opinion in Endocrinology, Diabetes and Obesity*, *18*(5), 328–331. https://doi.org/10.1097/MED.0b013e3283471c74

Pragglejaz Group. (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor and symbol*, *22*(1), 1-39. https://doi.org/10.1080/10926480709336752

Puhl, R. M., & Heuer, C. A. (2010). Obesity stigma: important considerations for public health. *American journal of public health*, *100*(6), 1019-1028. https://doi.org/10.2105/ajph.2009.159491

Qin, X., & Pan, J. (2016). The medical cost attributable to obesity and overweight in China: Estimation based on longtidinal surveys. *Health Economics*, *25*, 1291–1311. https://doi.org/10.1002/hec

Rhodes, C., & Garrick, J. (2002). Economic metaphors and working knowledge: Enter the 'cogito-economic' subject. *Human Resource Development International*, *5*(1), 87–97. https://doi.org/10.1080/13678860110018803

Saguy, A. C., & Almeling, R. (2008). Fat in the fire? Science, the news media, and the "Obesity Epidemic." *Social Forum*, *23*(1), 53–83. https://doi.org/10.1111/j.1573-7861.2007.00046.x

Saguy, A. C., Gruys, K., & Gong, S. (2010). Social Problem Construction and National Context: News Reporting on "Overweight" and "Obesity" in the United States and France. *Social Problems*, *57*(4), 586–610. https://doi.org/10.1525/sp.2010.57.4.586

Semino, E. (2008). *Metaphor in Discourse*. Cambridge University Press. https://doi.org/10.1017/cbo9780511896316.017

Semino, E. (2021). "Not soldiers but fire-fighters" – Metaphors and Covid-19. *Health Communication*, *36*(1), 50–58. https://doi.org/10.1080/10410236.2020.1844989

Semino, E., Demjén, Z., & Demmen, J. (2018). An integrated approach to metaphor and framing in cognition, discourse, and practice, with an application to metaphors for cancer. *Applied Linguistics*, *39*(5), 625–645. https://doi.org/10.1093/applin/amw028

Semino, E., Demjén, Z., Demmen, J., Koller, V., Payne, S., Hardie, A., & Rayson, P. (2017). The online use of Violence and Journey metaphors by patients with cancer, as compared with health professionals: A mixed methods study. *BMJ Supportive and Palliative Care*, *7*(1), 60–66. https://doi.org/10.1136/bmjspcare-2014-000785

Semino, E., Demjén, Z., Hardie, A., Payne, S., & Rayson, P. (2018). *Metaphor, Cancer and the End of Life: A Corpus-Based Study*. Routledge. https://doi.org/10.4324/9781315629834

Sontag, S. (1978). *Illness as Metaphor*. Farrar, Straus and Giroux.

Sopory, P. (2017). Metaphor in health and risk communication. *Oxford Research Encyclopedia of Communication*, (August), 1–22. https://doi.org/10.1093/acrefore/9780190228613.013.304

Steen, G. J., Dorst, A. G., Berenike Herrmann, J., Kaal, A. A., Krennmayr, T., & Pasma, T. (2010). *A Method for Linguistic Metaphor Identification: From MIP to MIPVU*. John Benjamins Publishing Company. https://doi.org/10.1075/celcr.14

Sun, S., He, J., Shen, B., Fan, X., Chen, Y., & Yang, X. (2020). Obesity as a "self-regulated epidemic": Coverage of obesity in Chinese newspapers. *Eating and Weight Disorders - Studies on Anorexia, Bulimia and Obesity*, (0123456789). https://doi.org/10.1007/s40519-020-00886-8

Tay, D. (2015). Metaphor in case study articles on Chinese university counseling service websites. *Chinese Language and Discourse*, *6*(1), 28-56. https://doi.org/10.1075/cld.6.1.02tay

Tay, D. (2017). Quantitative metaphor usage patterns in Chinese psychotherapy talk. *Communication and Medicine*, *14*(1), 51–68. https://doi.org/10.1558/cam.27688

Tay, D. (2019). Metaphor response categories and distribution between therapists and clients: A case study in the Chinese context. *Journal of Constructivist Psychology*, 1–17. https://doi.org/10.1080/10720537.2019.1697913

Teng, F., You, J., Poon, K. T., Yang, Y., You, J., & Jiang, Y. (2017). Materialism predicts young Chinese women's self-objectification and body surveillance. *Sex Roles*, *76*(7–8), 448–459. https://doi.org/10.1007/s11199-016-0671-5

The State Council of the People's Republic of China. (2019). 国务院关于实施健康中国行动的意见 [Opinions of the State Council on Implementing the Healthy China Initiative]. The Central Government of People's Repblic of China [online]. Available: http://www.gov.cn/zhengce/content/2019-07/15/content_5409492.htm. Last accessed 9 May 2021.

Thomala, L. L. (2021). Chinese overweight population share by gender 2019. Statista [online]. Available: https://www.statista.com/statistics/1069140/china-overweight-population-share-by-gender/. Last accessed 9 May 2021.

van Hooft, J., Patterson, C., Löf, M., Alexandrou, C., Hilton, S., & Nimegeer, A. (2018). Media framing and construction of childhood obesity: A content analysis of Swedish newspapers. *Obesity Science & Practice*, *4*(1), 4–13. https://doi.org/10.1002/osp4.150

Wang, B. P., Lu, X., Hsu, C., Lin, E. P., & Ai, H. (2019). Linguistic metaphor identification in Chinese. In S. Nacey, A. G.Dorst, T. Krennmayr, & W. G. Reijnierse (Eds.), *Metaphor Identification in Multiple Languages: MIPVU around the World* (p. 247-265). John Benjamins Publishing Company. https://doi.org/10.1075/celcr.22.12wan

Wright, J. (2009). Biopower, biopedagogies and the obesity epidemic. In J. Wright and V. Harwood (eds.), *Biopolitics and the 'Obesity Epidemic': Governing bodies* (pp: 1–14.) Routledge. https://doi.org/10.4324/9780203882061-5

Wright, J., & Harwood, V. (Eds.). (2012). Biopolitics and the 'obesity epidemic': Governing bodies (Vol. 3). Routledge. https://doi.org/10.4324/9780203882061

Yang, J. S. (2020). From discourse of weakness to discourse of empowerment: The topos of the "Sick Man of East Asia" in Modern China. In I. Amelung (ed.), *Discourse of Weakness in Mordern China: Historical Diagnoses of the "Sick Man of East Asia"* (pp: 25-78). Schwächediskurse und Ressourcenregime.

Yi, Z., Xu, R. Q., Zhao, K., & Li, K. J. (2012). Television news coverage of obesity in China, 1982-2009. *Biomedical and Environmental Sciences*, *25*(3), 325–333. https://doi.org/10.3967/0895-3988.2012.03.011

Yoo, J. H., & Kim, J. (2012). Obesity in the new media: A content analysis of obesity videos on YouTube. *Health Communication*, *27*(1), 86–97. https://doi.org/10.1080/10410236.2011.569003

Youngson, A., Cole, F., Wilby, H., & Cox, D. (2015). The lived experience of diabetes: Conceptualisation using a metaphor. *The British Journal of Occupational Therapy*, *78*(1), 24–32. https://doi.org/10.1177/0308022614561240

Yu, Y. (2019). Metaphorical representations of "leftover women": Between traditional patriarchy and modern egalitarianism. *Social Semiotics*, 1–18. https://doi.org/10.1080/10350330.2019.1625515

Zhao, W., Zhai, Y., Hu, J., Wang, J., Yang, Z., Kong, L., & Chen, C. (2008). Economic burden of obesity-related chronic diseases in Mainland China. *Obesity Reviews*, *9*(SUPPL. 1), 62–67. https://doi.org/10.1111/j.1467-789X.2007.00440.x