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體現與生成詞彙之交會：以台灣總統演講中的
身體隱喻為例

When Embodiment Meets Generative Lexicon:
The Human Body Part Metaphors in
Taiwan Presidential Speeches

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體現 (embodiment) 與生成詞彙 (generative lexicon) 之交會：

以台灣總統演講中的身體隱喻為例

When Embodiment Meets Generative Lexicon:

The Human Body Part Metaphors in Taiwan Presidential Speeches

本論文係 段人鳳 君 (學號 D94142001) 在國立臺灣大學語言學
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黃以文

致謝



‘E quando você quer alguma coisa, todo o Universo conspira para que você realize seu desejo. [當你真心渴望追求某種事物時，整個宇宙都會聯合起來幫你完成。]’

Paulo Coelho. 1988. *O Alquimista* [牧羊少年奇幻之旅]

我想取得博士學位。2005 年秋天，我有幸獲得國立台灣大學語言學研究所錄取，成為博士班的一員，開始了我通往博士的旅程。錄取博士班後，在需要兼顧工作和學業的情況下，迎向我的並非平坦的康莊大道，而是蜿蜒的崎嶇小徑。一路上，我不斷告訴自己，順風逆風，都得前進；但在似乎永無止境的路途上，有個想法卻總是浮現腦海：放棄吧！

所幸那個想法並未主宰我，我很高興我終究完成了這趟旅程。讓我不放棄的因素，來自於周遭的人對我的關愛、鼓勵、支持和鞭策。

我首先要感謝我的指導教授江文瑜博士。江博士引領我進入了政治話語和隱喻分析的殿堂，開啟了我對語言學的另一層認識。她給予我充分的自由，讓我得以選擇自己想做的論文題目。我也相當感激她的包容與耐心，每當我想放棄時，她總是用各種方式，激勵我前進，帶領我走完這趟旅程。

我的共同指導教授黃居仁博士也是我完成博士修業的一大動力。黃博士給了我來香港理工大學學習的機會，他的啟發讓我看研究課題的發展方向，他的指導讓我突破研究上的盲點和限制。我對黃博士的感恩之情，無法以筆墨形容。

國立台灣大學語言學研究所的蘇以文教授在我入學前，便對我鼓勵有加，在我入學後，更是對我循循善誘，試圖拓展我的視野，讓我看到語言學的不同面向。在論文口試過程中，蘇教授除了藉由提問讓我有機會闡述論文的貢獻，更指引了我未來研究的發展方向。

我也至為感激國立中正大學語言學研究所的張榮興教授和國立台灣大學語言學研究所的謝舒凱教授。他們在百忙中，抽空擔任我的口試委員，並根據自己的專業，提點了我的博士論文需要改進的部分，包含理論運用、觀念釐清和資料分析等面向，讓我得以補強這本論文之不足。

曾在台大語言所任教的黃宣範教授、安可思教授和張顯達教授，以及台大語言所所長宋麗梅教授和呂佳蓉教授，在我的博士研修的路上，給予相當大的啟發、引導和關懷。對於他們，我滿懷感恩。

同儕和行政的支援也是讓我持續前進的動力。我相當感謝台大語言所邱盛秀、鍾曉芳、卡霞、陳萱芳、李乃欣、呂維倫、王國樹、龔書萍、洪嘉馥...等對我的幫助、加油與鼓勵，也謝謝香港理工大學中文及雙語學系的李逸薇、熊佳娟和許洪志給我的觀念上的建構和技術上的協助，讓我在這趟旅程中，有時雖然放慢腳步或駐足休息，但之後總能繼續向前。我也非常感謝台大語言所辦公室劉美玲小姐和劉嘉蘭小姐，在他們繁忙的行政工作中，總是提供我相當大的協助。

家人給我無條件的愛與支持讓我沒有回頭的理​​由。我很遺憾這趟旅程開始前，先父便已蒙主寵召；而在我博士修業過程中，先母和兄長亦先後因癌症離我而去。雖然不在我身邊，但我相信他們以某種形式，守護著我一路前行。所幸，我還有家姊，讓我不致孑然一身；她也盡其所能，令我無後顧之憂地完成學業。

有志竟成，不論要花多久時間，不論其間過程如何，當一個人真心渴求某件事物時，整個宇宙會聯合起來幫他／她完成。這趟博士研修的路途，讓我深切體認到這句話的真諦：整個宇宙，透過我所遇到的人們，幫助我完成了這趟旅程。

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中文摘要

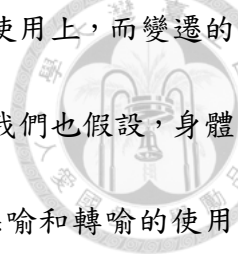


本論文旨在結合體現 (embodiment) 和生成詞彙 (generative lexicon) 兩大理論。

藉由分析台灣總統語料庫中，由身體部位名稱構成之隱喻／轉喻，本論文凸顯這兩大理論可互補彼此之不足：透過彰顯意義產生的認知層面，體現彌補了生成詞彙未對意義來源說明的缺憾；生成詞彙，特別是物性結構 (qualia structure)，則藉由解釋身體部位做為隱喻／轉喻的選擇限制，來補強體現。我們分析了台灣總統語料庫中的四個身體部位—血、肉、骨、脈—作為隱喻／轉喻的用法，試圖回答下列問題：

- (1) 體現 (embodiment) 和生成詞彙 (generative lexicon) 如何互補？生成詞彙中的物性角色 (qualia role) 導致身體部位之隱喻／轉喻的使用？抑或是身體部位做為隱喻／轉喻的使用有助於提取該部位之物性角色？
- (2) 物性結構如何限制身體部位之隱喻／轉喻的使用？
- (3) 物性結構和生成詞彙機制 (generative mechanisms) 如何影響涉及身體部位的隱喻／轉喻之形成和理解？
- (4) 國家領導人如何藉由身體部位名詞來表達政治思維？他們對於身體部位的隱喻／轉喻使用如何反映政治脈絡？

本論文相信，不同的身體部位，以其功能和特徵，在政治演講中會有不同的



用法。不同的政治思維也會反映在身體部位名稱的隱喻／轉喻使用上，而變遷的政治環境也會造成不同領導者對於同一身體部位的不同使用。我們也假設，身體部位之能見度 (visibility) 和功能 (telic) 角色為驅使該部位隱喻和轉喻的使用之最重要因素。

本論文對於概念隱喻、生成詞彙和政治話語等研究皆有所貢獻。在方法上，本論文修改了 Pragglejaz Group 於 2007 年所提出之隱喻辨識程序 (metaphor identification procedure)，為中文語料之隱喻辨識提出了較佳的方法。再者，本論文納入生成詞彙理論，俾便研究者更正確地推導出涉及身體部位的隱喻和轉喻，且有助於這類語言現象的理解。在理論上，本論文建立了物性角色和隱喻之間的相互關聯，同時也預測，身體部位的能見度和功能性為促成其隱喻／轉喻使用的最重要因素。在政治話語研究方面，本論文有系統的分析了台灣總統演講中，身體部位的隱喻／轉喻使用，彰顯了政治脈絡如何影響身體部位詞彙的使用。

Abstract



This dissertation integrates embodiment with generative lexicon. By analyzing the metaphorically/metonymically used human body part terminology in the Taiwan Presidential Corpus, a representative sample of the Taiwanese leadership rhetoric, we reveal how these two theories complement each other on the one hand, and disclose how the changing political context leads to the discriminated uses of the corporeal terms on the other hand. We argue that the two theories can complement each other: Embodiment strengthens generative lexicon by spelling out the cognitive reasons which motivate meaning generation; and generative lexicon, specifically the qualia structure, reinforces embodiment by accounting for the reason underlying the selection of a particular body part for metaphorization. Choosing to analyze how the four body parts—血 *xie* ‘blood’, 肉 *rou* ‘flesh’, 骨 *gu* ‘bone’, 脈 *mai* ‘meridian’—behave in the Taiwan Presidential Corpus, this dissertation aims to answer the following questions:

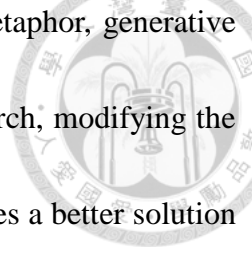
- (1) How do embodiment and generative lexicon interact? Does the qualia role influence the metaphorical/metonymical use of the body part terms? Or does the metaphorical/metonymical use of the body part terms facilitate the retrieval of the



qualia role?

- (2) What is the significance of qualia structure in constraining the selection of body parts for metaphorical/metonymical use?
- (3) What is the significance of the qualia structure and the generative mechanisms in the formulation and comprehension of the conceptual pairings involving body parts?
- (4) How are political ideas conceptualized by the country leadership's use of corporeal terminology? In other words, how can we establish the association between the activation of certain body parts and a certain political context?

This dissertation, built on the potentiality to incorporate embodiment and generative lexicon, investigates the body part metaphors/metonyms used in the leadership rhetoric in Taiwan. We hypothesize that different body parts are activated in different ways in political speeches due to their distinctive features and functions, and the visibility and telicity of a body part are the major reasons why the body part is chosen for metaphorical/metonymical use. Moreover, different political agenda are likely to be reflected in the particular uses of corporeal terms, and the change of the socio-political context should lead to the diverging uses of an identical body part referred to in the speeches.



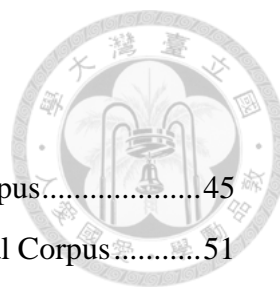
This dissertation will contribute to research on conceptual metaphor, generative lexicon, as well as political discourse. Methodologically, this research, modifying the metaphor identification procedure (Pragglejaz Group 2007), provides a better solution for metaphor identification in Chinese data. With the incorporation of generative lexicon, it furthermore facilitates the researcher to more accurately formulate the conceptual mappings involving body part terms, and to better comprehend metaphorically used body parts. Theoretically, taking generative lexicon into consideration, it establishes correlation between qualia roles and the conceptual mappings. Based on the findings, it also predicts that the visibility and telicity of a body part are the most dominant reasons which activate the choice of a body part for metaphorical/metonymical use. In the light of political discourse, it systematically analyzes how the human body parts are interweaved in the country leadership rhetoric, revealing the influence exerted by political context upon the use of corporeal terminology.

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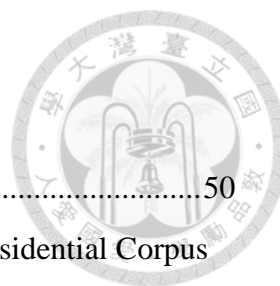
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List of Abbreviations



Linguistic terminology

ASP	The gloss of aspectual marker
BA	The gloss of 把
CL	The gloss of classifier
DE	The gloss of 的 and 之
INT	The gloss of intensifier
MIP	Metaphor identification procedure
NEG	The gloss of negative
PASS	The gloss of passive marker
PLU	The gloss of plural marker
PREP	The gloss of preposition
PRG	The gloss of progressive marker
SHI	The gloss of 是

Political terminology

CCP	Chinese Communist Party
Chen S.	Chen Shui-bian
Chiang C.	Chiang Ching-kuo
Chiang K.	Chiang Kai-shek
DPP	Democratic Progressive Party
KMT	Kuomintang, the Chinese Nationalist Party
Lee T.	Lee Teng-hui
Ma Y.	Ma Ying-jeou

PRC	People's Republic of China
ROC	Republic of China
USSR	The Union of Soviet Socialist Republics
Others	
TCM	Tradition Chinese Medicine

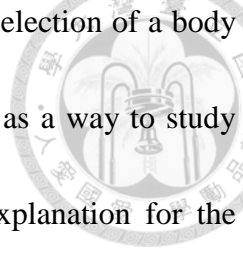


Chapter 1 Introduction



Human body is an important medium through which people understand the whole world. It is through the interaction between the human body and the environment that people make sense of what they perceive, with which they conceive. Body part terminology, therefore, is used extensively to represent a variety of notions, ranging from the physical surroundings, time, situations, to a person's emotion, temperament, behavior, etc. (e.g. Gibbs 2006, Kovecses 2002, Li 2015). This is embodiment, which demonstrates how body part terms are used metaphorically. While embodiment provides cognitive reasons which underlie meaning generation (e.g. Yu 2003, 2007) and serves as the foundation for people to understand conceptual metaphors (e.g. Lakoff and Johnson 1980, 1999, Johnson 2008), it does not account for exactly what triggers the conceptual mappings, or what constrains the selection of a body part term to represent a comparatively abstract notion.

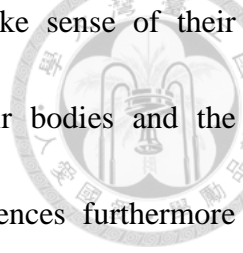
In order to explain the reasons underlying the conceptual pairings, this dissertation integrates the theory of embodiment, a key concept in cognitive linguistics, with the theory of Generative Lexicon (Pustejovsky 1991, 1995), of which we focus on Qualia Structure and generative mechanisms, by analyzing the lexical items containing body part terms in the Taiwan Presidential Corpus. Embodiment tackles how and where



meaning arises, but it falls short in explaining what motivates the selection of a body part to represent an abstract notion. Generative Lexicon functions as a way to study the representations and relations of meanings, but it lacks the explanation for the source of meanings. The integration of both, which has not been found in previous research, in the analysis of the corporeal metaphors in political speeches allows us to account for the cognitive motivation of body metaphor meaning and to represent these metaphors by qualia structure through mechanisms of selection. More importantly, the combination of the two theories enables us to find out the constraints underlying the choice of certain human body part in conceptual mappings.

1.1 Theoretical background

This dissertation involves two theories: embodiment and generative lexicon, each of which is sketched below and will be elaborated in Chapter 2. Embodiment, or the embodied theory of meaning by Johnson (2008), is proposed as a counterargument against mind-body dualism, a key concept of the Western philosophy and epistemology (Lakoff and Johnson 1999). The Western tradition has regarded mind and body as distinct entities, which are independent of each other and cannot be integrated. The proposal of embodiment, arguing against the dualist view of knowledge in the West, claims that body and mind should be regarded as continuity

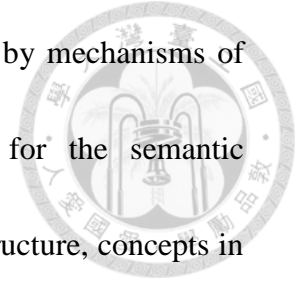


(e.g. Johnson 1987, 2008). Its central tenet is how people make sense of their experiences in the world lies in their interaction between their bodies and the environment. The meaning emerging from the corporeal experiences furthermore form the basis for people to understand abstract concepts. The human body and body parts, during the process of people's acquisition of knowledge and meaning, are involved and function as indispensable media. What the physical side goes through describe what the mental side conceives, and the mental states are instantiated by the physical states/actions. In a word, embodiment is to map a concrete body part or body onto a comparatively abstract concept that is difficult to understand/convey so as to facilitate communication.

Previous studies on embodiment (e.g. Yu 2009, 2011) focus on the identification of the human body and body parts used in the pairings, explaining how human body (parts) is/are activated for the conceptualization of abstract ideas. One question, however, is unanswered: Why human body or a specific body part is chosen in the representation of a concept? What mechanism facilitates the activation of the body (part) in the mapping? The answer, we expect, is to be answered with the supplementation of qualia structure and generative devices within generative lexicon.

Generative lexicon (Pustejovsky 1991, 1995) addresses the richness of word meanings. Tackling the creative use of words and the issues of compositionality of

lexical items, it proposes four levels of representation connected by mechanisms of selection. Among the four levels, qualia structure accounts for the semantic productivity of a lexical item in a construction. Based on qualia structure, concepts in the world are composed of at least the following four roles:



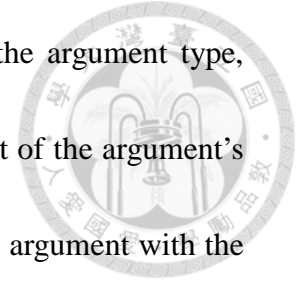
- (1) The constitutive role, which concerns the relation between an object and its constituents or parts;
- (2) The formal role, which distinguishes the object within a larger domain;
- (3) The telic role, which reveals the purpose and function of the object;
- (4) The agentive role, which explains the factors bringing about an object.

The constitutive and formal roles provide the descriptive information of an object. The telic and agentive roles, not directly referring to the object, present the embodiment information of the object at issue, as they represent eventive dimensions which indicate the interaction between the object and human beings, i.e. how it functions to people and how it is brought into being.

The generative devices involved in this research include the following (Pustejovsky and Jezek 2008):

- (1) Accommodation: the type a function requires is inherited by the argument; and

(2) Type coercion: the type a function requires is imposed on the argument type, which is accomplished by either (a) exploitation (taking a part of the argument's type to satisfy the function), or (b) introduction (wrapping the argument with the type required by the function).



The application of generative lexicon facilitates us to extrapolate why the human body or a specific body part is activated in the representation of an abstract notion. The qualia structure, specifically the telic and agentive roles, help us find out the reasons motivating the mappings, and furthermore make prediction about what body part(s) is/are to be chosen in other possible mappings. The generative mechanisms enable us to understand the metaphoricity of certain fixed idioms, which is yet to be addressed by conceptual metaphor theorists. Combining embodiment with generative lexicon, this dissertation aims to enrich the embodiment and conceptual metaphor theory with a more sophisticated view brought about by generative lexicon. Analyzing the metaphorical use of body parts in political speeches, we will testify that human body parts are not treated as equal in embodiment. Instead, specific body parts are chosen, and the rationale behind the choices can be explained and predicted with the application of qualia structure within generative lexicon. Moreover, analyzing the presidential speeches, we can spell out the tendency of how country leaders of

differing political contexts use body part terminology.



1.2 The presidential speeches and the corpus at issue

The data to be analyzed is the presidential speeches; specifically we select the Taiwan Presidential Corpus, expand it, and investigate how body part terms behave figuratively in this corpus. The presidential speeches are selected because speeches by political figures, especially by country leaders, are loaded with conceptual metaphors, since conceptual metaphors, which are ubiquitous in people's language, actions, and thoughts, facilitate the leaders to persuade the listeners, to relate themselves emotionally with the listeners in an unconscious manner, and to establish their own legitimacy while demolishing their opponents' (Charteris-Black 2004, 2011), without evoking the listeners' aversion (Mio 1997). Previous research on the figurative language occurring in the country leadership rhetoric addresses the domains extending from the human beings' activities, social relations and institutions (e.g. JOURNEY, FAMILY, and RELIGION domains), leaving unexplored the most embodied ones, i.e. the metaphors/metonyms emerging right out of the human body. This dissertation will make this up by systematically examining the metaphorically and/or metonymically used corporeal terminology in the presidential speeches in Taiwan.

The Taiwan Presidential Corpus, originally constructed by Huang and Ahrens

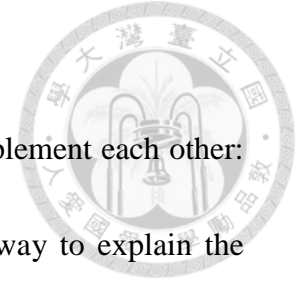
(2008), is expanded by the author to include the speeches delivered on New Year's days and Double Tenth days by the five presidents, Chiang Kai-shek, Chiang Ching-kuo, Lee Teng-hui, Chen Shui-bian, and Ma Ying-jeou, from 1955 to 2014. Spanning 60 years, and containing 13,044 types and 155,296 tokens of words, this corpus provides valuable data for analysis of political discourse in Chinese. The details of this corpus will be discussed in Section 3.1, Chapter 3.

1.3 The research questions and hypotheses

This dissertation aims to find the answers to the following three research questions:

- (1) How do embodiment and generative lexicon interact? Does the qualia structure influence the metaphorical use of the body parts? Or does the metaphorical use of the body part terms help the retrieval of the qualia role?
- (2) What is the significance of the qualia structure and the generative mechanisms in accounting for the reasons which underlie the mappings from body part terms to comparatively abstract concepts?
- (3) How are political ideas conceptualized by body parts? In other words, how can we establish the association between the activation of certain body parts and a certain political context?

This dissertation is built on the following four hypotheses:



- (1) We hypothesize that generative lexicon and embodiment complement each other:

generative lexicon strengthens embodiment by providing a way to explain the selection of a particular body part for metaphorization. Embodiment enhances generative lexicon by providing the cognitive reasons which underlies the meaning generation (Huang et al. 2013, Huang and Hsieh forthcoming)

- (2) Based on Hypothesis 1, we analyze the metaphors and metonyms involving body

parts in presidential speeches in Taiwan. We believe that different body parts, with their respective features and functions, present different versatility in the presidential speeches. As human body is composed of various parts, it is expected that one body part is chosen prior to another in the metaphorization.

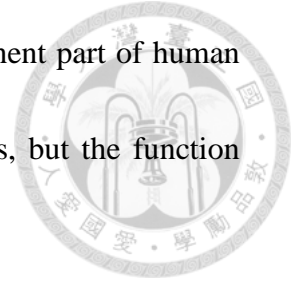
- (3) Different political agenda are expected to be expressed through distinctive uses of

body parts. The change of the socio-political context should lead to the variation of the body parts referred to in the speeches. Different body parts perform different functions. It is hypothesized that certain body part is chosen because of its corresponding functionality, which can be realized as telic or agentive role of qualia structure, in its metaphoric use.

- (4) Among the four roles of qualia structure, the telic role, referring to the purpose

and function of body parts, is predicted to be the most productive in the

representations of body metaphors. Not only does the component part of human body come into play in the metaphorical use in the speeches, but the function associated to the part motivates the use.



1.4 The contributions

This dissertation, integrating both embodiment and generative lexicon in the analysis of the presidential speeches, will contribute to the theory of conceptual metaphor and the research on political discourse. Regarding the conceptual metaphor theory, we will make contribution by proposing a modified version of metaphor identification procedure (MIP, Pragglejaz Group 2007) for researchers to identify the metaphoricity of Chinese lexical forms. More importantly, incorporating generative lexicon, specifically the qualia structure, in the metaphor analysis, we will not only elaborate correlations between the qualia structure and the conceptual mapping principles but also account for why one body part used metaphorically is prioritized to another.

In the light of political discourse, this dissertation will contribute to the research on the conceptual metaphors employed in country leadership rhetoric. It will not only uncover how the most embodied conceptual metaphors—the metaphorically used corporeal terminology—behave in presidential speeches, but also reveal the interaction between the socio-political context and the employment of these

metaphors by showing the five presidents' diverging uses of identical conceptual metaphors.



1.5 Chapter arrangements

The rest of the dissertation is structured as follows: In Chapter 2, we will briefly describe what have brought about embodiment and generative lexicon, and the previous research on both theories which is related to this dissertation. We will also review literature on the figurative language utilized in country leadership speeches and the research centering on this topic. In Chapter 3, we will address the corpus data and the political context. Furthermore, the method will be elaborated. Chapters 4-7 will be data analysis, followed by Chapter 8, which concludes this dissertation by discussing the contributions, the difficulties and the future development of this dissertation.

Chapter 2 Literature review

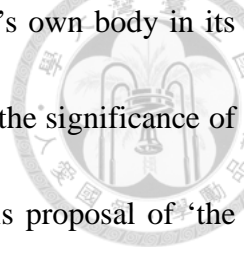


This chapter consists of three parts: embodiment, Generative Lexicon, and country leadership rhetoric. An overview of the three fields will be provided, followed by the previous studies which are pertinent to my dissertation.

2.1 Embodiment

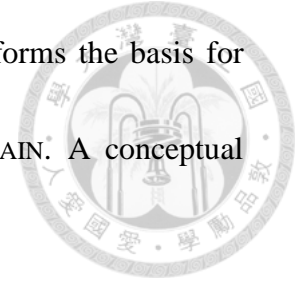
2.1.1 Embodiment, image schema and primary metaphor

The Western tradition of philosophy and epistemology has a long history in regarding mind and body as two ontologically distinct entities, denying the importance of human body in consideration of human thought. This can be traced far back to Ancient Greece, and the representative figure is Plato. According to Plato, ideas, directly present in the mind, are more real than the objects themselves, which are perceived through the physical faculties. With this Plato brought forth a hierarchy of reality, in which ideas are the most real, followed by physical objects, and then by images, shadows, and reflections of objects (Lakoff and Johnson 1999). In other words, what occurs at the mental level is more real than what occurs at the physical level. The mind is thus considered superior to the body, which leads to the division between them and neither can be assimilated.



Embodiment, referring to ‘understanding the role of an agent’s own body in its everyday, situated cognition’ (Gibbs 2006: 1), is a manifestation of the significance of the human body in cognition. This is reaffirmed by Johnson in his proposal of ‘the embodied theory of meaning’, in which he contends that meaning stems out of ‘the organic activities of embodied creatures in interaction with their changing environments’ (Johnson 2008: 11). The research of embodiment has been attracting scholars’ attention for recent decades (Ziemke and Frank 2007). Tracing the history of embodiment, it is thought that the term ‘conceptual metaphor’ is inseparable from ‘embodiment’ (Rohrer 2006) and the former serves as one of the anchors for understanding the latter (Wilson and Foglia 2011). The conceptual metaphor theory proposed by Lakoff and Johnson (1980), which claims that conceptual metaphors are deeply rooted in language, thought and action, has declared the importance of bodily source of sense making; namely, the bodily experiences/activities are the origins and structures of meaning. Contrary to the Western tradition of philosophy, of which the tenet is that the mind is disembodied, and concepts, logical relations and propositions have nothing to do with human body (Lakoff and Johnson 1999, Johnson 2008), Lakoff and Johnson contend that mind is intertwined with body, and how people make sense of their experiences in the world lies in the interaction between their bodies and things around them. The meaning emerging from the bodily experiences, called

SOURCE DOMAIN in the conceptual metaphor theory, furthermore forms the basis for people to understand abstract concepts, known as TARGET DOMAIN. A conceptual metaphor is formulated as TARGET DOMAIN IS SOURCE DOMAIN.

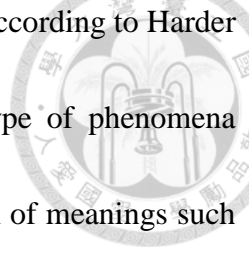


The proposal of conceptual metaphor theory, along with other theories,¹ erodes the division between body and mind, which directs people's attention to how the body and sensorimotor interaction with the environment influence people's thought and language. Lakoff and Johnson (1980, 1999) think that the majority of conceptual metaphors arise out of the sensorimotor experiences, and the abstract concepts are mostly structured via the bodily source domains. What best explain this argument is the orientational metaphors, which resort directly to the spatial orientations arising from the interaction between the human body and the environment. Whether it is the pair HAPPY IS UP, SAD IS DOWN, or CONSCIOUS IS UP, UNCONSCIOUS IS DOWN, this type of metaphors stems from the human corporeal experiences and subjective mental reactions to those experiences.²

Also focusing on the recurring fundamental physical activities and the mechanism stemming out of them, Johnson (1987) and Lakoff (1987) respectively

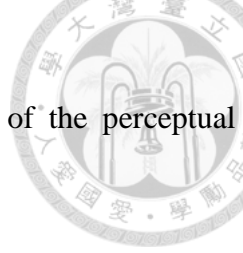
¹ According to Wilson and Foglia (2011), conceptual metaphor theory by Lakoff and Johnson (1980), the enactive perspective on cognition by Varela, Thompson and Rosch (1991) and the analysis on robotics and computationally intelligent action by Clark (1997) are three landmark works which provides a historical anchor in explaining embodiment at the earlier stage.

² The HAPPY IS UP, SAD IS DOWN pair is based on the physical state '[d]rooping posture typically goes along with sadness and depression, erect posture with a positive emotional state'. The CONSCIOUS IS UP, UNCONSCIOUS IS DOWN opposition is on the physical basis '[h]umans and most other mammals sleep lying down and stand up when they awaken' (Lakoff and Johnson 1980: 15)



propose *image schema*, an important mechanism of embodiment. According to Harder (2010), the notion image schema was developed to capture a type of phenomena perceived by Talmy (2000: 28), who argues that the comprehension of meanings such as ‘partition’, ‘linear extent’, and ‘adjacency’ is connected to the corporeal levels of human experiences which are thought to precede linguistic and conceptual knowledge. Image schemas are patterns emerging ‘primarily as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulation of objects, and our perceptual interactions’ (Johnson 1987: 29). In other words, they are recurring patterns, shapes or regularities ‘in, or of, our actions, perceptions, and conceptions’ (Rohrer 2006: 127).

According to Johnson (2008), image schemas are grounded in the fact that human beings are born to move, to exert their strength to manipulate objects and to respond to the surroundings. Certain patterns, emerging during people’s motion and their interaction with the objects and surroundings, occur over and over again that they become stable, visualized, and are retained in cognition. Image schemas, Johnson contends, should be viewed ‘as structures of sensorimotor experience that can be recruited for abstract conceptualization and reasoning’ (Johnson 2008: 141). Uniting the abstract and formal cognitive structure with the structure of bodily process, image schemas contain the following features:

- 
- (1) Recurrent, stable patterns of sensorimotor experiences;
 - (2) ‘image’-like, in that they preserve the topological structure of the perceptual whole;
 - (3) Operating dynamically in and across time;
 - (4) At once ‘bodily’ and ‘mental’;
 - (5) Predicated on interaction with a wider environment;
 - (6) Realized as activation patterns (or ‘contours’) in topologic neural maps;
 - (7) Structures that link sensorimotor experiences to conceptualization and language;
and
 - (8) Having internal structures that give rise to constrained inferences (Johnson 2008: 144)

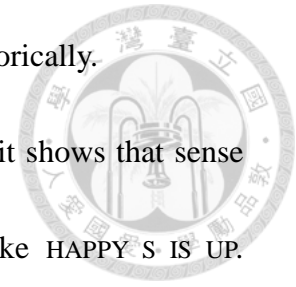
Take CONTAINER image schema, which consists of three parts: ‘a boundary, which demarcates’, ‘an interior’ and ‘from an exterior’ (Johnson 2008: 141). This schema arises because people put things into and take them out of a box, a jar, a bag, a container in general, or because people move in and out of a room, a house, a building, a container in a broader sense. From this schema people acquire the sense of containment. Another example is SOURCE-PATH-GOAL image schema, which consists of ‘a starting point’, ‘a destination’ and ‘a path from the starting location to the

destination' (ibid: 142). This path schema is formed because people move from one point to another, and the surface covered during the movement is considered the path between these two points.



Aiming to account for how our experiences in the world contribute to the formation of language and conceptual structure, Grady (1997) proposes *primary scenes* and *primary metaphors*, of which the former motivates the pairings in the latter. Primary scenes, referring to 'minimal (temporally delimited) episodes of subjective experience, characterized by tight correlations between physical circumstance and cognitive response' (ibid: 24) such as bodily warmth and proximity, stem from basic events, 'simple, real-time experiences which relate in particular ways to our goal-oriented interactions with the world'. The primary scenes go through the process of *conceptual binding* (ibid: 24), where certain scenes conflate due to their frequent association, and then through *deconflation* (ibid: 25), in which two highly correlated concepts are recognized distinct. The deconflated concepts then function as the source and target concepts which form *primary metaphors* (ibid: 25) and remain in human cognition. These metaphors are 'simple, atomic component of the molecular structure of complex metaphors' (Lakoff and Johnson 1999: 49). They are not only building blocks of complex metaphors, but they also explain the existence of a huge range of conventional conceptual metaphors, the way the metaphors are learned and their

precise details, and the mechanism by which people reason metaphorically.



Primary metaphor is an important notion of embodiment, as it shows that sense emerges from the bodily transaction with the environment. Take HAPPY S IS UP.

Classified as an orientational metaphor in Lakoff and Johnson (1980), it is a primary metaphor (Grady 1997: 295) and its details are listed below:

Metaphor	HAPPY IS UP
Motivation	The correlation between happiness and erect body posture. And/or correlation between being in a higher position (e.g. on a hill) and feeling safe, in control, etc.
Example	I was feeling <i>low</i> yesterday but the good weather has really <i>picked me up</i> . My spirits <i>soared</i> when they announced the winners of the competition.

In this metaphor, the body posture is tightly connected with the mental state, because the former is the direct reflection of the latter. The motivation, which shows the pairings between ‘subject judgment’ and ‘sensorimotor domain’ (Lakoff and Johnson 1999: 50) in the above example indicates it is the physical faculty, i.e. the straight upright body posture, rather than the mental capacity, involved in the meaning production in the metaphor. Another example is UNDERSTANDING IS GRASPING (Grady 1997: 297), which activates the faculty of manipulation, from which we know a specific body part *hand(s)* is involved:

Metaphor	UNDERSTANDING IS GRASPING
Motivation	Correlation between close manipulation of an object and access to information about it.
Example	I'm trying to <i>grasp</i> the meaning of this verdict. I think I finally have a <i>handle</i> on the statistical principles.



Image schemas and primary metaphors, two significant notions of embodiment, not only provide explanations of people's employment of metaphorical expressions, but also underscore the universality of human beings' conceptual system. However, embodiment is not all about universality. It is injected a dose of specificity by another factor: Culture. Since our data reveals certain metaphorically used corporeal terms are culturally driven, the interplay between culture and embodiment, specifically between the Chinese culture and embodiment, needs to be reviewed.

2.1.2 Culture and embodiment

In their explanation of orientational/spatialization metaphors such as HAPPY IS UP, SAD IS DOWN, Lakoff and Johnson think the formation of this metaphor takes root in 'our physical and cultural experience' (Lakoff and Johnson 1980: 14). Their explanation highlights another important dimension of the embodied theory of meaning: culture. Since human beings are situated in a certain culture, how culture influences

embodiment merits attention. Despite the lack of elaboration of the cultural dimension, Lakoff and Johnson emphasize the significance of culture in the activation of orientational metaphors. Cultural dimension thus should not be overlooked in the analysis of embodied theory of meaning. As cultural dimension is consequential in the analysis of this dissertation, it is elaborated as follows.

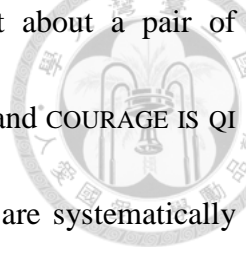
Studies to follow also call for the attention to cultural impact on embodiment. For example, Sinha and Jensen de Lopez (2000), extending the notion of embodiment beyond 'humanly corporeal' (ibid: 22) into the cultural level, point out the interaction between cultural behaviors and language patterns as well as how socio-cultural dimension structures the 'cognitive' unconscious'. Gibbs (2006) also emphasizes the importance of cultural dimension in the human mental capacity and language. As the world where human beings are situated and act is culture-loaded, the study of 'organism-environment mutuality and reciprocity' (ibid: 16) is thus essential to the study of human beings, and the human body can be regarded as a media for analyzing the culture system. Johnson and Rohrer (de Oliveira and de Souza Bittencourt 2007) reaffirm the significant role that socio-cultural dimension plays in embodiment. Johnson considers culture integral part in meaning making process embedded in embodiment, and Rohrer contends the surroundings in which people dwell is 'partly social and cultural; to explain things in bodily terms is to explain them, at least in

parts, in terms of the social and cultural' (ibid. 25).



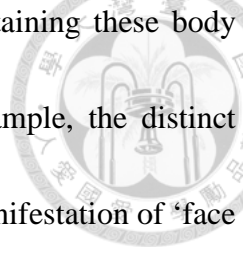
It is obvious that people's mind is embodied in such a way that the characteristics of the body and the specifics of the physical and cultural environment serve as the foundation in the formation of conceptual system. How people conceptualize entities, properties and events is defined by the interaction between the human body, the physical and cultural world (e.g. Gibbs 1994, 1999, Kovecses 2005, Maalej and Yu 2011, Yu 2008a, 2008b). Human body as a source imagery for understanding certain abstract concepts shows universality, but culture explains why certain aspects of sensorimotor experience are salient and meaningful.

Chinese is the language of our corpus data, in which quite a few cases are culturally dependent (e.g. 血氣 *xieqi* blood-breath 'blood and vital energy', 國脈 *guomai* country-meridian 'the life meridian of a country'). Chinese culture and its interaction with embodiment are therefore elaborated. In this light, Yu has done a series of research on expressions actuating Chinese culture, which points out the uniqueness of Chinese culture in lexical items with body parts, especially with the internal organs. For example, Yu (2003) addresses the Chinese expressions containing 膽(囊) *dan(nang)* gall(-bag) 'gallbladder', and argues that it is deeply influenced by the traditional Chinese medicine (TCM), in which the gallbladder is considered the body part to make judgments and decisions as well as to determine the degree of one's



courage. This cultural model emerging from TCM has brought about a pair of conceptual metaphors: ‘GALLBLADDER IS CONTAINER OF COURAGE, and COURAGE IS QI (GASEOUS VITAL ENERGY) IN GALLBLADDER’ (Yu 2003: 13), which are systematically reflected in the use of plentiful conventional expressions. Yu (2007), focusing on the organ *heart*, compares how this organ is pictured in the Chinese culture and the Western culture. He points out that, unlike the heart-mind dichotomy in the Western tradition, the notion 心 ‘heart’ in ancient Chinese philosophy and TCM is equivalent to the combination of ‘heart’ and ‘mind’ in English. That is, this organ in Chinese performs ‘both affective and cognitive activities’ (Yu 2007: 82). Also on the conceptualization of *heart* in ancient Chinese philosophy, Yu (2009) argues that the metaphor THE HEART IS THE RULER OF THE BODY is the most dominant metaphor underlying numerous expressions in Chinese. Moreover, bi-directional mappings exist between HEART and RULER, i.e. HEART AS RULER and RULER AS HEART, which is driven by the predominant belief in ancient Chinese philosophy that, like microcosm and macrocosm, man and universe correspond to each other.

Aside from the internal organs, Yu also explores how cultural dimensions motivate the conceptualization of external organs. Studying the compounds/idioms consisting of *hand*, *finger*, *palm*, *face* or *eyes* in Chinese, Yu argues that, though the conceptual development or mechanisms underlying the linguistic manifestation is



similar in both Chinese and English in terms of expressions containing these body parts, cultural influence has portrayed different pictures. For example, the distinct values assigned to the concepts containing *face* has led to richer manifestation of ‘face and facework’ (Yu 2009: 182) in Chinese than in English. In the same vein, Yu (2009, 2011) investigates speech organs in Chinese, referring to Radden’s (2004) metonymic chain: SPEECH ORGAN FOR SPEAKING, SPEECH ORGAN FOR SPEECH, and SPEECH ORGAN FOR LANGUAGE. He discovers that, while the first two metonymies are prevalent in the conventionalized expressions, the third is not lexicalized in Chinese but realized in the Chinese ‘ideographic writing system as components of the characters’ (Yu 2009: 213): it occurs as a radical in the Chinese characters referring to ‘language’ and ‘speech’. Yu’s research has shed light on the interplay between Chinese cultural and metaphoricality of body parts. However, quite a few examples discussed in his research are fixed idioms or compounds containing body parts and the way he identifies the metaphorically used words are not addressed; and he did not address exactly what motivates the metaphor uses. This dissertation is to explicate how to identify metaphorically used words and reveal what actually trigger the use.

Apart from culture, which plays a significant role in manifesting certain dimensions of embodiment, politics provides a field for the use of the figurative meanings of body parts. As this dissertation selects political discourse for data

analysis, the interaction between politics and embodiment is briefly discussed below.

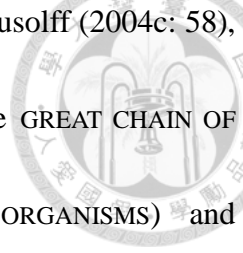


2.1.3 Politics and embodiment

Human body as a source of conceptual imagery denoting political issues, especially political entities, has a long tradition both East and West (e.g. Beer and De Landtsheer 2004, Hale 1971, Huang 2004). According to Huang (2004:346), ‘body thinking’ was a typical way to discuss politics in ancient China, where a kingdom was analogized as a microcosm, i.e. human body, and the monarch, the courtiers and the people were likened to different body parts (Huang 2004). The king was often conceptualized as the heart (cf. Yu 2009), and the courtiers and people as all other body parts than the heart, e.g. eyes, ears, lungs, liver, the whole body, etc.³ In some cases, the king was compared to the head while the courtiers/officials as the arms and legs. From the representations derives a concepts: the monarch, compared to either the heart or the head, is assigned with priority and dominance over the courtiers and people (Huang 2004: 363); in reverse, the heart and the head are prior to other parts of the body.

The hierarchy among the body parts in China finds its counterpart in the ‘body politic’ metaphor for political entities in the western tradition, which can be traced

³ Examples can be found in *Book of Rites*, *Works of Mencius*, *Chronicle of Zuo*, *Xunzi*, etc. The most typical example is ‘the king of a country is like the heart of a body [...]. The four crucial courtiers are to the king as the liver, lung, spleen and kidney are to the heart. The hundreds of officials to the king are comparable to the body and openings [i.e. eyes/ears/mouth/nostrils, etc.]. to the heart (*Luxuriant Dew of the Spring and Autumn Annals*, compiled in the 4th century, quoted in Huang 2004: 372. My translation).



back to ancient Greece (Hale 1971, Musolff 2010). According to Musolff (2004c: 58), conceptualizing a political entity as a human body is part of the GREAT CHAIN OF BEING system, where ‘lower-order concepts (e.g. ANIMAL ORGANISMS) and higher-order ones (e.g. SOCIAL INSTITUTIONS) are parts of an over-arching ontological whole, in which all levels are in correspondence’. Moreover, one of the two strands of ‘body politic’ in the western tradition⁴ focuses on the function of parts of a political entity by comparing the composition of a state to that of a human body (Musolff 2004a), with the prince portrayed as the head, the senate as the heart, the financial officers as the stomach, the tillers as the feet, etc. (John of Salisbury 1963: 65), which exposes a hierarchy among these body parts. Hobbes (1996: 9), drawing on the mappings between the institutions of a political entity and the abstract dimensions of a human being, compares a common-wealth or state as an artificial man, within which the sovereignty is referred to as an artificial soul, the magistrates and officers as artificial joints, reward and punishment as the nerves, etc., which also transmit a hierarchy. The hierarchical value of body parts is thus obvious in both East and West, and currently existing expressions such as 國家元首 *guojia-yuanshou* country-head ‘head of state’ in Chinese and ‘head of government’ in English (Musolff 2004b: 438)

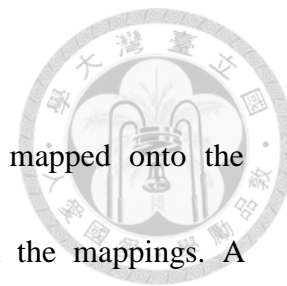
⁴ The other strand of ‘body politic’ metaphor focuses on the body of the ruler, who was regarded as having two bodies: one body concrete and natural, the other abstract and political (Kantorowicz 1997, cited in Musolff 2004a: 83).

still reflect the body politic in both traditions.

The above articles focus on how human body parts are mapped onto the components of a political entity and the hierarchy arising from the mappings. A systematic study on how body parts functioning as the source domains for other target domains involved in political discourse is yet to be done. This dissertation aims to contribute to the research on body metaphor used in political discourse by filling up this gap.

2.1.4 The limitation of embodiment

Despite its explanation of how the corporeal level influences the conceptual level, embodiment suffers a limitation it: it does not explain why human body or body parts are chosen to represent abstract notions. The research articles cited above, addressing the issues on the impact created by the culture dimension onto the metaphorical use of body parts, and on the mappings between the human body parts and the parts of a political entity, indicate that embodiment as an approach enables researcher to analyze what are observed from language use. However, it does not investigate what underlies the choice, and thus cannot predict what may happen. This limitation is to be overcome by the supplementation of the Generative Lexicon.



2.2 Generative lexicon

Generative lexicon (Pustejovsky 1991, 1995) addresses the productivity of word meanings; specifically it tackles the creative use of words and the issue of compositionality of lexical items. Witnessing the problems posed by the sense enumerative lexicon and the inadequacy of the formal theories of natural language semantics on their accounts for polysemy, Pustejovsky proposes generative lexicon based on his belief that ‘a core set of word senses [...] is used to generate a larger set of word senses when individual lexical items are combined with others in phrases and clauses’ (Pustejovsky 1995: 2). According to Pustejovsky, generative lexicon is a system involving at least four levels of semantic representations which are connected with generative devices. These representations and devices are briefly introduced as follows:

The four levels of representations include

- (1) Argument structure: it defines the number and type of arguments that a lexical item takes.
- (2) Event structure: it specifies the event type of a lexical item and a phrase.
- (3) Qualia structure: it explains the compositions and relations of a lexical item.
- (4) Lexical inheritance structure: it identifies how a lexical item or phrase is positioned in the type of lattice.

The generative mechanisms proposed by Pustejovsky in his early work refer to

- (1) Type coercion: where a lexical structure is converted to ‘the semantic interpretation by a governing item in the phrase’ (Pustejovsky 1995: 61)
- (2) Selective binding: where a lexical structure ‘operates specifically on the substructure of a phrase, without changing the overall type in the composition’
- (3) Co-composition: ‘where multiple elements within a phrase behave as functors, generating new non-lexicalized senses for the words in composition.’

Later in Pustejovsky and Jezek (2008) the above generative mechanisms are modified to better explicate the selection of an argument by a predicative expression.

The modified mechanisms are:

- (1) Pure selection (Type matching): the type a function requires is directly satisfied by the argument
- (2) Accommodation: the type a function requires is inherited by the argument;
- (3) Type coercion: the type a function requires is imposed on the argument type.

This is accomplished by either:

- a. Exploitation: taking a part of the argument’s type to satisfy the function;
- b. Introduction: wrapping the argument with the type required by the function.

Also in his later works on generative lexicon, Pustejovsky (2001, 2006) and Pustejovsky and Jezek (2008) divide the domain of individuals into three types:



- (1) Natural types, which refer to the formal and constitutive roles.
- (2) Artifactual types, which pertain to telic or agentive roles.
- (3) Complex types, which refer to the relation between types.

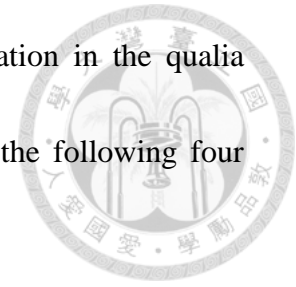
The above type division shows that natural types are involved mostly with the constitutive and formal roles while artifactual types mostly with the telic and agentive roles. We think this may not be the case for the metaphorical use of body part terminology, a natural type, and we predict the telic role should be the most salient.

Among all the representations, mechanisms, and the types of the domain of individuals, Qualia Structure and the mechanisms of selection, significant to this dissertation, are further elaborated below.

2.2.1 Qualia Structure

Qualia structure is conceived based on Aristotle's *aitiae*, which addresses the four causes of objects: material, formal, efficient and final causes, as Aristotle believed that knowing the causes of a thing was the foundation to know what it was (Falcon 2014). Qualia structure, dealing with the compositionality of words/lexical items,

provides the clue of how lexical items encode semantic information in the qualia structure. Following Aristotle, Pustejovsky (1995) proposes that the following four roles compose an object/thing:



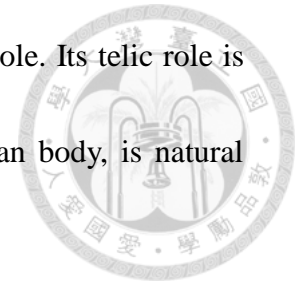
- (1) The constitutive role concerns the relation between an object and its constituents or parts, which may refer to material, weight, parts and component elements;
- (2) The formal role distinguishes the object within a larger domain. This role may involve the orientation, magnitude, shape, dimensionality, color, and position;
- (3) The telic role reveals the purpose and function of the object;
- (4) The agentive role explains the factors bringing about an object. In other words, it addresses the creator, artifact, natural kind, causal chain of the object. It is necessary to differentiate natural kinds from artifacts.

Pustejovsky (1995) also points out two general principles regarding qualia roles:

- (1) A qualia structure is manifest in every category;
- (2) The value of each quale may not occur in every lexical item.

We basically follow Pustejovsky's proposal of qualia structure. However, his division of the domain of individuals may not be adequate. We think the natural type do not only refer to the formal and constitutive roles. It also presents the telic and agentive roles. Take 'eye', of which the four roles are listed in Figure 1: eye is

constituted with pupil, cornea, eyelashes, etc. ‘Eye’ is the formal role. Its telic role is to see, read, stare, etc. The agentive role of eye, as part of human body, is natural kind.



Eye

- Constitutive = pupil, cornea, eyelashes, etc.
- Formal = eye
- Telic = see, read, stare, etc.
- Agentive = natural kind

Figure 1. The four roles of ‘eye’

Contrary to the assumptions of other models of semantics, in which words have simple definitions that differs from what they mean and how they behave syntactically in the language, qualia structure presents a ‘set of semantic constraints’ by which a word is interpreted when occurring in a context as well as ‘the structural template over which transformation may apply to alter the denotation of a lexical item or phrase’ (Pustejovsky: 1995: 86). Pustejovsky argues that qualia not only shape our knowledge of words; they furthermore facilitate our understanding of a word in context. He exemplifies this point with sets of examples, showing how identical verbs are interpreted when followed by different objects. Taking *enjoy*. Pustejovsky (1995: 88) juxtaposes three sentences (reproduced below) in which *enjoy* is interpreted differently due to the nouns following it:

Mary enjoyed the movie last night. (*watching*)

John quite enjoys his morning coffee. (*drinking*)

Bill enjoyed Steven King's last book. (*reading*)



It is the telic role of each of the objects, movie (watch), coffee (drink), book (read), which draws the diverging meanings out of the same verb *enjoy*.

Aside from the selection brought about by nouns, different adjectives also contribute to activate different qualia values of identical nouns. In terms of an agentive nominal *typist*, 'fast' (as in 'fast typist') refers directly to the telic role of *typist*, while 'male' ('male typist') to the formal role (Pustejovsky 1995: 89).

Summing up from the above, we can see that qualia structure functions to portray an essential component of lexical semantics. With the four qualia values on each lexical item, qualia structure encapsulates a language user's understanding of objects and relations in the world, as well as provides adequate explanations of how lexical items behave in linguistic context.

2.2.2 Generative mechanisms

The generative mechanisms, or mechanisms of selection, involved in our data analysis currently include 'accommodation' and 'type coercion', modified by Pustejovsky in

his later publications (Pustejovsky and Jezek 2008). As they are proposed along with ‘pure selection’, we discuss each of them below.



A. Pure selection

Pure selection, or type matching, refers to the mechanism when the type requirements of a functional element are directly met by the argument without the requirement of type adjustment (Pustejovsky and Jezek 2008). Take the sentence *The rock fell*. The predicate ‘fell’ requires a physical object, and the argument ‘the rock’ satisfies the restriction. It is pure selection.

B. Accommodation

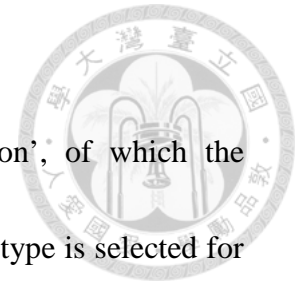
Accommodation refers to the situation ‘when the selecting type is inherited through the type of the argument’ (Pustejovsky and Jezek 2008: 195). Take *The pen fell to the floor*. The verb *fell*, which should select a natural type (Cf. *The rock* in *The rock fell* above), is the predicate of the argument *the pen*, an artifactual type. In this case, in which the reader’s understanding about *the pen* is thus inherited from that about *the rock*, exemplifies how accommodation works.

C. Type coercion

Type coercion is subdivided into ‘exploitation’ and ‘introduction’, of which the former refers to the cases when a subcomponent of the argument’s type is selected for interpretation, and the latter occurs when the selecting type, which refers to something ‘richer than the argument type’, is ‘wrapped’ with the type constrained by the predicate (Pustejovsky and Jezek 2008: 187).

Exploitation is exemplified by the selection of different components in *Mary read the book* and *Mary burnt the book*. Book can refer to either the *physical object* (the printed matter) or the *information* (the content), or both. *The book* refers to the component of *information* in *Mary read the book*, whereas it refers to the *physical object* in *Mary burnt the book*. The predicates *read* and *burnt* thus select different components of the argument *book*.

Introduction is exemplified by *The passengers read the walls of the subway* (Pustejovsky and Jezek 2008: 187). Like the sentence *Mary read the book* above, the verb *read* selects the component *information*, which is not found in any qualia roles of *the walls of the subway* in nature. The predicate *read* appropriates *information*, a component not inherently owned by this noun phrase, to *the walls*.



2.2.3 Previous research using generative lexicon related to this dissertation

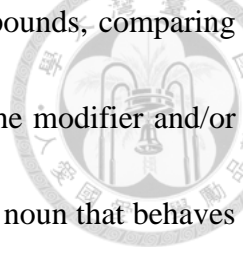
Generative lexicon sheds light on semantics. Compared with the enumeration approach, generative lexicon provides a more economical solution to research on compounds and phrases. Johnston and Busa (1999) propose applying generative lexicon, especially the qualia structure, to analyze noun-noun compounds. Comparing the same set of compounds in English and Italian, they find the qualia information—the telic, agentive, and constitutive roles—is manifest in the prepositions in Italian words. Since the publication of this article, research on the application of generative lexicon to the analysis of word meanings of a variety of languages has been conducted one after another, including Chinese.

Generative lexicon is extensively applied in the analysis of Chinese, ranging from the orthographical to the clausal level. To begin with, Huang and his colleagues have done a series of research on Chinese radicals and the derived characters. For example, Huang et al. (2013) find that the ontology embedded in the Chinese radicals reveals the conceptual derivation and knowledge reasoning ability addressed in generative lexicon. Investigating Chinese radicals referring to five sense faculties⁵ in 說文解字 *Shuowen Jiezi* with the assumption that these radicals represent basic concepts, they identify the qualia relations between the basic concepts of these

⁵ The five radicals are 目 *mu* ‘eye’, 耳 *er* ‘ear’, 口 *kou* ‘mouth’, 鼻 *bi* ‘nose’ and 舌 *she* ‘tongue’.

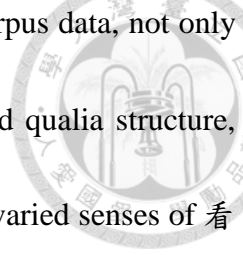
radicals and each derived character. Broadening the scope, Huang and Hsieh (forthcoming) explore the Chinese radicals and word meanings. They have found that the roles referring to events, i.e. telic and agentive, predominate lexical meaning production. When it comes to body parts, classified as natural kind in generative lexicon, the telic quale (or final cause) is the most productive relation in the characters derived from radicals denoting body parts.

The application of generative lexicon in the analysis of Chinese compounds is found in the series of research conducted by Song and her colleagues. For example, Song, Zhao and Kang (forthcoming) build an annotation scheme on Chinese nominal compounds with the incorporation of generative lexicon. Applying the annotation scheme, they compare compound nouns consisting of a natural type and an artificial type and discover the qualia information and the semantic type from generative lexicon function to reveal the patterns of Chinese nominal compounds. Song and Qiu (2013), focusing on the qualia relations in the nominal compounds consisting of verbal elements, disclose how the verbal elements influence the interpretations of the qualia values of compound nouns. Song and Zhao (2013a), analyzing the nominal compounds in Chinese, reveal the interaction among the meaning extension (i.e. metaphorical and/or metonymical extension) and the qualia values of the morphemes within compounds, as well as the semantic types of the compounds. In the same vein,



Song and Zhao (2013b) explore the metaphorical noun-noun compounds, comparing how the metaphorical constituents behave when they function as the modifier and/or as the head. They argue that whether it is the modifying or the head noun that behaves metaphorically, only three qualia roles are identified: formal, constitutive and telic. They also contend that in compounds consisting of a metaphorical head, both the head noun and the modifying noun can activate the qualia role of the compound. Moreover, their findings indicate that the constitutive role predominates when body part terms are involved in the compounds, such as foot in 頁腳 *yejiao* page-foot ‘footer’.

The interplay between the mechanism of selection and lexical items in Chinese also attracts scholars’ attention. Regarding coercion, Huang and Ahrens (2003) analyze the semantic coercion that Mandarin classifiers exert on nouns. Referring to the taxonomic system created by Mandarin classifier system, they argue that classifiers coerce specific meanings, kinds and events, out of individual-denoting nouns. Hsu and Hsieh (2013), addressing the complement coercion operation of disyllabic verbs, i.e. how these verbs coerce the NP complements into events, find that the verbs at issue can be put into two clusters based on the coerced element: one cluster coerces a complement more often and the other coerces more noun types. This difference, they claim, is attributable to the semantics of the verbs. Wang and Huang (2010), examining how the three mechanisms influence the verb-argument



composition of the Chinese perception verb 看 *kan* ‘look at’ in corpus data, not only disclose the selective restrictions brought about by the context and qualia structure, but also point out the differing selection preferences caused by the varied senses of 看 *kan* ‘look at’. This corpus approach is also employed by Li (2014) in his analysis of the combination of the Chinese verb 寫 *xie* ‘write’ and nouns.

The research articles discussed above pertain to this dissertation in different ways. The studies on the interaction between the Chinese radicals and the derived characters (e.g. Huang and Hsieh (forthcoming)) facilitate the establishment of the hypotheses of this dissertation. Their findings enable us to see the possibility that embodiment and generative lexicon intersect, and to predict the telic role predominate in the use of corporeal words in our data. The papers probing into Chinese compounds (e.g. Song and Zhao 2013a) and the mechanism coercion (e.g. Huang and Ahrens 2003) inspire us in the light of the method: how coercion works on the lexical level and the clausal level.

2.3 Country leadership rhetoric and conceptual metaphors

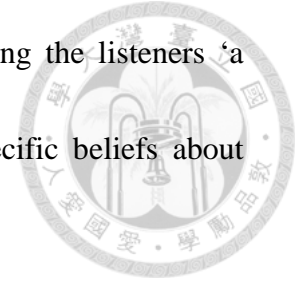
Conceptual metaphor plays an important role in speeches by country leaders (Charteris-Black 2005, 2011). Representing one thing in terms of another and making abstract ideas easily understood, metaphor can circumvent the ‘boomerang effect’,

which is the listener's backlash against the highly charged language/images that are sometimes employed in persuasion (Mio, 1997: 128). Metaphor is thus frequently used for the purpose of persuasion (e.g., Charteris-Black, 2004; Deignan, 2000; Lakoff, 1991; Mio, 1997), which is crucial in political discourse, as the behavior at the core of politics—the acquisition, maintenance, negotiation, exercise and loss of power—involves persuasion (Semino, 2008).

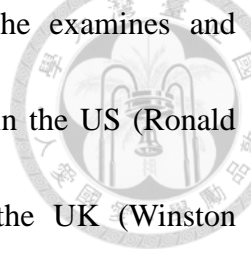
Charteris-Black (2004: 87) regards political speeches as a specific genre as they function to convey 'an idealized "vision" of the social world'. Having conducted a series of research on speeches delivered by country leadership (Charteris-Black 2004, 2005, 2011), he argues that speeches delivered by the leaders differ from spontaneous spoken discourse, as they usually are collaborative work by a team of 'invisible' speech writers prior to the speech events. The use of metaphors thus can be seen as a result of conscious work, as the metaphors employed are supposed to fulfill the specific discourse function intended in the speeches.

Charteris-Black (2011) contends that metaphor in political rhetoric serves to create unconscious emotional connections, hence a powerful tool for myth creation. Metaphor, with which politicians 'tell the right story' (Charteris-Black 2011: 311), functions to legitimize the speakers and at the same time delegitimize their political opponents. Based on his research, metaphor in political speeches is powerful in

triggering the listener's emotion reaction because it evokes among the listeners 'a shared system of belief as to what the world is and culture-specific beliefs about mankind's place in it' (Charteris-Black 2011: 44).



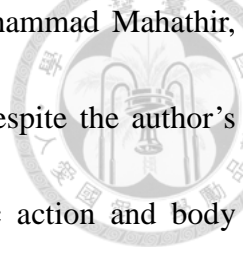
In his study on the metaphors in the American presidential inaugural speeches spanning around 200 years, Charteris-Black (2004) finds that the metaphors employed in those speeches mainly come from a narrow range of source domains, which reflect people's everyday experiences, e.g. CONFLICT, JOURNEY, BUILDING, FIRE and LIGHT, etc. He claims that these source domains underscore certain values. For example, in the most productive source domain, CONFLICT, the speakers highlight the personal sacrifice and physical struggle as these two are claimed to be essential to attain social goals. The JOURNEY metaphors carry positive evaluation and appeal to the public's patience when a government policy is initiated and implemented, and when a goal is to be achieved. BUILDING metaphors are conceptually related to JOURNEY metaphors, as both activities involve progress and stages towards a goal and both call for patience and both are inherently positive in value. FIRE and LIGHT, according to Charteris-Black, are distinctive to American presidential speeches (in comparison with the British party political manifesto corpus), and they both highlight positive qualities, as LIGHT in the corpus is associated with knowledge and goodness (in contrasting evil), and FIRE with purification and production of light.



In *Politicians and Rhetoric* (Charteris-Black 2005, 2011), he examines and contrasts the conceptual metaphors employed by country leaders in the US (Ronald Reagan, Bill Clinton, George Bush and Barack Obama) and the UK (Winston Churchill, Margaret Thatcher, and Tony Blair). Analyzing how these country leaders resort to metaphor as a strategy to persuade the listener, Charteris-Black argues that metaphor functions to portray each of the country leaders as one who looks right, sounds right, has right intentions and thinks right. The metaphors lay the foundation on which the speakers build up their legitimacy and question or attack their opponents. Charteris-Black (2011) summarizes all the source domains occurring in the British and American leadership speech corpora respectively, among which PERSONIFICATION ranks the highest in the British corpus and JOURNEY metaphor tops in the American corpus.⁶ In the source domains occurring in both the British and American corpora, body part metaphor is most related to PERSONIFICATION, HEALTH and ILLNESS, and LIFE and DEATH, but it is yet to be systematically investigated.

Between the two editions of *Politicians and Rhetoric*, which investigate the speeches delivered by country leaders of the western world, Charteris-Black (2006) delves into the communication strategies by iconic non-western leaders: Mahatma

⁶ The source domains used by the British and American politicians overlap a lot, including JOURNEYS, PERSONIFICATION, CREATION, DESTRUCTION, REIFICATION, CONFLICT, HEALTH and ILLNESS, ANIMALS, FIRE, RELIGION/MORALITY, LIGHT and DARKNESS, FREEDOM and SLAVERY, BUILDINGS, LIFE and DEATH, PLANTS, LANDSCAPE, CRIME and PUNISHMENT, FINANCE, WEATHER, and WATER. The source domains unique to the British corpus are SPORTS and GAMES, COLOR, and SLEEP, and those unique to the American corpus include AMERICAN DREAM, BELL, and STORY.

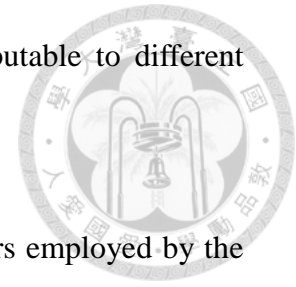


Gandhi, Nelson Mandela, Fidel Castro, Ayatollah Khomeini, Muhammad Mahathir, and Lee Kuan Yew.⁷ Metaphor analysis is still one of the foci despite the author's inclusion of the non-verbal strategies (e.g. appearance, symbolic action and body language) in the research scope. Analyzing the major issues of each of the leaders, Charteris-Black (2006) finds the conceptual metaphors employed in the leaders' communication of their visions/values more diversified than those in their legitimacy. Overall, the source domain identified range from frequently occurring domains such as WAR, PERSON, ANIMAL, PLANT, SPORT, PHYSICAL/MORAL/NATURAL FORCE, to those rarely used ones such as SCIENCE, LAW, HISTORICAL FORCE, which are mapped onto a variety of target domains. The motivation underlying the use of these source domains, according to the author, are associated with the historical, political, and/or religious contexts where these leaders are situated.

Lu and Ahrens (2008), integrating the framing theory, conceptual metaphor theories and mapping principles, investigate the Taiwan presidents' speeches with a special focus on the source domain BUILDING. Comparing this specific metaphor used in their corpus with that in Charteris-Black's (2004, 2005) corpora and spelling out the differences between the BUILDING metaphors in their corpus and in

⁷ The data under analysis include not only speeches and statements, but also writings, by these country leaders. The only exception is the data of Muhammad Mahathir, of which the data under analysis consists of the leader's autobiography.

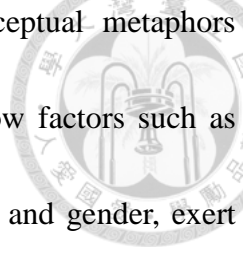
Charteris-Black's corpora, they argue these differences are attributable to different ideologies and historical backgrounds of these presidents.



Koller and Semino (2009) investigate the conceptual metaphors employed by the German chancellors of opposite sex, Gerhard Schroder and Angela Merkel. Comparing and contrasting the patterns of metaphor used by these two country leaders of the same country, the authors find that Merkel's usage of metaphors signal empathy and passion, which are characteristics typically linked to femininity. The authors, however, claim that this female chancellor may adopt metaphors to perform her gender, rather than indicating her being a woman.

Ahrens (2011), in order to solve the problem of circularity in the Strict Father and Nurturant Parent Models proposed by Lakoff (1996/2002), presents an alternate approach: analyzing the lexical frequency patterns associated with these two models in the speeches delivered by 4 U.S. Presidents--1 Democrat and 3 Republicans--from 1981 to 2006. Using WordNet 3.0 to select 18 lexemes representing the two models, the author examines the statistical data and collocational patterns of these lexemes. The author, uncovering the underlying conceptual paradigm implicit in the use of certain metaphors, proves that the two conceptual models do impact differentially on the Democrats and Republicans.

The aforementioned research contributes to the studies of political discourse and



conceptual metaphor analysis. They not only identify the conceptual metaphors occurring in the rhetoric of country leadership but also testify how factors such as history, political agenda, party membership, personal background, and gender, exert influence on their use of conceptual metaphors. However, the conceptual metaphors arising from the HUMAN BEING domain in those studies are either biased toward the social relations/interactions of the people (e.g. kinship, neighbor), or toward the actions/movement which are apt to be put into other domains (e.g. JOURNEY, WAR, SPORT). The most fundamental conceptual metaphors, i.e. those stemming directly from the human body and the most embodied ones, are yet to be explored. In order to put the most important piece into the puzzle, this dissertation intends to analyze body part metaphors in a systematic manner and to reveal how they function in the country leadership rhetoric. Choosing the four parts of the body, 血 *xie* ‘blood’, 脈 *mai* ‘meridian’, 骨 *gu* ‘bone’, and 肉 *rou* ‘flesh’, we would like to uncover how they function in the speeches delivered by five presidents in Taiwan over the different eras in Taiwan politics.

Chapter 3 Data and Method

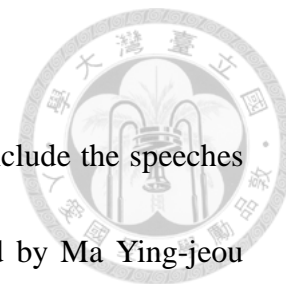


This chapter is composed of two parts: the corpus data and the method. The data under analysis comes from the expanded version of Taiwan Presidential Corpus (Huang and Ahrens 2008). As it contains speeches by five presidents from 1955 to 2014, we will sketch the socio-political context. Regarding the method, we first modify the metaphor identification procedure proposed by the Pragglejaz Group (2007) so that it better accounts for the Chinese data. We then expand the qualia role annotating method proposed by Song and Zhao (2013a, 2013b) to better examine our corpus data.

3.1 Taiwan Presidential Corpus

The data at issue is an expanded version of the Taiwan Presidential Corpus (Huang and Ahrens 2008). Constructed by Huang and Ahrens, the original corpus comprises the speeches given by four Taiwan presidents, Chiang Kai-shek, Chiang Ching-kuo, Lee Teng-hui and Chen Shui-bian, on New Year's days and Double Tenth days from 1955 to 2007. The speeches of Yen Chia-kan, who was regarded as transition in nature between Chiang Kai-shek and Chiang Ching-kuo, were not included in the corpus (Lu and Ahrens 2008). The corpus, segmented and tagged, contains 11,283 types of words

and 126,384 tokens of words.



For the current research, this corpus is further expanded to include the speeches delivered by Chen in 2008, the last year of his second term, and by Ma Ying-jeou from 2008-2014. The expanded version contains 13,044 types of words and 155,296 tokens of words. In a word, the corpus contains the speeches given by five Taiwan presidents on New Year's days and Double Tenth days from 1955 to 2014. Spanning 60 years, this corpus enables us to see both the linguistic and political changes. Table 1 summarizes the composition of the corpus.

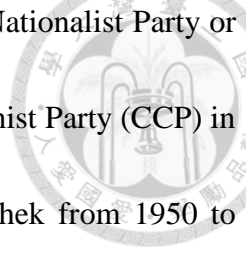
Table 1. Details of the expanded version of Taiwan Presidential Corpus

Presidents*	Speeches	Types of words	Tokens of words	Number of tokens per speech
Chiang K. (1955-1975)	39	7,723	67,627	1,734
Chiang C. (1978-1988)	20	2,312	9,990	499.5
Lee T. (1989-2000)	24	3,263	21,240	885
Chen S. (2000-2008)	16	4,573	30,322	1,895.1
Ma Y. (2008-2014)	13	4,651	26,117	2778.2
Total	112	N/A	155296	N/A

*Chiang K. = Chiang Kai-shek. Chiang C. = Chiang Ching-kuo. Lee T. = Lee Teng-hui. Chen S. = Shui-bian. Ma Y. = Ma Ying-jeou

3.2 The political background of the five presidents

A brief introduction for the political context where each of the presidents is situated is provided below. Taiwan is under the governance of the Republic of China (ROC),



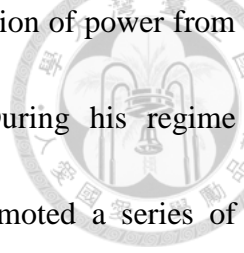
which was relocated to Taiwan after the ruling party, the Chinese Nationalist Party or Kuomintang (KMT), lost the civil war against the Chinese Communist Party (CCP) in 1949. ROC, ruled by the KMT government led by Chiang Kai-shek from 1950 to 1975, was under the one-party monopoly, in which Chinese mainlanders took control of the important offices in the government, and the Taiwanese elites, culture, and awareness were suppressed. Chiang Kai-shek, the political and military leader simultaneously, was regarded as a dictator, as he prosecuted the political dissidents and the critics of his regime, most of whom were Taiwan-born talents, during the ‘White Terror’ era (1947-1987, Chen 2008: 185). Thinking himself as the president of (the Republic of) China, Chiang Kai-shek held as his ultimate goal retaking the sovereignty of Mainland China, which he thought had been ‘stolen’ by a group of bandits led by Mao Zedong (i.e. the CCP), and simultaneously saving the fellow countrymen in China, who he thought were suffering and in despair under the CCP’s regime.

After Chiang Kai-shek passed away in 1975, the Vice President Yen Chia-kan was sworn in as the President, according to the ROC Constitution. However, his presidency was considered purely transitional in nature between Chiang Kai-shek and his son, Chiang Ching-kuo (Lu and Ahrens 2008), who was elected the President in 1978. His ruling, from 1978-1988, brought forth the change of political system from

dictatorship to democracy. Lifting the martial law in 1987 and appointing the Taiwanese elites to important offices, Chiang Ching-kuo took measures which led Taiwan to the initial phase of democracy. The major opposition party, the Democratic Progressive Party (DPP), which advocates Taiwan independence, democratic reformation and environmentalism, was founded in 1986, the late stage of Chiang Ching-kuo's regime.

Chiang Ching-kuo's successor, Lee Teng-hui, was the first Taiwan-born President as well as the first President through the direct presidential election. Originally the Vice President during Chiang Ching-kuo's regime, he was sworn in as the President soon after Chiang deceased. During his governance (1988-2000), he endeavored to promote democracy and Taiwan localization movement. In 1996, garnering 54% of the votes cast, he was elected the President through the direct election, which not only was regarded as the realization of democracy in Taiwan, but also evidenced his acquisition of public support. Despite the fact that he was a KMT member, his intention to promote Taiwan independence was declared in his announcement of 'Two-State Theory', in which he argued that Taiwan and China were two countries, or engaged in a 'special state-to-state relationship' (Ling 2012: 179). During his regime, Taiwanese national identity was budding (Wu 2005).

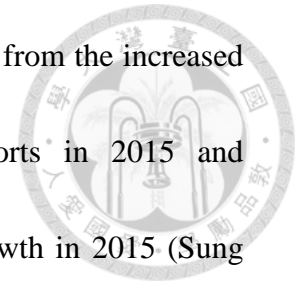
Year 2000 was a monument of politics in Taiwan, as Chen Shui-bian, a bulwark



of the DPP, was elected the President, which caused the first transition of power from KMT to DPP, ending the KMT's monopoly for 50 years. During his regime (2000-2008), Chen Shui-bian upheld Taiwan awareness and promoted a series of 'Taiwanization' movement. Advocating Taiwan independence, he regarded China an obstacle to this goal and took a strong attitude toward the relations between Taiwan and China. He proposed to hold several referendums, the most remarkable among which was that Taiwan joining the United Nations under the name 'Taiwan', which was regarded as his announcement of Taiwan independence. His regime witnessed the Taiwanese national identity, which budded in late 1990s, gradually overwhelmed the Chinese national identity.

The second transition of power occurred in 2008, when Ma Ying-jeou from the KMT won the President election. Tending to uphold a Chinese nationalist identity over a separatist Taiwanese one, Ma Ying-jeou supports a softer policy toward China and endeavors to maintain cross-strait peace. He also tries to boost economy of Taiwan. Regarding China as an indispensable partner, he urges economic links between Taiwan and China. According to the United States Central Intelligence Agency (2015), since 2009, Taiwan's regulation governing the mutual investment between Taiwan and China has been gradually loosened. Closer economic ties with China, however, pose both opportunities and threats to Taiwan economy (The United

States Central Intelligence Agency 2015). An obvious threat came from the increased competition from China, which has squeezed Taiwan's exports in 2015 and furthermore forced Taiwan to lower its outlook for economic growth in 2015 (Sung 2015).

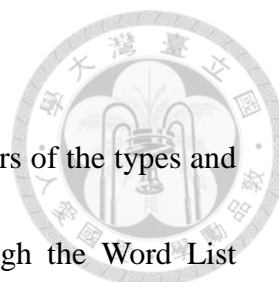


Summing up, we can divide politics in Taiwan into three periods:

1949-1987: The authoritarian era in which Chiang Kai-shek and Chiang Ching-kuo ruled. Both identified themselves as Chinese. Chiang Kai-shek held restoring ROC in Mainland China as his ultimate goal. But Chiang Ching-kuo started thinking about constructing Taiwan.

1987-2000: The transition from the authoritarian to democracy in which Chiang Ching-kuo and Lee Teng-hui ruled. Chiang Ching-kuo lifted the martial law, which initiated the democratization of Taiwan, which Lee Teng-hui continued. As the first native Taiwanese president winning the direct presidential election, he implemented a series of localization movements.

2000-present: The democracy era in which the peaceful transition of power occurred twice. Chen Shui-bian, advocating Taiwan independence, practiced Taiwanization and desinicization. Ma Ying-jeou, on the other hand, takes softer policy toward China and tries to promote exchange, especially in economy, between Taiwan and China.



3.3 Method

The corpus is uploaded to AntConc (Anthony 2014) and the numbers of the types and tokens of all the lexical items in the corpus are retrieved through the Word List function (Figure 2). The lexical items are then manually searched. When a type consisting of a body part is identified, it is marked and checked so that its behavior can be recognized. The body parts are divided into external and internal body parts, which are shown in Table 2.

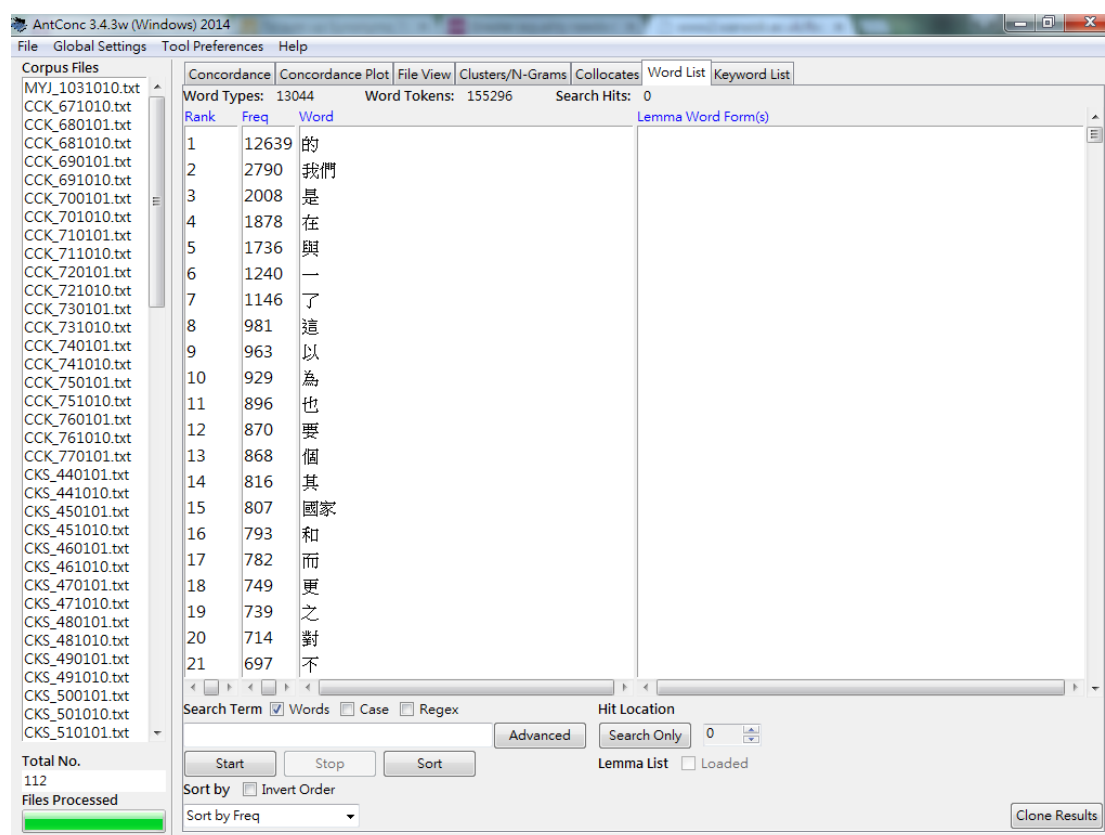


Figure 1. The Word List function of AntConc

Table 2. External and internal body parts used in Taiwan Presidential Corpus

External	Internal
頭／首、髮、面／臉、目、眉（睫）、耳、 口、唇、牙／齒、頸、肩、臂、手、拳、 掌、指、胸、懷、腹、股、足、腳、身、 體、軀、躬、背、屍、胎、皮	腦、咽喉、心、肺、肝、膽、 血 、髓、 脈 、 骨 、脊梁、關節、穴、神經、腔、 肉

This dissertation chooses to analyze the following four body parts: 血 *xie* ‘blood’, 肉 *rou* ‘flesh’, 骨 *gu* ‘bone’, 脈 *mai* ‘meridian’, for the following reasons:

- (1) They are atypical body parts. Unlike e.g. 手 *shou* ‘hand’, 腳 *jiao* ‘foot’, 肝 *gan* ‘liver’, 肺 *fei* ‘lung’, of which the boundaries are defined more clearly (Encyclopaedia Britannica 2007, the MOE Dictionary), 血 *xie* ‘blood’, 肉 *rou* ‘flesh’, 骨 *gu* ‘bone’, and 脈 *mai* ‘meridian’ have no clear boundaries. Instead, they are ‘extensive’ and compose a large proportion of the human body.
- (2) They are intertwined with each other. One functions to form another, e.g. flesh forms blood vessels, the tangible part of the meridian; one carries another, e.g. blood vessels, part of meridian, carry blood; one manufactures another, e.g. bone (marrow) manufactures blood. These four parts of the body are so intertwined, which we assume will be reflected in their metaphor uses.
- (3) Though intertwined with each other, the four body parts differ in ‘being

embodied'. Their definitions⁸ show that 血 *xie* 'blood', 骨 *gu* 'bone', 肉 *rou* 'flesh' are more embodied, while 脈 *mai* 'meridian' is less so as it involves imagined part, i.e. the conduit circulating 氣 *qi* 'energy'. Comparing these four body parts reveals that the more embodied a body part is, the more easily we can predict its behavior, and vice versa.

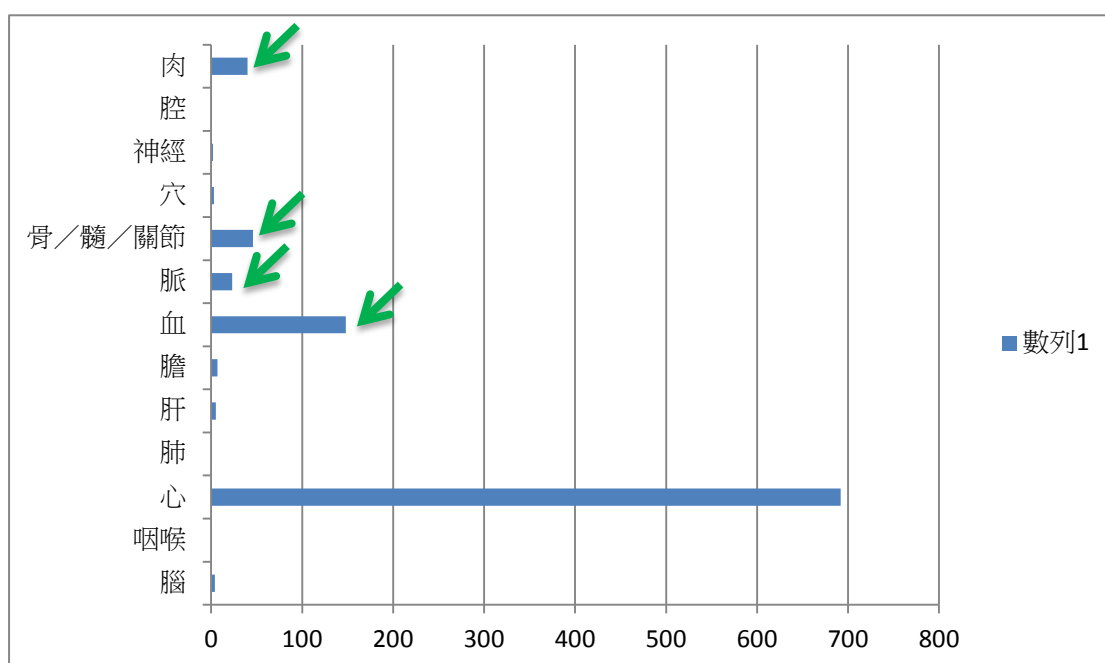
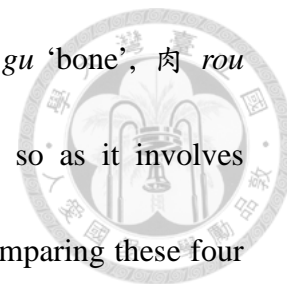


Figure 2. The frequency of the internal body parts in the Taiwan Presidential Corpus

⁸The MOE Dictionary defines the four body parts as follows:

血 *xie* 'blood': 高等動物體內脈管所含的紅色血液。從心臟流出，循環全身，有分配養分、輸送廢物，以營全身新陳代謝的功能。'The red fluid in the veins/vessels of higher organisms, which starts from the heart, circulates throughout the body. It functions to carry nutrients and wastes so as to conduct metabolism'.

肉 *rou* 'flesh': 動物體中包住骨骼的柔韌物質。如：「肌肉」 'the soft part of an animal's body which encloses bones. E.g. "flesh"'.

骨 *gu* 'bone': 動物體內支持身體的支架組織 'The frame inside the body of an animal which supports the body.'

脈 *mai* 'meridian': 分布人與動物周身，使血液流通而循環不窮的血管。如：「動脈」、「靜脈」 'The blood vessels, distributed all over the human body and animal body, carry blood everywhere.' However, according to traditional Chinese medicine, 脈 *mai* is regarded as part of the body in which life-sustaining substances are held through, rather than merely the blood vessels in anatomy. The elements circulated through the meridians are both visible and invisible, the former of which is blood and the latter 氣 *qi* 'energy'.

3.3.1 Modified metaphor identification procedure



Metaphor, in this dissertation, refers to a cognitive device which includes both metaphor and metonym. This dissertation proposes a method combining metaphor identification and qualia role retrieval. For metaphor identification, scholars of conceptual metaphor have been endeavoring to propose plausible methods. The Metaphor Identification Procedure (MIP) by Pragglejaz Group in 2007 and its modified version, Metaphor Identification Procedure Vrije University Amsterdam (MIPVU) by Steen et al. (2010), have gained recognition (e.g. Dorst 2011, Low et al. 2008, Siqueira et al. 2009). This dissertation modifies MIP so that it better works for Chinese texts. The steps of the original MIP are quoted below (Pragglejaz Group 2007: 3):

- (1) Read the entire text-discourse to establish a general understanding of the meaning.
- (2) Determine the lexical units in the text-discourse
- (3) (a) For each lexical unit in the text, establish its meaning in context, that is, how it applies to an entity, relation, or attribute in the situation evoked by the text (contextual meaning). Take into account what comes before and after the lexical unit.



(b) For each lexical unit, determine if it has a more basic contemporary meaning in other contexts than the one in the given context. For our purpose, basic meanings tend to be

-- “More concrete [what they evoke is easier to imagine, see, hear, feel, smell, and taste];

-- Related to bodily action;

-- More precise (as opposed to vague);

-- Historically older.

Basic meanings are not necessarily the most frequent meanings of the lexical unit.

(c) If the lexical unit has a more basic current-contemporary meaning in other contexts than the given context, decide whether the contextual meaning contrasts with the basic meaning but can be understood in comparison with it.

(4) If yes, mark the lexical unit as metaphorical.

Steps 2 and 3 are modified. As Chinese sentences contain no delimiters (e.g. spaces)

to separate words, Step 2 is modified as follows:

(2') On determining the lexical units in the text-discourse, we use the Chinese Word Segmentation System with Unknown Word Identification developed by the



(CKIP, <http://ckipsvr.iis.sinica.edu.tw/>), we then check the results manually so as to eliminate any errors in word segmentation.

For the determination of the basic contemporary meaning of a lexical unit in Step 3(b), we refer to an on-line dictionary compiled by the Ministry of Education, ROC, (The MOE Dictionary, at <http://dict.revised.moe.edu.tw/>). However, due to the uniqueness of Chinese morphology, we have to modify Steps 2 again. The lexical items containing body part terms in my corpus are mostly compounds, which are composed of a body part word with another/other word(s). The basic contemporary meaning thus cannot be determined based on a compound as a whole. Instead, the body part words need to be extracted and examined on their own so as to reveal how these words behave in the compound. The rationale behind this modified step is, when a word forms part of a compound, it usually undergo meaning changes, except it is part of a coordination structured compound.

Take lexical items 血緣 *xieyuan* blood-relation and 血債 *xiezhai* blood-debt, which are compounds containing the body part 血 *xie* 'blood'. In the MOE dictionary, 血緣 *xieyuan* blood-relation is defined as 血統上的關係 'relations by blood' and 血債 *xiezhai* blood-debt as 深仇重怨. 常指爭鬥殘殺引起的仇恨

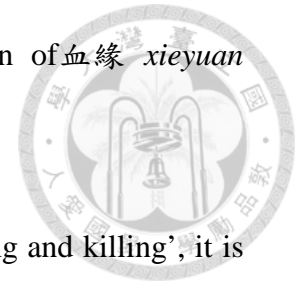
‘enmity caused by fighting and killing’. If the definitions are taken as the basic contemporary meaning, the two lexical items are considered literal.



We thus take the unit or morpheme 血 *xie* ‘blood’ out of the compounds 血緣 *xieyuan* blood-relation ‘relationship by blood’ and 血債 *xiezhai* blood-debt ‘enmity caused by fighting and killing’ and examine the semantic change occurring to the body part in the compounds. In other words, considering 血 *xie* ‘blood’, and other body part words, as a lexical unit in compounds, we examine the basic contemporary meaning of these body part terms.

In terms of 血 *xie* ‘blood’ in the compounds 血緣 *xieyuan* blood-relation ‘relationship by blood’ and 血債 *xiezhai* blood-debt ‘enmity caused by fighting and killing’, its basic contemporary meaning in the MOE dictionary is 高等動物體內脈管所含的紅色血液。從心臟流出，循環全身，有分配養分、輸送廢物，以營全身新陳代謝的功能 ‘The red fluid in the veins/vessels of higher organisms, which starts from the heart, circulates throughout the body. It functions to carry nutrients and wastes so as to conduct metabolism’. In these two compounds, 血 *xie* ‘blood’ does not simply refer to the body fluid which functions to sustain life. Instead, it has undergone meaning extension. The unit 血 *xie* ‘blood’ refers to the genetic traits, or ancestral tie, carried by this fluid. It is the genetic/ancestral feature embedded in blood

which forms the relations of a group of people, the definition of 血緣 *xieyuan* blood-relation ‘relationship by blood’.



Regarding 血債 *xiezhai* blood-debt ‘enmity caused by fighting and killing’, it is the genetic ties carried by blood which makes the fighting/killing a ‘debt’ to those who share the same genes with the victim. If the victim and another person/other people are not related by blood, i.e. if they do not share the familial/ancestral traits, the concept of ‘debt’ would not occur to the person/people.

Step 2, again, should be changed to:

(2'') On determining the lexical units in the text-discourse, we use the Chinese Word Segmentation System with Unknown Word Identification developed by the Chinese Knowledge and Information Processing Group (CKIP, <http://ckipsvr.iis.sinica.edu.tw/>), we then check the results manually so as to eliminate any errors in word segmentation. When the lexical unit contains a body part, we take the body part as a unit and examine its contemporary basic meaning, and compare it with the contextual meaning. The contextual meaning at this step refers to its meaning in the compound.

We then employ the modified MIP in the analysis. Example 1 reveals how it

works.



Example 1

海峽兩岸人民源自於相同的血緣 (Chen S._900101)

After reading the text-discourse and getting general understanding, we segment this sentence as follows:

海峽兩岸人民源自於相同的血緣⁹

We construct the contextual meaning based on its co-text. Meanwhile, we search the MOE dictionary to find out the basic contemporary meaning of each lexical item. When it comes to the lexical item 血緣 *xieyuan* blood-relation ‘relationship by blood’, we take this lexical item as a compound in which 血 *xie* ‘blood’ is considered a lexical unit, of which the basic contemporary meaning is the red fluid which sustains life. We are aware of the semantic incongruity between the basic meaning of 血 *xie* ‘blood’ and its meaning in 血緣 *xieyuan* blood-relation ‘relationship by blood’, i.e., the genetic tie, and we can relate the extended meaning to the basic meaning. 血 *xie* ‘blood’ in 血緣 *xieyuan* blood-relation ‘relationship by blood’ is thus considered to

⁹ Double underscores are employed to link the segmented Chinese texts. The words of the corresponding word-for-word translation are also linked by double underscores.

signal metaphorical extension. Example 1, represented in its original text (segmented), word-for-word translation and free translation, is shown below:



Example 1'

海峽__兩岸__人民__源自於__相同__的__**血緣**

Strait__both-shores__people__come-from__same__DE__relationship-by-blood

People in Taiwan and China are descendants from the same ancestor.

Take another lexical item, **膏血** *gaoxie* fat-blood 'fat and blood', for example.

Example 2

為**榨取**我大陸億萬同胞的**膏血**殺害[...]無數生命(Chiang K._581010)

Segmenting the sentence after reading it and getting hold of the meaning, we get the following segmentation result:

為__**榨取**__我__大陸__億萬__同胞__的__**膏血**__殺害__[...]無數__生命

The contextual meaning is constructed based on the co-text. Meanwhile, we look up each lexical unit in the MOE dictionary. It is found that the lexical items in bold typeface, i.e. **榨取** *zhaqu* squeeze-take 'squeeze out' and **膏血** *gaoxie* fat-blood 'fat

and blood’, have basic contemporary meanings, which differ from their contextual meanings: the contextual meaning of 榨取 *zhaqu* is ‘to take (from)’ and that of 膏血 *gaoxie* is ‘wealth’. 膏血 *gaoxie* fat-blood ‘fat and blood’ is determined metaphorical due to the semantic incongruity between its basic contemporary meaning and its contextual meaning. (We are also aware that the lexeme 同胞 *tongbao* same-fetus ‘compatriot’ realizes CONTAINER metaphor, within which 膏血 *gaoxie* fat-blood ‘fat and blood’ is held. However, as this dissertation focuses on the human body part metaphors, we have to discard metaphorical use of 榨取 *zhaqu* squeeze-take ‘squeeze out’ and 同胞 *tongbao* same-fetus ‘compatriot’.)

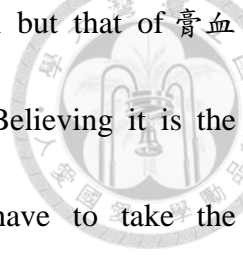
Example 2’

為__榨取__我__大陸__億萬__同胞__的__膏血__殺害__[...]無數__生命
(Chiang K._581010)

in-order-to__squeeze__my/our__mainland__hundreds-of-millions__compatriots__
_DE__fat-and-blood__kill [...]__countless__lives

*[Mao Zedong and his company] killed countless lives... in order to **take the wealth from** our compatriots in Mainland China...*

One point merits attention. The lexical item 膏血 *gaoxie* fat-blood ‘fat and blood’ undergoes meaning extension in a way differing from that of 血緣 *xieyuan* blood-relation ‘relationship by blood’. The meaning change of 血緣 *xieyuan*



blood-relation ‘relationship by blood’ occurs at the lexical level but that of 膏血 *gaoxie* fat-blood ‘fat and blood’ at the sentential/clausal level. Believing it is the morphological structure which leads to the difference, we have to take the morphological structure into consideration. 血緣 *xieyuan* blood-relation ‘relationship by blood’ is a modifier-modified compound, in which the morpheme always changes meaning. On the other hand, 膏血 *gaoxie* fat-blood ‘fat and blood’ is coordination in structure, in which neither 膏 *gao* ‘fat’ nor 血 *xie* ‘blood’ undergoes semantic extension at the lexical level. They refer back to the whole human body, as they function to constitute the human body.

Once we identify a metaphorically used lexical unit, we need to formulate the conceptual mapping. We propose to incorporate qualia structure, which provides more information for the metaphorically used word and helps us formulate the principles governing conceptual metaphors, as elaborated below.

3.3.2 Qualia role retrieval

In order to formulate the conceptual mappings more precisely, we incorporate the qualia structure, through which we retrieve the qualia role(s) of the body part(s) in the corpus data. We expand the method proposed by Song and Zhao (2013a, 2013b) with our modification, as we focus on two levels: Song and Zhao focus on the intra-lexical

relations of nominal compounds; we address the qualia role of a lexical item at the lexical and clausal levels. The differences between our expanded and modified method and Song and Zhao's (2013a) are detailed in Table 3 below:

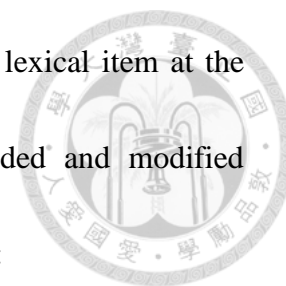
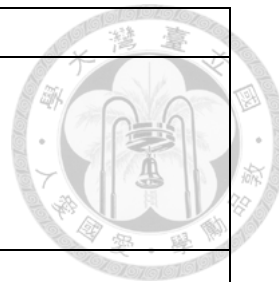


Table 3. Differences between our method and Song and Zhao (2013a)

Our method	Song and Zhao (2013a)
1. We spell out the qualia structure, i.e. the four roles, of the body part at issue.	--
--	1. Each element's part-of-speech (P) in the compound, e.g. adjective, verb (v) and noun (n).
2. We do not provide the types of the compound and each element, since all the body part words belong to the natural type.	2. The types of the compound and each element (T), i.e. natural type (N), artifactual type (A) and underspecified type (U).
3. We provide structural relation between elements of compounds, but the terms used differ from those used by Song and Zhao (2013a). We use 'modifier-modified', 'coordination', 'subject-predicate' and 'verb-object constructions' for the structural relations.	3. The structural relation between two elements in the compound, e.g. modification construction, subject-verb construction and verb-object construction.
4. Finding a body part in the lexical forms may have more than one sense based on the corpus data, we provide the senses of the body part at issue.	--
5. We specify the qualia role of a body part at the lexical level, and that at the clausal level.	4. The qualia relation between two elements in a compound or the qualia relation between the compound and the elements, i.e. Formal, Constitutive, Telic and Agentive.
6. We provide the metaphorical and/or	5. Sense variations. E.g. metaphors and

metonymical meaning of the body part.	metonymies.
7. We specify the speaker and the frequency, i.e. the president who employs the lexical item and the times he uses it	--
8. We cite the basic contemporary meaning of the lexical item provided in the dictionary compiled by the Ministry of Education (the MOE dictionary), Taiwan. When a lexical item is not listed as an entry in the MOE dictionary, it is looked up in 漢典 (zdic) at www.zdic.net. When a word is listed in neither dictionary, we infer its meaning based on its clausal information.	--



Take the body part 血 *xie* 'blood'. First the qualia structure is spelled out, as indicated in Figure 3:

blood

- Constitutive = ...
- Formal = liquid, red
- Telic = sustain life, carry ancestral features, carry emotion and personal traits, etc.
- Agentive = natural kind

Figure 4. The qualia structure of blood

In Figure 3, the constitutive role is not explicated, as this dissertation focuses on the relations between a body part and the human body, i.e. how a body part behaves in embodiment, rather than the relations between blood cells and other components and blood as a whole. In other words, we explore body part metaphor which is based on the fact that the body part is constitutive to the human body as a whole. The



constitutive role of blood is thus left blank. The formal role of blood is liquid and red.

The telic role of blood includes sustaining life, carrying ancestral features, carrying

emotion and personal traits. The agentive role is natural kind.

However, we have noticed that the lexical unit 血 *xie* ‘blood’ in our corpus data have two senses.¹⁰ One refers to the blood inside the human body which sustains life.

The other refers to the blood flown outside the human body. We thus need to have two sets of qualia roles for each sense, as indicated in Table 4 below.

Table 4. Two senses of 血 *xie* ‘blood’ and the corresponding qualia roles

	Sense 1	Sense 2
Constitutive	--	--
Formal	liquid, red	liquid, red, smell, coagulation
Telic	sustain life, carry ancestral features, carry emotion and personal traits, etc.	--
Agentive	Natural kind	X which causes blood flow out of body/body parts

Take 血肉 *xierou* blood-flesh ‘blood and flesh’ and 血跡 *xieji* blood-mark ‘blood mark’. The following information is provided based on our modified and expanded method:

¹⁰ This will be elaborated in Chapter 4.

Table 5. The information listed in the analysis

Lexical item	血肉	血跡
1. Structure	Coordination	Modifier-modified
2. Sense	The red body fluid which sustains life	The blood flown out of the human body
3. Qualia role at the lexical level	Null	Agentive
4. Qualia role at the clausal level	Telic	Agentive
5. Metaphorical meaning	ANCESTRY IS BLOOD	LOSS OF LIFE IS BLEEDING
6. Speakers	Chiang K.: 2 (tokens)	Chiang K.: 4 (tokens)
7. Meaning in the MOE Dictionary	血液和肌肉。指人的軀體。	血液滴落或沾附於各種物體上的痕跡。

Several issues merit attention. Regarding the qualia role at the lexical level, the 血 *xie* ‘blood’ in 血肉 *xierou* blood-flesh ‘blood and flesh’ is in coordination structure, and both 血 *xie* ‘blood’ and 肉 *rou* ‘flesh’ refer back to the human body. That is, they are constitutive roles of human body, and thus no role is highlighted at the lexical level. On the other hand, the agentive role is specified for 血 *xie* ‘blood’ in 血跡 *xieji* blood-mark ‘blood mark’, as 跡 *ji* ‘mark’ is brought about by 血 *xie* ‘blood’.

Concerning the qualia role at the clausal level, the lexical item 血肉 *xierou* blood-flesh ‘blood and flesh’ and 血跡 *xieji* blood_mark are interpreted as part of the clause. When the clausal context is considered, it is found that 血肉 *xierou* blood-flesh ‘blood and flesh’ is followed by 相連 *xianglian* connect, as in 自然個個

都是血肉相連、呼吸相通的自由鬥士！ ‘Each of us surely is the fighter for freedom who shares the same blood, flesh and breath.’ The telic role thus arises from 血 *xie* ‘blood’ in 血肉 *xierou* blood-flesh ‘blood and flesh’, as it functions to carry the genetic tie/ancestral tie, which connects the fighters together. On the other hand, the body part 血 *xie* ‘blood’ in 血跡 *xieji* blood_mark still performs the agentive role, as its meaning remains when it is put in the clause: 惟有團結一致，繼承國父的遺志，追隨先烈的血跡 ‘The only thing we can do is unite ourselves, take Dr. Sun Yat-sen’s will, and follow the national martyrs’ blood marks....’

Regarding the metaphorical/metonymical meaning, at this stage we have to consider only the meaning change extended out of the clausal level. The conceptual pairing ANCESTRY IS BLOOD can be retrieved out of the clause 自然個個都是血肉相連, and LOSS OF LIFE IS BLEEDING out of 追隨先烈的血跡.

Let’s think about the approach taken by a researcher of conceptual metaphor analysis. (Again, we take lexical items containing 血 *xie* ‘blood’.) S/he may consider metaphorical the morpheme of 血 *xie* ‘blood’ in the bolded lexemes in the following sentences based on her/his intuition:

Example 3

a. 海峽__兩岸__人民__源自於__相同__的__**血緣**

Strait__both-shores__people__come-from__same__DE__relationship-by-blood

People in Taiwan and China are descendants from the same ancestor.

- b. 人人__都__有__恨__不__分__毛賊__之__肉__而__食__之__的__血仇__血債
Everyone__all__have__hate__NEG__tear__Mao-thief__DE__flesh__and__eat__i
t__DE__blood-revenge__blood-debt

Everyone wishes to avenge their family member's death on Mao.

- c. 無不__是__緘口__吞聲，忍淚__泣血
NEG-NEG__SHI__shut-up, hold-tears__weep-blood

[The people] all shut their mouths up, held their tears and weep blood.

- d. 福爾摩沙__的__子民__流__著__相同__的__血液
Formosa__DE__people__flow__ASP__same__DE__blood

The Formosan people [i.e. people in Taiwan] share the same blood and hold the same 'Taiwan Spirit'.

- e. 我們__追念__國父__在__四十四年__以前__領導__革命__先烈，擲__頭顱，
流__鮮血

We__think-back__the-founding-father__in__44-year__ago__lead__revolution__n
ational-martyrs, throw-away__head, flow__fresh-blood

We are in memory of Dr. Sun Yat-sen. He led the national martyrs, who threw away their heads and bled their blood (did not care about their lives) so as to overthrow the absolute monarchy which had last for three thousand years.

- f. 用__我們__自己__的__血，自己__的__汗，自己__的__手，來__決定__自己
__和__世代__子孫__的__命運

Use__our__own__DE__blood, our__own__sweat, our__own__hand,
come__decide__ourselves__and__generations__offsprings__DE__destiny

[We] should use our own blood, our own sweat, and our own hands to determine our own destiny and our offspring's destiny.

- g. 自然__個個__都__是__血肉__相連、呼吸__相通__的__自由__鬥士

Naturally__each-and-every__all__SHI__blood-and-flesh__connect,
 breath__link__DE__freedom__fighter

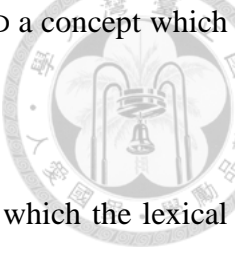
*Each of us surely is the fighter for freedom who shares the same blood, flesh and
 breath*



On determining the target and source concepts, the researcher is likely to formulate
 the following conceptual mappings:

Example 3	Conceptual mappings possibly formulated by other researchers
3a. 海峽兩岸人民源自於相同的 血緣	ANCESTRY IS BLOOD
3b. 人人都有恨不分毛賊之肉而食之的 血仇血債	BLOOD IS DEBT or DEBT IS BLOOD
3c. 無不是緘口吞聲，忍淚 泣血	SUFFERING IS BLOOD
3d. 福爾摩沙的子民流著相同的 血液	ANCESTRY IS BLOOD
3e. 我們追念國父在四十四年以前領導革命先烈， 擲頭顱，流 鮮血	LIFE IS BLOOD
3f. 用我們自己的 血 ，自己的汗，自己的手，來決 定自己和世代子孫的命運	EFFORT IS BLOOD
3g. 自然個個都是 血肉 相連、呼吸相通的自由鬥士	ANCESTRY IS BLOOD

The following questions are yet to be answered:

- 
1. Is it adequate to claim BLOOD as the source domain? Or is BLOOD a concept which belongs to a larger concept?
 2. Why does the same conceptual metaphor arise from clauses in which the lexical items containing 血 *xie* 'blood' differ in form and morphological structure (3a, 3d, 3g)?
 3. When the clausal context is similar, e.g. blood in 3d and 3e is preceded by 流 *liu* 'flow', why do the conceptual mappings retrieved differ?

Taking the modified MIP described in 3.3.1, we examine this body part in a compound as a lexical unit, find out its basic contemporary meaning and contextual meaning, so as to see whether the body part is used metaphorically/metonymically.

We retrieve the qualia role(s) out of 血 *xie* 'blood' in each lexical item, which is shown in Table 6 below.

At the lexical level, the unit 血 *xie* 'blood' in 3a and 3b, discussed in 3.3.1, performs the telic role, as 'carry ancestral/genetic tie' is one of the function of blood of Sense 1. 血 *xie* 'blood' in 3c performs the formal and agentive roles simultaneously, as the object following the verb 'cry, weep' is liquid, and it is blood flown out of the human body. 血 *xie* 'blood' in 3d and 3e realizes the formal role, as the character 液 *yi* 'liquid' in 3d and 鮮 *xian* 'freshness' in 3e highlight the formal

role of 血 *xie* ‘blood’. The unit 血 *xie* ‘blood’ as a morpheme word in 3f and in the coordination structure 3g does not specify a role at the lexical level.



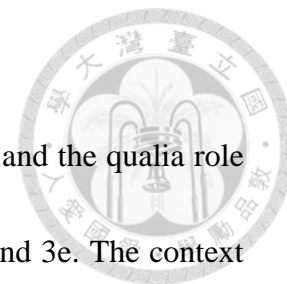
Table 6. Qualia role of 血 *xie* ‘blood’ at the lexical level and the modified conceptual metaphors

Lexical item	Qualia role at the lexical level	Conceptual mappings formulated using our method	Example
血緣	Telic	ANCESTRY IS BLOOD	3a. 海峽兩岸人民源自於相同的 血緣
血債	Telic	ANCESTRY IS BLOOD	3b. 人人都有恨不分毛賊之肉而食之的 血仇血債
泣血	Formal & agentive	SUFFERING IS <u>BLEEDING</u>	3c. 無不是緘口吞聲，忍淚 泣血
血液	Formal	ANCESTRY IS BLOOD	3d. 福爾摩沙的子民流著相同的 血液
鮮血	Formal	LIFE IS BLOOD	3e. 我們追念國父在四十四年以前領導革命先烈，擲頭顱，流 鮮血 ，
血	Null	MAKING EFFORT IS <u>BLEEDING</u>	3f. 用我們自己的 血 ，自己的汗，自己的手
血肉	Null	ANCESTRY IS BLOOD	3g. 自然個個都是 血肉 相連、呼吸相通的自由鬥士

BLOOD should not be regarded a source domain in these mappings. Rather, it is a ‘source concept’,¹¹ i.e. one of the concepts enclosed in a domain, HUMAN BODY; the functionality derived from blood, i.e. BLEEDING, also belongs to the domain HUMAN

¹¹ The terms ‘source concept’ and ‘target concept’ employed in this dissertation should be differentiated from those in Grady (1997) and those in Kovecses (2003). The terms refer to the deinflated concepts which are highly correlated at the stage of *conceptual binding* and function to form *primary metaphors*, according to Grady (1997: 24). They are, however, not different from what Lakoff and Johnson (1980) call ‘source domain’ and ‘target domain’ in Kovecses (2003). The source and target concepts in this dissertation refer to the concepts within a domain. For example, BLOOD, which is enclosed in the domain HUMAN BODY, is a source concept. A target concept is the concept onto which the source concept is mapped, e.g. ANCESTRY.

BODY.



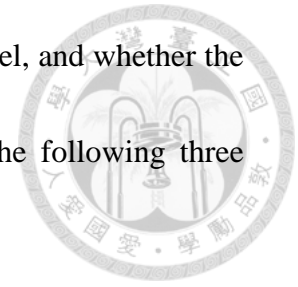
At this stage, another issue arises: when the context is similar, and the qualia role is the same, will the conceptual mappings be the same? Take 3d and 3e. The context of both examples are similar, with 流 *liu* ‘flow’ as the verb preceding blood, be it 血液 *xieyi* ‘blood’ or 鮮血 *xianxie* ‘fresh blood’. Moreover, the qualia role retrieved from both lexical items is the same: formal. However, given the similar context and the same qualia role, the conceptual mapping for 3d is ANCESTRY IS BLOOD, while that of 3e should be LIFE IS BLOOD. This discrepancy needs to be resolved.

Another issue to be settled occurs to 3f and 3g. The unit 血 *xie* ‘blood’ in the coordination structure do not specify any qualia role at the lexical level. How do we formulate the conceptual metaphor of 3f and 3g?

In order to answer the above questions, we examine the examples again and find the following two phenomena:

- (1) If the metaphorical meaning can be accessed at the lexical level, the lexically specified role must contribute to the interpretation of the metaphor.
- (2) If the metaphorical meaning is not lexically accessed, but a lexical item specifies one of the qualia roles, this specified role may not contribute to the metaphor.

Based on whether the qualia role is specified at the lexical level, and whether the metaphorical meaning is lexically accessed, we have obtained the following three kinds of meaning representations:



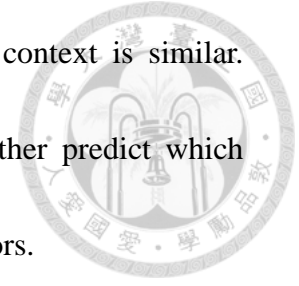
- (1) The lexical item with a specified role at the lexical level and the word's metaphorical meaning is lexically accessed. E.g. 血緣、血債
- (2) The lexical item with a specified role at the lexical level but the word's metaphorical meaning is NOT lexically accessed. E.g. 泣血、鮮血、血液
- (3) The lexical item with NO specified role at the lexical level and the word's metaphorical meaning is NOT lexically accessed. E.g. 血、血肉

The three representations reveal a point yet to be addressed in previous research on embodiment: the layeredness and inter-connectedness of the meaning extensions of body parts, which strengthens the human body as a whole in embodiment process.

Our method has several advantages. First, incorporating the qualia structure, we have higher accuracy in determining the source concept. That is, we can determine whether it is a body part (e.g. BLOOD), or the functionality emerging from the body part (e.g. BLEEDING), which is mapped onto an abstract concept. We also explain why an identical conceptual pairing arises from clauses in which the lexical items containing a body part differ in form and morphological structure. We spell out the

reason why the retrieved conceptual mappings differ when the context is similar.

Moreover, with the data analysis as the foundation, we can further predict which qualia role is the most predominant in activating body part metaphors.



In the following four chapters, we will analyze the four body parts: 血 *xie* ‘blood’, 肉 *rou* ‘flesh’, 骨 *gu* ‘bone’ and 脈 *mai* ‘meridian’. In each of the following chapters, firstly we review the previous research. We then apply the modified MIP to uncover whether the lexical forms containing the specific body part is figuratively used. (The only exception is Chapter 4: We have demonstrated how the modified MIP works on the lexical items containing 血 *xie* ‘blood’.) The qualia structure of each part is spelled out, and the interactions between the figurative meanings, the qualia roles, and the morphological structures are examined. Then we investigate how the speakers use these body parts and provide accounts for how the changing socio-political contexts guide their use. Finally we summarize our findings at the end of each chapter.

Chapter 4 Data Analysis: 血 *xie* ‘blood’



The data analysis is divided into four chapters according to the four body parts at issue. That is, we are going to explore the lexical items containing 血 *xie* ‘blood’, 肉 *rou* ‘flesh’, 骨 *gu* ‘bone’, and 脈 *mai* ‘meridian’.

Before going into the details of the analysis in the corpus, we would like to point out the reason why we analyze the metaphors arising from human body parts. Human body, constituted by differing parts, is capable of performing diversified tasks, as shown in Figure 3 below.

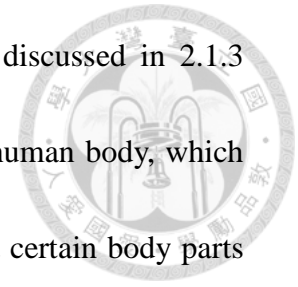
human body

- Constitutive = head, arms, legs, heart, liver, stomach, blood, flesh, etc.
- Formal = human body
- Telic = move (walk, run, etc.), perform tasks (grasp, throw, etc.), etc.
- Agentive = natural kind

Figure 3. The qualia structure of human body

It is the functions of and coordination among the body parts which facilitates the human body to do all the jobs. Different levels of significance are given to different body parts, which is attributable to the specific functions of the body parts. This is

reflected from the corporeal metaphors for political entities, as discussed in 2.1.3 above. Embodiment theory addresses meaning emergence out of human body, which often falls at the level of body part. This results from the fact that certain body parts are highlighted in certain cases, and we argue the function, i.e. the telic role, of body parts is the major reason why it is highlighted.

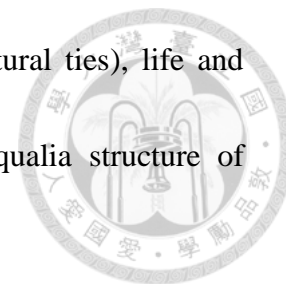


4.1 Previous studies on blood and the qualia structure of blood

The metaphorical/metonymical use of blood has attracted linguistic scholars' attention these two decades. Charteris-Black (2001), in his analysis of the figurative uses of blood in the Bank of English, argues that blood mainly represents ancestry, life and temperament. According to Kovecses' (2002) research comparing English and Hungarian, and Mischler's (2008) diachronic corpus study on Modern English, blood often functions as the source domain onto which emotion is mapped. Also focusing on the figurative description of emotion, Vainik's (2011) finding reveals that, in the light of internal body parts, blood is often activated and its frequency is only next to that of 'heart'. Investigating the metaphorical uses of blood in American English and Hungarian, Simo (2011: 2898) finds that blood symbolizes 'vitality, passion, life, familial ties, but also aggression and death'.¹² Summing up from the above, we can

¹² The schema of blood and its movement can also be mapped onto the domains of FINANCE and

see blood represents ancestry (including familial, ethnic and cultural ties), life and vitality, temperament/emotion, and aggression and death. The qualia structure of blood is illustrated as Figure 4, which is reproduced below:



blood

Constitutive = ...
Formal = liquid, red
Telic = sustain life, carry ancestral features, carry emotion and personal traits, etc.
Agentive = natural kind

Figure 4. The qualia structure of 血 *xie* ‘blood’

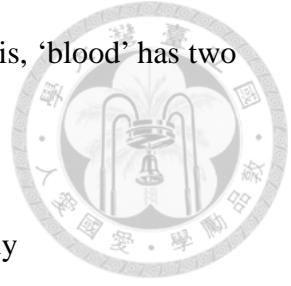
Like what is pointed out in 3.3.2, as the discussion focuses on the interaction between the body part and the human body, the constitutive role of blood is not listed. Blood is red and liquid in its form. It functions to sustain life, carry ancestral features, and carry emotion and temperaments. Its agentive role is natural kind.

A point merits attention: why can blood represent two contradictory notions, life and death, which is argued by Simo (2011)? This can be answered by the meaning division of blood, which was missing in the previous studies.¹³ We think the two

TRAFFIC (e.g. Goatly 2007). This usage is under X IS A PERSON metaphor, which is not found in our corpus data regarding the words containing 血 *xie* ‘blood’. The X IS A PERSON metaphor, however, is identified in the other three body parts, which will be discussed in the corresponding chapters.

¹³ Simo (2011: 2898) mentions that Proto-Indo-European language had different words for ‘outside blood’ and ‘inside blood’, the former of which was associated with death and the latter life. But she does not elaborate the two notions of blood.

contradictory notions of blood should be treated as polysemy. That is, ‘blood’ has two senses:



Sense 1 of blood: liquid circulating naturally inside human body

Sense 2 of blood: liquid flowing inside/out of human body due to injury or effort making¹⁴

Table 7. Two senses of 血 *xie* ‘blood’ and the corresponding qualia roles

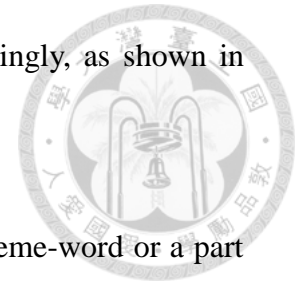
	Sense 1	Sense 2
Constitutive	--	--
Formal	liquid, red	liquid, red, smell, coagulation
Telic	sustain life, carry ancestral features, carry emotion and personal traits, etc.	--
Agentive	Natural kind	X which causes blood flow out of body/body parts

This division facilitates our understanding about why blood can represent both life and death. It is because the former is brought about by sense 1, and the latter by sense

¹⁴ The event structure presupposes sense 2: CAUSE-TO-BLEED (x, y, B), in which x is the causer, y is the theme, and B represents blood as a result of bleeding. The qualia structure of this event structure is shown below:

- Formal= CAUSE-TO-BLEED
- Constitutive= x, y, B
- Agentive = x
- Telic = Blood

2.¹⁵ The qualia structure of blood thus should be divided accordingly, as shown in Table 4 in 3.3.2, which is reproduced as Table 7 above.



We then examine the 148 hits with 血 *xie* 'blood' as a morpheme-word or a part in lexical forms in our corpus so as to retrieve conceptual mappings and to uncover the interaction between qualia roles and conceptual mappings.

Applying the method described in 3.4.1 and 3.4.2, we identify the metaphorically used items of 血 *xie* 'blood', be it a morpheme-word or part of a compound. We then retrieve the qualia role(s) of 血 *xie* 'blood' in the lexical forms first at the lexical level, and then at the clausal level, so as to reveal how it behaves. The three kinds of meaning representations and the corresponding examples are shown below:

- (1) The lexical item with a specified role at the lexical level and the word's metaphorical meaning is lexically accessed. E.g. 血忱
- (2) The lexical item with a specified role at the lexical level but the word's metaphorical meaning is NOT lexically accessed. E.g. 熱血, 鮮血
- (3) The lexical item with NO specified role at the lexical level and the word's metaphorical meaning is NOT lexically accessed. E.g. 血肉

¹⁵ This division also functions to explain why positive and negative evaluations attributed to phrases consisting of blood in *blood for life* in Charteris-Black (2001). The phrases transmitting positive evaluations, e.g. new blood, emphasizes the blood flowing in human body, and those negative evaluations, e.g. 'to bay for someone's blood', refers to the blood excreted from human body.

The first kind is exemplified by 血忱 *xiechen* blood-sincerity ‘sincerity’. The morpheme 血 *xie* ‘blood’ in 血忱 *xiechen* blood-sincerity ‘sincerity’ highlights the telic role at the word level, because blood functions to carry a character or trait ‘sincerity’. The qualia role identified at the lexical level is transferred to the clausal level, as shown in Example 4 below:

Example 4

這__六十年__來，中正__與__我__全國__軍民，實__無日__不__奉獻__其__
心力、**血忱**__於__保衛__中華民國 (Chiang K._601010)

This__sixty-years__come,

Chung-cheng__and__my__nationwide__armed-forces-and-people,

actually__no-day__NEG__devote__our__effort, sincerity__to__protect__ROC

For 60 years, Chung-cheng [Chiang Kai-shek's self-naming], all the armed forces and people have been dedicating our efforts and sincerity to guarding the Republic of China.

Example 4, showing that blood carries a trait, highlights the function of blood and generates a metaphor TEMPERAMENT IS BLOOD.

The second kind is exemplified by the words 熱血 *rexie* hot-blood ‘fervent’ and 鮮血 *xianxie* fresh-blood ‘fresh blood’. 血 *xie* ‘blood’ in 熱血 *rexie* hot-blood ‘fervent’ presents the formal role at the lexical level, as 熱 *re* ‘hot’ indicates a

specific dimension of blood, i.e., temperature. No mapping can be retrieved from this lexical form. However, when the clausal context is studied, a new qualia role is assigned and a metaphor emerges. Regarding the qualia role, this lexical item is coerced to take on the telic role, because the word 熱血 *rexie* hot-blood ‘fervent’ refers to a trait, as exemplified in Example 5 below:

Example 5

只要__大家__都__能__秉持__其__忠肝__熱血，...那__就__能__一齊__來__承接__中華__文化__歷史__的__光輝 (Chiang K._620101)

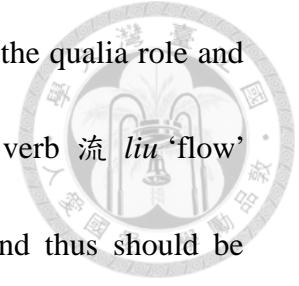
As-long-as__everybody__all__can__hold__their__loyalty__ferventness,...
then__INT__can__together__come__take__Chinese__culture__history__DE__glory

As long as everybody can keep being loyal and fervent,... then we all can see the glory of Chinese culture.

Example 5, also representing blood carrying a specific characteristic at the clausal level, realizes the mapping TEMPERAMENT IS BLOOD.

Also exemplifying the second kind, Example 6 shows that 鮮血 *xianxie* fresh-blood ‘fresh blood’, at the lexical level, indicates the formal role of blood, as it specifies a distinctive dimension of blood, freshness. At the lexical level, no metaphor

is retrievable. However, the clausal context triggers the change of the qualia role and the emergence of the metaphor. When this lexical form follows the verb 流 *liu* 'flow' in the clause, it refers to the blood flowing out of the body, and thus should be regarded as taking on the agentive role. The mapping emerging from this example is LIFE IS BLOOD, as indicated in Example 6 below:



Example 6

我們__追念__國父__在__四十四年__以前__領導__革命__先烈，擲__頭顱，
流__鮮血，推翻__了__三千年__來__專制__的__政體 (Chiang K._441010)

We__commemorate__founding-father__PREP__44-years__ago__lead__revoluti
on__national-martyrs, throw-away__head, flow__fresh-blood,
overthrow__ASP__3000-years__come__absolute-monarchy__DE__polity

We are in memory of Dr. Sun Yat-sen. He led the national martyrs, who threw away their heads and bled their blood (did not care about their lives) so as to overthrow the absolute monarchy which had last for three thousand years.

The third kind is exemplifying by Example 7:

Example 7

千萬__僑胞__血肉__相連、忘__身__於__外 (Chiang K._611010)

Tens-of-thousands__overseas-Chinese__blood-flesh__connect,
forget__body__PREP__outside

Tens of thousands of overseas Chinese are connected genetically and they do not

care about their own safety.



The lexical item 血肉 *xierou* 'blood-flesh' does not specify any role at the lexical level, and the word's metaphorical meaning cannot be accessed lexically. When we go beyond the lexical level and take the clausal context into consideration, it is the telic role and the pairing ANCESTRY IS BLOOD emerging out of the clause.

We would like to reiterate that, the three representations of the lexical items consisting of a body part term reveal an issue yet to be discussed in research on embodiment: the layeredness and inter-connectedness of the meaning extensions of body parts, which reinforces the human body as a whole in the process of embodiment. In the analysis of 血 *xie* 'blood', two situations occur when the qualia role is identified at the lexical level: The metaphorical meaning is accessible at the lexical level and the metaphorical meaning is coerced and accessible at the clausal level. When 血 *xie* 'blood' refers back to the whole body at the lexical level, its qualia role cannot be retrieved at the lexical level and the metaphorical meaning cannot be accessed at the lexical level. The three kinds disclose a tightly constructed and inter-related embodiment process, underscore the importance of the body as a whole, and highlight the consistency of embodiment where the concept of the body is

tied into the metaphors.



Table 8 shows the senses, levels of interpretation and the qualia roles of lexical items containing 血 *xie* 'blood'.

Table 8. Qualia roles, senses and levels of interpretation of lexical items containing 血 *xie* 'blood'

Qualia Roles	Sense 1		Sense 2	
	Lexical level	Clausal level	Lexical level	Clausal level
Unspecified	34	0	21	0
Formal	11	0	47	37
Telic	22	49	0	0
Agentive	0	18	50	81
Total	67	67	118	118

According to Table 4, when Sense 1 is activated at the lexical level, there are 34 tokens of which none of the qualia roles is specified. 11 tokens function as the formal role and 22 the telic role. At the clausal level, 49 tokens perform the telic and 18 the agentive role. When Sense 2 is activated at the lexical level, there are 21 tokens with unspecified role, and 47 tokens perform the formal and 50 the agentive role. At the clausal level, 37 tokens function as the formal role and 81 tokens the agentive role.

Table 8 reveals a tendency that the token numbers of the unspecified role and the formal role drop, and those of the telic and agentive roles rise, when the interpretation

moves from the lexical to the clausal level. This is ascribed to the coercion occurring at the clausal level. Moreover, according to Table 8, Sense 2 predominates the use of 血 *xie* 'blood' in the corpus, showing the body part 'blood' in the speeches tends to refer to blood flowing out of body or body parts due to injury or effort-making.

Taking into consideration the morphological structure of the lexical items, we find 血 *xie* 'blood' as a component of lexical items are realized in the modifier-modified, coordination, verb-object, and subject-predicate structures, and it alone forms a morpheme-word. The analysis will be divided according to the sense, the level of interpretation, and the structure of lexical item. Afterwards, we investigate the interaction between the speakers, the conceptual mappings using blood as the source concept, and the qualia roles at the clausal level,¹⁶ so as to reveal how the use of metaphors differ along with the change of the political context.

4.2 Sense 1

This section is divided further into two subsections: one on Sense 1 realized at the lexical level, and the other at the clausal level. Table 9 shows the morphological structures, the qualia roles at the lexical and clausal levels, and the number of tokens of each role.

¹⁶ Regarding the analysis of conceptual metaphor, we focus on the interpretation at the clausal level, because we believe that the meaning at this level is what is meant to be transmitted to the listener.

According to Table 9, the modifier-modified structure predominates, with 52.24% among all the structures, followed by the coordinate structure (25.37%), the morpheme-word (20.90%) and the subject-predicate structure (1.49%).

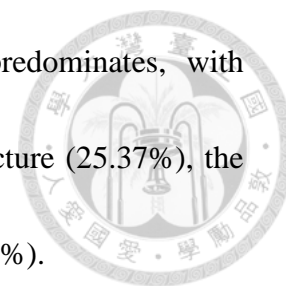
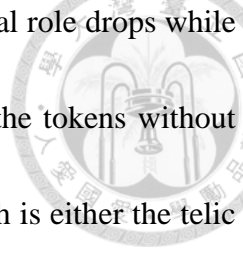


Table 9. The structures, qualia roles of *血* 'blood' under Sense 1

Structure	Total number of tokens (& percentage)	Qualia role at lexical level	No. of tokens	Qualia role at clausal level	No. of tokens
Modifier-modified	35 (52.24%)	Unspecified	3	Unspecified	0
		Formal	10	Formal	0
		Telic	22	Telic	33
		Agentive	0	Agentive	2
Coordination	17 (25.37%)	Unspecified	17	Unspecified	0
		Formal	0	Formal	0
		Telic	0	Telic	12
		Agentive	0	Agentive	5
Morpheme-word	14 (20.90%)	Unspecified	14	Unspecified	0
		Telic	0	Telic	3
		Agentive	0	Agentive	11
Subject-predicate	1 (1.49%)	Formal	1	Formal	0
		Telic	0	Telic	1
Total			67		67



This table also reveals two tendencies: the number of the formal role drops while those of the telic and agentive roles rise at the clausal level; and the tokens without any qualia role at the lexical level are coerced to take on one, which is either the telic or the agentive role, at the clausal level. The two tendencies lead to the telic role ranking the highest at the clausal level, with 49 out of 67 tokens (73.13%). This testifies our hypothesis that the telic role, which encodes the function or purpose of a body part, is what mainly motivates embodiment.

4.2.1 Sense 1: lexical level

Sense 1 realized at the lexical level involves mostly modifier-modified structure, followed by coordination, and then by subject-predicate, each of which is elaborated below.

A. Modifier-modified structure

This morphological structure predominates, which include expressions such as 血緣 *xieyuan* blood-relation ‘relationship by blood’, 熱血 *rexie* hot-blood ‘fervent’, 血輪 *xuelun* blood ‘blood’, 血忱 *xiechen* blood-sincerity ‘sincerity’, and so on.¹⁷ Take 血緣 *xieyuan* blood-relation ‘relationship by blood’, of which the qualia relation

¹⁷ The full list also include 血液, 血流, 血系, 血胤, 血性, 血誠, 血脈, 血債 and 血帳.

between the elements is explained below. This lexical item, with the first element modifying the second element, refers to ‘relationship by blood’ in the MOE Dictionary. The morpheme 血 *xie* ‘blood’ has undergone meaning extension: instead of the red fluid which circulates inside the body and sustains life, it refers the origin of a person, or the familial/ethnic/ancestral tie. 血 *xie* ‘blood’ is regarded as the realization of the *telic* role, as it indicates the function of blood in the formation of the relation, i.e., to carry the familial/ethnic/ancestral ties. Figure 5 below presents the qualia structure of 血緣 *xieyuan* blood-relation ‘relationship by blood’.

血緣 *xieyuan* blood-relation ‘relationship by blood’

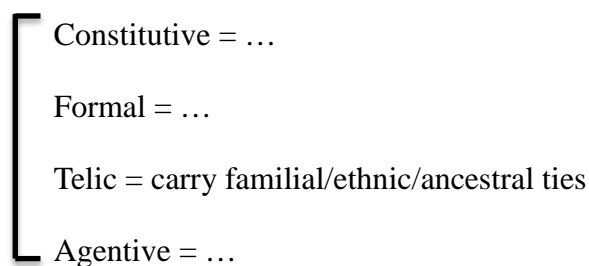
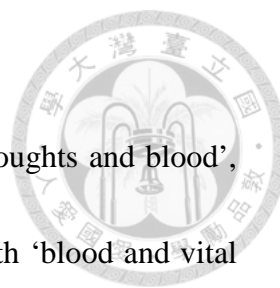


Figure 5. The qualia structure of 血緣 *xieyuan* blood-relation ‘relationship by blood’

Another example highlighting the telic role is found in the lexical item 血性 *xiexing* blood-nature ‘disposition of doing good and fostering justice’ (the MOE Dictionary), which refers to a trait. Drawing a mapping between blood and temperament, it is the telic role that blood performs, as it functions to carry a disposition.



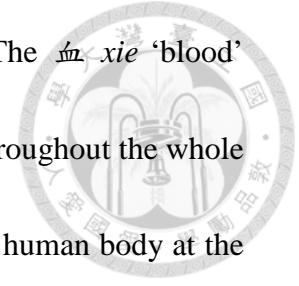
B. Coordination structure

Lexical items of this structure include 心血 *xinxie* heart-blood ‘thoughts and blood’, 血肉 *xierou* blood-flesh ‘blood and flesh’, 血氣 *xieqi* blood-breath ‘blood and vital energy’ and 膏血 *gaoxie* fat-blood ‘fat and blood’. This structure does not specify any qualia role of blood, but realizes blood as the constitutive role of the human body, as the elements of these words refer to the constituents of a human body either biologically or culturally. Take 血肉 *xierou* blood-flesh ‘blood and flesh’. 肉 *rou* ‘flesh’, consisting of muscle and fat, is an essential component to human body, which composes most of the vital organs. The occurrence of the character 肉 *rou* ‘flesh’ facilitates the direct association to human body. 血 *xie* ‘blood’, co-occurring with 肉 *rou* ‘flesh’, is thus coerced to refer back to the human body.

C. Morpheme word

When 血 *xie* ‘blood’ occurs alone as a morpheme word, it behaves similar to this character in the coordination structure. For example, the morpheme word 血 *xie* ‘blood’ occurs in parallel constructions such as 有血有肉 *youxie-yourou* have-blood-have-flesh ‘with blood and flesh’ and 自己的血、自己的汗 *ziji de xie ziji de han* one’s-own-blood, one’s-own-sweat ‘our own blood and our own sweat’, as well as linked by conjunction such as 血和淚 *xie he lei* blood-and-tear ‘blood and

tears’ or 鐵與血 *tie yu xie* iron-and-blood ‘weapon and blood’. The 血 *xie* ‘blood’ as a morpheme word, regarded as the red liquid which circulates throughout the whole body and sustains life, is understood as the constitutive role of the human body at the lexical level.



D. Subject-predicate structure

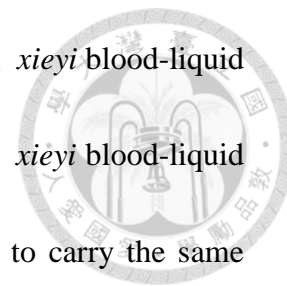
There is only one fixed idiom of this structure: 血濃於水 *xienongyushui* blood-thick-than-water ‘blood is thicker than water’. At the lexical level, it realizes the formal role of blood, as it encodes a distinctive feature, the density of this liquid. However, the clausal context coerces it to perform the telic role, which is to be discussed in 4.2.2 below.

4.2.2 Sense 1: Clausal level

The roles of 血 *xie* ‘blood’ coerced at the clausal level which differ from those at the lexical level occur to the modifier-modified and the subject-predicate structures. Regarding 血 *xie* ‘blood’ in the coordination and the morpheme-word structures, the roles are assigned at the clausal context. Each is elaborated below.

Regarding the modifier-modified structure, take 血液 *xieyi* blood-liquid ‘blood’, which indicates the formal role of blood at the lexical level, as 液 *yi* ‘liquid’ manifest

the liquid form. The clausal context coerces 血 *xie* ‘blood’ in 血液 *xièyè* blood-liquid ‘blood’ to take on the telic role. Example 8 below shows that 血液 *xièyè* blood-liquid ‘blood’, embedded in the clause, refers to the function of blood: to carry the same temperament in the blood, which realizes the pairing TEMPERAMENT IS BLOOD.



Example 8

福爾摩沙__的__子民__流__著__相同__的__血液，秉持__相同__的__「台灣__精神」 (Chen S._940101)

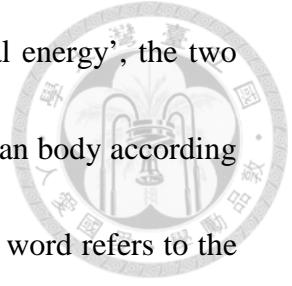
Formosa__DE__people__flow__ASP__same__DE__blood, hold__same__DE__
‘Taiwan__Spirit’.

The Formosan people [i.e. people in Taiwan] share the same blood and hold the same ‘Taiwan Spirit’.

The 血 *xie* ‘blood’ in the subject-predicate structure, 血濃於水 *xienongyushui* blood-thick-than-water ‘blood is thicker than water’, is found to be coerced to refer to the function of blood, i.e. the telic role. Emphasizing the ancestral/ethnic ties among the members of an ethnic group, it transmits the ANCESTRY IS BLOOD metaphor.

血 *xie* ‘blood’ in the words of the coordination structure are coerced to perform two roles: the telic and the agentive roles. 血肉 *xierou* blood-flesh ‘blood and flesh’ and 血氣 *xieqi* blood-breath ‘blood and vital energy’ are assigned the telic role, and 膏血 *gaoxie* fat-blood ‘fat and blood’ and 心血 *xinxie* heart-blood ‘thoughts and

blood' the agentive. Take 血氣 *xieqi* blood-breath 'blood and vital energy', the two elements of which are regarded as the essential constituents of human body according to traditional Chinese medicine. When embedded in the clause, the word refers to the ethnic/ancestral ties shared by all Chinese people, thus conveying the ANCESTRY IS BLOOD metaphor (Example 9):



Example 9

今天__大陸__人民__激烈__反共...亦__就__正__是__中華__兒女__炎黃子
孫__血氣__之__倫... (Chiang K._570101)

Today__Mainland-China__people__furious__anti-communist...also__INT__exa
ctly__SHI__China__sons-and-daughters__descendants-of-the-Yellow-Emperor__
blood-and-vital-energy__DE__ethics

*Now people in the Chinese Mainland fight furiously against the Chinese
Communists... which is driven by the blood and vital energy shared by all the
Chinese people...*

Regarding the coerced agentive role at the clausal level, we take 膏血 *gaoxie* fat-blood, which is defined 'fat and blood'. It metaphorically refers to 'the wealth earned by making efforts' by the MOE Dictionary. When one makes effort, his/her blood is consumed and regarded flowing out of the body as sweat, which makes it the

agentive role and realizes the EFFORT IS BLOOD metaphor (Example 10).¹⁸



Example 10

為__榨取__我__大陸__億萬__同胞__的__膏血__，殺害[...]無數__生命
(Chiang K._581010)

in-order-to__squeeze__my/our__mainland__hundreds-of-millions__compatriots
__DE__fat-and-blood__kill [...]__countless__lives

*[Mao Zedong and his company] killed countless lives... in order to **take the wealth from** our compatriots in Mainland China...*

4.3 Sense 2

Predominating the meaning of 血 *xie* 'blood' in the corpus, Sense 2 is realized in the modifier-modified, verb-object, and coordination structures. The qualia roles at the lexical and clausal levels and the token numbers are listed in Table 10.

According to Table 10, at the lexical level, the modifier-modified structure predominates, with 55.08% among all the structures, followed by the verb-object (27.12%) and then by the coordination (17.80%) structures. The ranking remains the same at the clausal level.

¹⁸ The definition provided by the MOE Dictionary refers to a metaphor which is a level up, WEALTH IS BLOOD. But we think the metaphor should be EFFORT IS BLOOD, as the consumption of blood leads to the generation of effort.

Table 10. The structures, qualia roles of 血 *xie* ‘blood’ under Sense 2

Structure	Total number of tokens (& percentage)	Qualia role at lexical level	No. of tokens	Qualia role at clausal level	No. of tokens
Modifier-modified	65 (55.08%)	Formal	31	Formal	21
		Agentive	34	Agentive	44
Verb-object	32 (27.12%)	Formal	16	Formal	16
		Agentive	16	Agentive	16
Coordination	21 (17.80%)	Unspecified	21	Unspecified	0
		Agentive	0	Agentive	21
			118		118

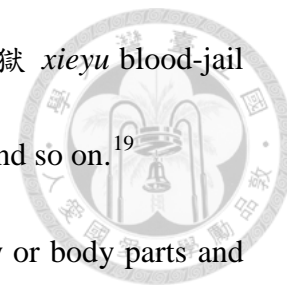
Both of the tendencies found in the analysis of Sense 1 are observed here: the number of the formal role drops while that of the agentive role rises at the clausal level; and the tokens without any a specific role at the lexical level are assigned the agentive role at the clausal level. Contrary to our hypothesis, no telic role is found in this sense, and the agentive role, rather than the telic, dominates at the clausal level, with 81 out of 118 tokens (or 68.64%).

4.3.1 Sense 2: lexical level

A. Modifier-modified structure

This structure predominates the realization of this sense. The lexical items include 血

鐘 *xiezhong* blood-alarm ‘alarm brought into being by blood’, 血獄 *xieyu* blood-jail ‘jail full of blood’, 血腥 *xiexing* blood-smell ‘reeking of blood’, and so on.¹⁹



As this sense refers to blood as liquid flowing out of the body or body parts and no function is specified, it can be inferred that the agentive role should dominate. For example, 血鐘 *xiezhong* blood-alarm refers to an imaginary alarm brought into being by blood flown out of the human bodies due to killing or injuries. There are other roles assigned to blood under this sense. Take 血腥 *xiexing* blood-smell. Defined as ‘reeking of blood’ in the MOE Dictionary, it is a lexical form with the first element 血 *xie* ‘blood’ performing the formal role, as it refers to the smell of blood.

B. Verb-object structure

Three lexical items come from this structure: 浴血 *yuxie* bathe-blood ‘bathed in blood’, 泣血 *qixie* weep-blood ‘weep blood’, 流血 *liuxie* low-blood ‘bleed’. Take 浴血 *yuxie* bathe-blood ‘bathed in blood’. This lexical item refers to the cruelty in a battlefield, where blood is shed and lives are lost, and the amount of blood is so huge that soldiers may think themselves bathed in blood. This word obviously realizes the agentive role of blood, because it refers to blood coming out from human body. It also perform the formal role simultaneously, as the verb 浴 *yu* ‘bathe’ takes liquid as one

¹⁹ The full list also contains 血路, 血手, 血跡, 血獄, 血浪, 血淵(黑獄), (腥風)血雨, 碧血, and 鮮血.

of its arguments.



C. Coordination structure

This occurs to 血汗 *xiehan* blood-sweat ‘blood and sweat’ and 血淚 *xielei* blood-tear ‘blood and tears’. Like the discussion in 4.1.1 above, the coordination structure assigns to 血 *xie* ‘blood’ a constitutive role of the human body as a whole. But 血汗 *xiehan* blood-sweat ‘blood and sweat’ and 血淚 *xielei* blood-tear ‘blood and tears’ are different from 血肉 *xierou* blood-flesh ‘blood and flesh’ and 血氣 *xieqi* blood-breath ‘blood and vital energy’. 汗 *han* ‘sweat’ and 淚 *lei* ‘tear’, also body parts, usually refer to the body fluids coming out of rather than flowing inside human body, despite the fact that they may remain in human body during the production. Though usually representing the body fluids shed out of the body, 汗 *han* ‘sweat’ and 淚 *lei* ‘tear’ are treated as the constitutive roles of the human body at the lexical level.

4.3.2 Sense 2: Clausal level

The roles coerced at the clausal level which differ from those at the lexical level occur to the modifier-modified structure. Regarding 血 *xie* ‘blood’ in the coordination structure, the roles are assigned at the clausal context. Each is elaborated below.

碧血 *bixie* green-blood ‘green blood’ and 鮮血 *xianxie* fresh-blood ‘fresh blood’ are the only types of which blood is coerced to take a different role at the clausal level. The roles of 血 *xie* ‘blood’ in 鮮血 *xianxie* fresh-blood ‘fresh blood’ coerced at the lexical and clausal levels are discussed as Example 3 above. 碧血 *bixie* green-blood ‘green blood’, identified as ‘green blood; blood shed in a just cause’ in the MOE Dictionary, refers to the formal role at the lexical level. When put into the clause, it is coerced to take on the agentive role, namely, to flow out of the body due to injuries, thus realizing the mapping BLOOD IS LIFE (Example 11):

Example 11

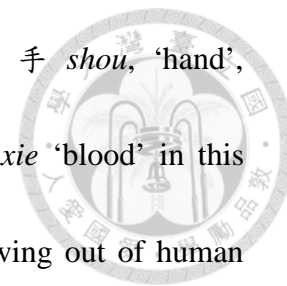
今天__大陸__同胞...更__需要__我們__民族__傳統__革命__精神__的__赤
心__碧血, 出__水火__而__解__倒懸 (Chiang K. 571010)

Today__Mainland-China__compatriot...even-more__need__our__nation__tradit
ion__revolution__spirit__DE__loyalty__green-blood,
out-of__water-fire__and__free-from__hang-by-the-feet

Our fellow countrymen in Mainland China... needing our loyalty and ‘green blood’ from our revolutionary spirit, are waiting for us to help them out.

血手 *xieshou* blood-hand, a modifier-modified compound, with both elements undergoing meaning extension, is not found in either dictionary. We thus need to infer its meaning from the contextual information. Example 12 below shows that the lexical

item 血手 *xieshou* blood-hand indicates a causation, in which 手 *shou*, ‘hand’, metonymically represents the agent causing the loss of life. 血 *xie* ‘blood’ in this lexical item plays the agentive role, as it refers to the liquid flowing out of human body. This also transmits the LOSS OF BLOOD IS LIFE metaphor:



Example 12

二十年__來，無論__臺海__戰爭__之於__西__太平洋...，其__禍根__亂源，
無__一__不__出__之於__毛共__叛逆__的__血手！(Chiang K._590101)

20-years__come, whether__Taiwan-Strait__war__to__west__Pacific-Ocean...,
its__root-of-trouble__source-of-turmoil, NEG__one__NEG__out__from__
Mao-Communist__rebellion__DE__blood-hand

For these two decades, whether it was the war across the Taiwan Strait, which occurred in the West Pacific Ocean,... All these calamities are caused by the Chinese Communists led by Mao Zedong.

All the lexical forms of the coordination structure, 血汗 *xiehan* blood-sweat ‘blood and sweat’ and 血淚 *xielei* blood-tear ‘blood and tears’, are coerced to take on the agentive role when put into the context. 汗 *han* ‘sweat’ and 淚 *lei* ‘tear’, also body parts, usually refer to the body fluids coming out of rather than flowing in human body. 汗 *han* ‘sweat’ represents the fluid shed from human body due to effort,

and淚 *lei* ‘tear’ due to suffering/sadness.²⁰ When 血 *xie* ‘blood’ co-occurs with汗 *han* ‘sweat’ and淚 *lei* ‘tear’ at the lexical level, it is the agentive role which is activated. Moreover, 血汗 *xiehan* blood-sweat ‘blood and sweat’ conveys the MAKING EFFORT IS BLEEDING metaphor and血淚 *xielei* blood-tear ‘blood and tears’ the SUFFERING IS BLEEDING metaphor (Example 13).

Example 13

回首__後望，我__看見__先人__筭路藍縷，以__血淚__締造__今日__的__
中華民國 (Ma Y._1010101)

Turn-back__look-back, I__see__forerunner__endure-great-hardship,
use__blood-tear__found__today__DE__ROC

*Looking back, I saw our forerunners, enduring great hardship, founded the
Republic of China with their blood and tears.*

The qualia roles coerced at the lexical and clausal levels, and the conceptual metaphor brought about by the roles at the clausal level are explicated. In the section to follow, we will explore how the change of the socio-political context leads to the change of the use of the conceptual metaphors and the qualia roles.

²⁰ There are expressions such as 喜極而泣 ‘happy tears’ or 感動落淚 ‘to shed tears because one is deeply moved’. But tears is more often associated with sadness/suffering than happiness or being moved.

4.4 The speakers, the conceptual mappings and the qualia roles



Our third hypothesis states:

The change of the socio-political context should lead to the variation of the body parts referred to in the speeches. Different body parts perform different functions. It is thus hypothesized that certain body part is chosen because of its functionality, which can be realized as telic or agentive role of qualia structure, in its metaphoric use.

Since this section focuses on the semantics of 血 *xie* 'blood', we examine how the lexical items consisting of 血 *xie* 'blood' in the conceptual mappings vary along with the change of the speakers, and the qualia roles involved in the metaphors. Tables 11 and 12 detail the qualia roles, the conceptual mappings and the speakers according to Senses 1 and 2 respectively.

Table 11 shows that within Sense 1, the conceptual mappings generated under the telic role of blood (73.13%) are much more than those under the agentive role (26.87%). When blood takes on the telic role, it is the source concept for ancestry, life and temperament, as in ANCESTRY IS BLOOD, LIFE IS BLOOD, and TEMPERAMENT IS BLOOD, and metonym BLOOD FOR BODY, with ANCESTRY IS BLOOD ranking the highest. When the agentive role is coerced for blood/bleeding, the following mappings are identified: MAKING EFFORT IS BLEEDING, LOSS OF LIFE IS BLEEDING and SUFFERING IS

BLEEDING. In terms of the speakers using the metaphors, Chiang K. ranks the highest (0.68‰), followed by Chiang C. (0.60‰), Lee T. (0.28‰), Chen S. (0.16‰), and then Ma Y. (0.15‰). Blood serving as the source concept within Sense 1 declines along the passing of the time.

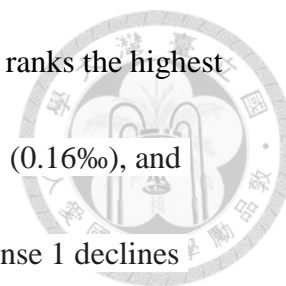
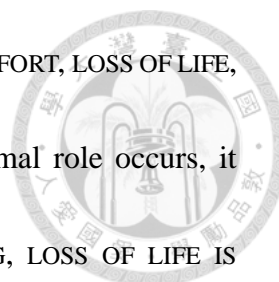


Table 11. The qualia roles, conceptual mappings, and the speakers under Sense 1 of 血 xie ‘blood’

Sense 1		Speaker				
Qualia role	Conceptual mappings	Chiang K.	Chiang C.	Lee T.	Chen S.	Ma Y.
Telic 49 (73.13%)	ANCESTRY IS BLOOD	11	2	2	4	3
	LIFE IS BLOOD	0	0	1	0	0
	TEMPERAMENT IS BLOOD	10	3	1	0	0
	BLOOD FOR BODY	12	0	0	0	0
Agentive 18 (26.87%)	MAKING EFFORT IS BLEEDING	4	0	2	0	0
	LOSS OF LIFE IS BLEEDING	7	1	0	1	1
	SUFFERING IS BLEEDING	2	0	0	0	0
Total (A)		46	6	6	5	4
Total token of words of the speeches (B)		67,627	9,990	21,240	30,322	26,117
Per 1000 words ((A)/(B)*1000)		0.68	0.60	0.28	0.16	0.15

Table 12 demonstrates that within Sense 2, the conceptual mappings emerging out of two qualia roles: the agentive and the formal, with the former (68.64%) occurring much more frequently than the latter (31.36%). When blood performs the



agentive role, it is mapped onto the following concepts: MAKING EFFORT, LOSS OF LIFE, and SUFFERING, with LOSS OF LIFE topping the rest. When the formal role occurs, it generates the following metaphors: MAKING EFFORT IS BLEEDING, LOSS OF LIFE IS BLEEDING and SUFFERING IS BLEEDING. Regarding the speakers employing the metaphors, the decline along with the time also occurs, but the line does not go all the way down. Instead, it rises a bit from Chiang K. (1.27 ‰) to Chiang C. (1.40 ‰), and then it goes down to Lee T. (0.47‰), Chen S. (0.13‰), and rises a bit at Ma Y. (0.15‰).

Table 12. The qualia roles, conceptual mappings, and the speakers under Sense 2 of 血 xie ‘blood’

Sense 2		Speaker				
Qualia role	Conceptual mappings	Chiang K.	Chiang C.	Lee T.	Chen S.	Ma Y.
Agentive 81 (68.64%)	MAKING EFFORT IS BLEEDING	4	3	2	1	1
	LOSS OF LIFE IS BLEEDING	49	5	3	0	0
	SUFFERING IS BLEEDING	4	2	3	2	2
Formal 37 (31.36%)	MAKING EFFORT IS BLEEDING	0	0	0	1	1
	LOSS OF LIFE IS BLEEDING	28	4	2	0	0
	SUFFERING IS BLEEDING	1	0	0	0	0
Total (A)		86	14	10	4	4
Total token of words of the speeches (B)		67,627	9,990	21,240	30,322	26,117
Per 1000 words ((A)/(B)*1000)		1.27	1.40	0.47	0.13	0.15

Examining both tables, we can see the interaction between the qualia roles and conceptual mappings. Certain mappings can be generated out of certain roles only. ANCESTRY, TEMPERAMENT, and LIFE are the concepts exclusively occurring when blood performs the telic role. MAKING EFFORT, SUFFERING and LOSS OF LIFE are found under the agentive and formal roles only.

Tables 11 and 12 basically present the use of the words consisting of blood declines along the succession of the five presidents. Regarding the use of *血* *xie* 'blood' in conceptual mappings, Chiang K. reveals the highest diversity and comparatively higher incidence, while Chen S. and Ma Y. the lowest diversity and incidence, as shown in Table 13 below.

The differences in the diversity of metaphors used by the speakers may be attributed to the socio-political change. Chiang K. was facing wars almost throughout his regime. As the military leader of the ROC, he witnessed the effort made to maintain the country integrity and the lives lost in wars. Moreover, his lifelong goal was to fight back, restore the ROC in Mainland China, and to save the compatriots from the CCP's cruel and authoritarian dominance. All boost the token numbers of his use of blood metaphors, especially those mapped onto the notion loss of life. Taking a closer look at the metaphors occurring in Chiang K.'s speeches, we can see that the notion regarding life, i.e. LOSS OF LIFE IS BLEEDING, ranks the highest, with 56 out of

98 tokens (57.14%). On the other hand, what Chiang K. faced was not an issue in the regimes of Chen S. and Ma Y., as the context they are situated is comparatively stable and warless, which leads to their lower token numbers and variety in the use of blood metaphors.

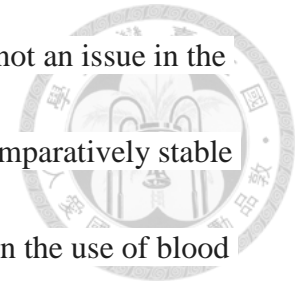


Table 13. The senses, conceptual mappings and the speakers of 血 *xie* ‘blood’

Sense	Conceptual mappings	Chiang K.	Chiang C.	Lee T.	Chen S.	Ma Y.
1	ANCESTRY IS BLOOD	6	2	2	4	3
	MAKING EFFORT IS BLEEDING	4	0	2	0	0
	LOSS OF LIFE IS BLEEDING	7	1	0	1	1
	LIFE IS BLOOD	0	0	1	0	0
	SUFFERING IS BLEEDING	2	0	0	0	0
	TEMPERAMENT IS BLOOD	10	3	1	0	0
	BLOOD FOR BODY	12	0	0	0	0
2	MAKING EFFORT IS BLEEDING	4	3	2	1	1
	LOSS OF LIFE IS BLOOD	49	5	3	0	0
	SUFFERING IS BLOOD	4	2	3	2	2
Total		98	16	14	8	7

A qualitative analysis on how an identical metaphor is employed by different speakers may also reveal whether the change of the socio-political context leads to different uses of a metaphor. We then compare ANCESTRY IS BLOOD under Sense 1 and

SUFFERING IS BLEEDING under Sense 2, because they both occur in the five presidents' speeches.²¹



4.4.1 ANCESTRY IS BLOOD

This metaphor, highlighting the genetic or ethnical bound among a group of people, functions to transmit the identification by the people carrying the blood. This metaphor is realized through the use of the following lexical items: 血肉, 血氣, 血液, 血脈, 血系, 血胤, 血緣, 血濃於水, 血債, 血帳, and 血仇. We then investigate the people claimed by the speaker to be descended from the same ancestor.

Take Examples 8 and 9 above. The speaker of Example 8 is Chen S., and the people he contended to have the same ancestor are '[we] Formosan (Taiwanese) people'.²² The speaker of Example 9 is Chiang K., and the ones he argued to be the descendants of the same ancestor refer to '[we] Chinese people'. Table 14 lists the speakers, the lexical items used, the referents sharing the same ancestor and the hits.

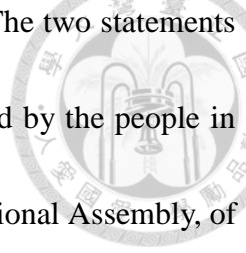
²¹ Two metaphors under meaning facet 2 are used by the five presidents: EFFORT IS BLOOD and SUFFERING IS BLOOD, the latter of which is chosen because of its comparative higher token number.

²² The self-referent 'we', not found at the clausal level, occurs at the discursual level. The word 'we', referring to the speaker and the listeners, should also be regarded as the descendants from the same ancestor.

Table 14. ANCESTRY IS BLOOD: The speakers, lexical items, and the agents sharing the same ancestor and the hits.

Speaker	Lexical item	The referents sharing the same ancestor (hits)
Chiang K.	血肉(2), 血氣(1), 血液(1), 血系(1), 血胤(1), 血債(2), 血仇(2), 血帳(1),	We and the people in China and the CCP soldiers and officials (6) We and overseas Chinese (1) We and Chinese people (5)
Chiang C.	血液(1), 血脈(1)	We and Chinese people (2)
Lee T.	血脈(2)	We and Chinese people (2)
Chen S.	血液(1), 血緣(3)	We Taiwanese (Formosan) people (1) We and Chinese people (2) People coming to Taiwan before and after 1949 (1)
Ma Y.	血緣(2), 血濃於 水(1)	We and people in Mainland China, Hong Kong and Macau (1) We and people in China (2)

The four presidents from the KMT almost unanimously regard ‘we’, i.e. themselves and the listeners in Taiwan, and Chinese people, including those in China (and Hong Kong and Macau in Ma Y.’s case) and overseas Chinese people, as the descendants from the same ancestor. This reflects the speakers identifying themselves with Chinese. Lee T., advocating Taiwanese consciousness and promoting Taiwan localization movement at the later stage of his presidency, claimed Taiwanese and Chinese people to be offspring from the same ancestor. This may be attributable to his



intention to secure his regime at the early stage of his presidency. The two statements were made in 1990 and 1991, during which he was not empowered by the people in Taiwan through the direct presidential election, but by the ROC National Assembly, of which most members came from China and identified themselves as Chinese. Lee's identifying himself as Chinese can be regarded a strategy to secure his regime.

What also merits attention is that Chen S.'s use of this metaphor differs from that of the other four. Though also drawing the ancestral tie between Taiwanese people and Chinese people in two cases, Chen S. is the only speaker using 'Taiwanese' or 'Formosan', rather than 'Chinese', when naming the people in Taiwan and claiming that they were from the same ancestor. This cuts up the ties linking Taiwanese and Chinese, which the other four presidents advocate. As one upholding Taiwanese identity and supporting Taiwan independence, this highlights his attitude of prioritizing Taiwan.

4.4.2 SUFFERING IS BLEEDING

This metaphor is realized through the use of the following lexical items: 血淚 *xielei* blood-tear 'blood and tears' and 泣血 *qixie* weep-blood 'weep blood' (Table 15). The use of this metaphor is similar to the use of ANCESTRY IS BLOOD. Though not directly addressing the ancestral ties, the SUFFERING IS BLEEDING metaphor reveals

whether the speakers identify themselves with, or empathize with, those who suffer.

We examine the context to find out the agents who are referred to as shedding blood and tears. Example 13 above shows that the ones refer to the forerunner of the ROC, and Example 14 below indicates the one who suffered were Taiwanese forebears, who endeavored to construct Taiwan.

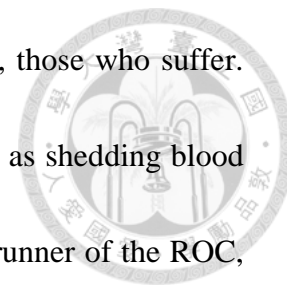


Table 15. SUFFERING IS BLEEDING: The speakers, lexical items, the agents shedding blood and tears and the hits.

Speaker	Lexical item	The agents sharing the same ancestor (hits)
Chiang K.	血淚 (3)	Compatriots in China (3)
	泣血 (1)	We and compatriots in China (1)
Chiang C.	血淚 (2)	We, founding fathers and previous citizens of ROC (2)
Lee T.	血淚 (3)	Chinese in China (1)
		Founding fathers and forerunner of ROC (2)
Chen S.	血淚 (2)	Forebears of Taiwan (1)
		Forebears and their descents of Taiwan (1)
Ma Y.	血淚 (2)	Founding father of ROC (2)

Example 14

數百__年__來__勇敢__的__台灣__人民__以__血淚交織,創造__光榮__的__歷史 (Chen S._950101)

Several-hundred__year__come__brave__DE__Taiwan__peoplle__use__blood-te
ar__interweave, create__glorious__DE__history

*For centuries the brave Taiwanese people created the glorious history with their
blood and tears.*



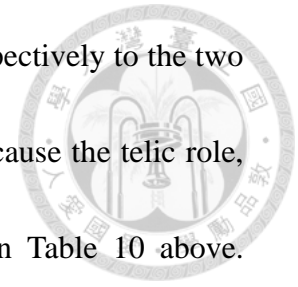
Like what is found in the ANCESTRY IS BLOOD metaphor, SUFFERING IS BLEEDING also portrays a similar picture: the four presidents from the KMT tend to identify themselves with the founding fathers/forerunners/forebears of ROC. In some cases those who shed blood and tears refer to people in China, whom the four presidents identify themselves with by dubbing ‘fellow countrymen’ or using ‘we’ at the discourse level. On the other hand, Chen S., identifying himself as native Taiwanese, refers only to the forerunners and their offspring who dedicated themselves to Taiwan construction as those who suffered.

4.5 Summary

The analysis uncovers several features regarding the uses of the qualia roles and the figurative uses of blood, and the speakers, each of which is elaborated as follows.

Concerning the qualia roles, we have found that (1) the number of the formal role drops while that of the telic or agentive role rises at the clausal level, and (2) the tokens without any specific role at the lexical level are assigned either the telic or

agentive role at the clausal level. Moreover, the labor assigned respectively to the two senses leads to the missing of the telic role in Sense 2. This is because the telic role, indicated in Sense 1, is not realized in Sense 2, as indicated in Table 10 above.

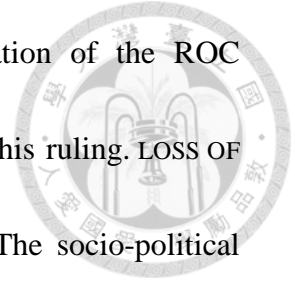


Contrary to our fourth hypothesis, the agentive role outnumbers the telic role when both senses are put together. As the token number of Sense 2 is comparative high and the agentive role is inherent in this sense, it is reasonable that the token number of the agentive role is higher.

As for the metaphorical use of blood, the interaction between the qualia roles and conceptual mappings is conspicuous. That is, certain metaphors are activated under certain roles only. ANCESTRY IS BLOOD, TEMPERAMENT IS BLOOD, and LIFE IS BLOOD are found exclusively under the telic role, while the concepts MAKING EFFORT, SUFFERING and LOSS OF LIFE occur under the agentive and formal roles only.

The speaker is a factor which influences the activation of the qualia roles and conceptual mappings. Taking into consideration the correlation between the qualia roles, the conceptual mappings and the speakers under both senses (shown in Tables 11 and 12), we observe a decline tendency for the use of the conceptual mappings under both senses. It is either Chiang K. or Chiang C., who ranks the highest, and either Chen S. or Ma Y., who ranks the lowest, concerning the metaphorical use of blood. This is attributable to the socio-political context where the speaker was. The

political situation back in Chiang K.'s regime was the relocation of the ROC government to Taiwan, and the civil war which almost paralleled his ruling. LOSS OF LIFE IS BLEEDING thus predominates Chiang K.'s metaphor use. The socio-political context in Chen S.'s and Ma Y.'s governances is comparatively peaceful, which leads to the missing of LOSS OF LIFE IS BLOOD in their speeches.



Chapter 5 Data Analysis: 肉 *rou* ‘flesh’



The Chinese character 肉 *rou* ‘flesh’ is usually compounded with 血 *xie* ‘blood’ and 骨 *gu* ‘bone’ in the coordination structure, as in the lexical items of 血肉 *xierou* blood-flesh ‘blood and flesh’ and 骨肉 *gurou* bone-flesh ‘bone and flesh’. We think it is because these parts are interlaced with each other. Flesh is adhered to bones, and blood goes through flesh. This physical fact makes the three parts co-occur either as coordinate compound or as collocates syntactically.

5.1 Previous studies on flesh metaphors

Previous studies with flesh as the source domain of conceptual metaphors are limited in number.²³ In Christianity, flesh has long been represented by bread in Eucharist, and this sacrament enables those who feed on Jesus’ flesh to obtain life.²⁴ However, it may be too fast to argue for the retrieval of a conceptual mapping LIFE IS FLESH, because the Bible may convey more profound concepts. A similar metaphor IMMORTALITY IS FLESH can be found in *西遊記 The Journey to the West* (Wu 1952), a

²³ Though Li (2015) thinks human being’s extreme anger/hatred towards a person can be exemplified by the use of a fixed idiom 寢皮食肉 ‘to remove a person’s skin for bedding and eat the person’s flesh’, this idiom are literal in ancient times. That is, cannibalism was practiced in ancient times to as a way to demonstrate one’s extreme hatred.

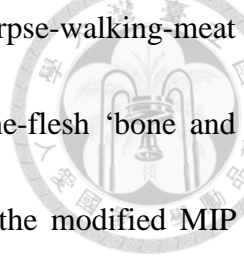
²⁴ This comes from ‘The one who feeds on me will have life because of me’ (John 6:57)

Chinese classical novel, in which 玄奘 Xuanzang's flesh is believed to give immortality to whoever eats it. In the world outside religion and mythology, Levi-Strauss (1969) finds that 'flesh' and 'bone' represent kinship in Tibet. Analyzing the Tibetan kinship terminology, he finds that 'of the same flesh' and 'of the same bone' represent two categories of kindred. Those who are of 'of the same flesh' come from legitimate marriages and may get married to one another, whereas those 'of the same bone' are offspring of the same ancestor and are not allowed to intermarry (Levi-Strauss 1969: 373). The features of these two body parts are interweaved in the two kinship terms: the flesh is accommodatingly fluid whereas the bone is rigid in its prohibitions.

The aforementioned research shows that the word/morpheme 'flesh' mainly functions to refer to kin of a certain kind in the Tibetan culture, which is broadened to include kin of all kinds in Mandarin Chinese, as will be discussed below.

5.2 Metaphor identification

The types of lexical items containing 肉 *rou* 'flesh' are the least diversified compared with those of lexical items containing 血 *xie* 'blood', 骨 *gu* 'bone', and 脈 *mai* 'meridian'. (We will come back to this point later.) There are only five types of lexical items containing the body part term 肉 *rou* 'flesh': 肉 *rou* 'flesh', 肉體 *routi*



flesh-body ‘body’, 行屍走肉 *xingshizourou* ambulating-corpse-walking-meat ‘ambulating corpse and walking piece of meat’, 骨肉 *gurou* bone-flesh ‘bone and flesh’ and 血肉 *xierou* blood-flesh ‘blood and flesh’. We repeat the modified MIP procedure to explore whether the unit 肉 *rou* ‘flesh’ is figuratively used against its basic contemporary meaning provided by the MOE dictionary: 動物體中包住骨骼的柔韌物質。如：「肌肉」 ‘the soft part of an animal’s body which encloses bones. E.g. “flesh”’. We then find the compound 肉體 *rou ti* flesh-body ‘body’ should be considered as metonymical rather than metaphorical, as flesh functions to refer to the whole body, i.e. FLESH FOR BODY.

Regarding the coordinated modifier-modified compound 行屍走肉 *xingshizourou* ambulating-corpse-walking-meat ‘ambulating corpse and walking piece of meat’, the parallel structure of 行屍 *xingshi* and 走肉 *zourou* indicates that 肉 here refers to the body of a dead person, i.e. a metonym MEAT FOR DEAD BODY. Moreover, the compound leads us to understanding 肉 *rou* ‘flesh’ in this fixed idiom in the same way as 肉 *rou* ‘flesh’ of a living human body, since walking can only be practiced by a living person/body. We also have to bear in mind that it is the whole body which is able to conduct the task walking, rather than ‘flesh’ only. We can thus find there are at least two layers of meaning changes—metaphorical and metonymical—embedded in this compound. It is metaphorical in that we understand

the dead in the way we understand the living. It is also metonymical in that flesh refers to the whole human body. The metonym brings about the qualia role of 肉 *rou* ‘flesh’: constitutive, as it demonstrates part-whole relations.



There are two compounds in the coordination structure: 骨肉 *gurou* bone-flesh ‘bone and flesh’ and 血肉 *xierou* blood-flesh ‘blood and flesh’. The morphemes within these two compounds do not undergo semantic changes at the lexical level. Each morpheme refers to the constitutive role of the whole human body. They are not metaphorically used at the lexical level; we thus need to examine whether they are metaphorically used at the clausal level. This will be addressed in Section 5.3 below.

5.3 Qualia structure of 肉 *rou* ‘flesh’

We look up the lexical item 肉 *rou* ‘flesh’ in the MOE dictionary, and according to the meaning provided by the dictionary, we present its qualia structure as follows:

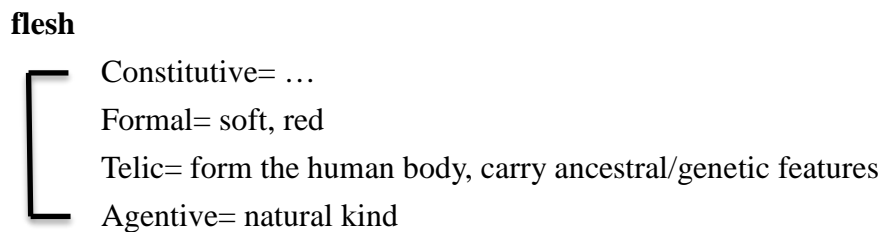
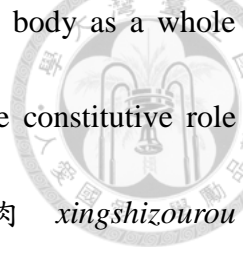


Figure 6. The qualia structure of 肉 *rou* ‘flesh’

Figure 6 indicates that 肉 *rou* ‘flesh’ does not have the constitutive role because



we focus on the relations between this body part and the human body as a whole rather than those between 肉 *rou* ‘flesh’ and its constituents. The constitutive role identified in 肉體 *routi* flesh-body ‘body’ and 行屍走肉 *xingshizourou* ambulating-corpse-walking-meat ‘ambulating corpse and walking piece of meat’ actually refer to the relations between flesh and the body, for it is the metonym FLESH FOR BODY retrieved from both lexical items. The formal role includes ‘soft and red’. As 肉 *rou* ‘flesh’ functions to form the parts and human body as a whole, its telic role is ‘form human body’. However, according to the findings of Levi-Strauss (1969) and the conventional use of this Chinese character, when 肉 *rou* ‘flesh’ co-occurs with 血 *xie* ‘blood’ and 骨 *gu* ‘bone’, another telic role emerges: ‘carry ancestral/genetic features’. The agentive role of 肉 *rou* ‘flesh’ is natural kind.

Like the sense division which occurs to 血 *xie* ‘blood’ in Chapter 4, there should be two senses of 肉 *rou* ‘flesh’: One refers to the flesh for a living body, and the other to that of a dead body. We thus have to explicate two sets of qualia structure accordingly:

Table 16 shows that the qualia structure of Sense 1 is the same as that of flesh illustrated in Figure 6 above. Sense 2, flesh of the body without life, reveals one more formal role: the smell. The agentive role of Sense 2 is ‘X which causes flesh fall from the body’.

Table 16. Senses of 肉 *rou* ‘flesh’ and the qualia structures

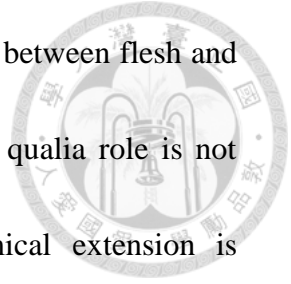
	Sense 1	Sense 2
Constitutive
Formal	Soft, red,	Soft, red, rancid
Telic	Form the human body, carry ancestral features, feel	...
Agentive	Natural kind	X which causes flesh fall from the body

We then investigate whether we can put the lexical items containing 肉 *rou* ‘flesh’ into the three representations formulated in Chapter 3. The representations and the corresponding compounds/morpheme word are listed below:

- (1) The lexical item with a specified role at the lexical level and the word’s metaphorical/metonymical meaning is lexically accessed, e.g. 肉體.
- (2) The lexical item with a specified role at the lexical level but the word’s metaphorical meaning is NOT lexically accessed. We cannot find any type falling into this category.
- (3) The lexical item with NO specified role at the lexical level and the word’s metaphorical meaning is NOT lexically accessed, e.g. 肉, 骨肉, and 血肉.

行屍走肉 *xingshizourou* ambulating-corpse-walking-meat ‘ambulating corpse and walking piece of meat’ is an intriguing case. Its figurative meaning is retrievable at the lexical level, as discussed in 5.2 above. However, the constitutive role emerging

from the metonym FLESH FOR BODY shows the part-whole relations between flesh and body, rather than flesh and the constituents of flesh. That is, the qualia role is not specified at the lexical level, while its metaphorical/metonymical extension is lexically accessible. Aside the exercise of the qualia structure, how we understand this special case involves the activation of two generative mechanisms, which may shed a light on conceptual metaphor theory.



The two mechanisms coming into play in our interpretation of this fixed idiom are *accommodation* and *exploitation*. First, we understand 肉 *rou* ‘flesh’ through the application of *accommodation*, which is defined as ‘the type a function requires is inherited by the argument’ (Pustejovsky 2013: 27), and which is operative only within the same type domain. That is, how we understand 肉 *rou* ‘flesh’ (Sense 2) in this fixed idiom comes from how we understand 肉 *rou* ‘flesh’ of a living person (Sense 1). The metonym and conceptual metaphor emerging from this mechanism are FLESH FOR BODY, and A DEAD PERSON IS A LIVING PERSON.

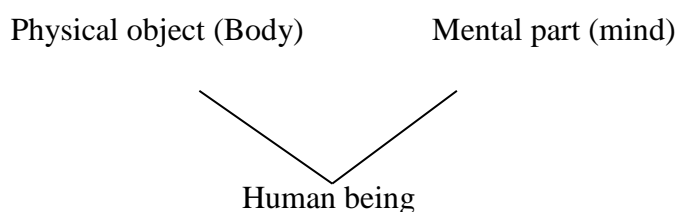
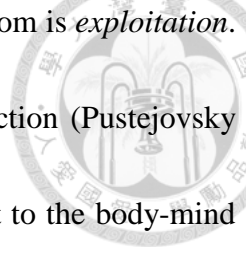


Figure 7. The constitutive roles of human being



The other mechanism facilitating our comprehension of this idiom is *exploitation*. That is, we select a part of the argument's type to satisfy the function (Pustejovsky and Jezek 2008). To understand this fixed idiom, we need to resort to the body-mind dichotomy. A human being is composed of the physical entity and the mental part, the former of which is the body and the latter the mind, as indicated in Figure 7 above. In other words, body and mind are the constitutive roles of a human being as a whole. This specific idiom 行屍走肉 *xingshizourou* ambulating-corpse-walking-meat 'ambulating corpse and walking piece of meat', presenting only the physical side that constitutes a human being, actually indicates the importance of the missing part: The mind. By representing what exists, this idiom, acknowledging the disappearance of the mind, highlights the significance of this missing part to a human being. That is, without the mind, a human being is no more a human being but a piece of meat.

Taking into consideration of the meaning change at the lexical level, we formulate A PERSON WITHOUT MIND IS A WALKING PIECE OF MEAT, which is combined with the metonym FLESH FOR HUMAN BODY. Both figurative meanings are transferred to the clausal level, as exemplified in Example 14:

Example 14

現在__又__要__那__個__被__它__鬥垮鬥臭__了__的__鄧匪__小平__出來__
__行屍走肉__，只__見__其__「作偽__心勞日拙」__而已。

now__again__ask__that__CL__PASS__it__persecute__ASP__DE
__Deng-bandit__Xiaoping__come-out__walking-dead,
only__see__his__‘fake__make-tiring-and-useless-pretensions’__only.

*Now they ask Deng Xiaoping, the one they have persecuted, to behave like a
puppet.*



Now we go back to the three representations and the lexical items realizing them.

Regarding the first representation, there is only one type, 肉體 *rou ti* flesh-body ‘body’, which refers to the human body. The role of 肉 *rou* ‘flesh’ at the lexical level is both constitutive and telic. It is a constitutive role of the human body because it clearly displays the metonymical relation, i.e. the part-whole relations between 肉 *rou* ‘flesh’ and 體 *ti* ‘body’. Aside from that, 肉 *rou* ‘flesh’ also performs the telic role because its function is to form the human body. The roles are also transferred to the clausal level. The figurative meaning is a metonym: FLESH FOR HUMAN BODY.

The lexical items classified as the third representation are 肉 *rou* ‘flesh’, 骨肉 *gourou* bone-flesh ‘bone and flesh’, and 血肉 *xierou* blood-flesh ‘blood and flesh’, all of which refer back to the whole human body. That is, they are the constitutive roles of the human body, but they do not specify any role at the lexical level. Moreover, their metaphorical meaning does not arise from the lexical level. When the context is taken into consideration, not only does the qualia role emerge but also is the meaning

extension visible, as indicated in Example 15 below:



Example 15

任何__家庭，都__要__有__其__一__個__「批判會」，要__他們__父母、子
女、夫婦、兄弟、姐妹...去__進行__其__互相__監視、骨肉__成仇、反__
倫理、反__人性__的__激烈__鬥爭，

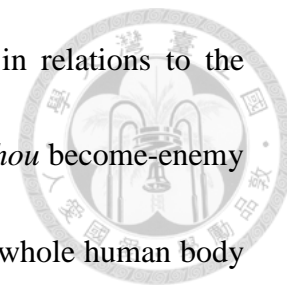
Any__family, all__request__have__its__one__CL__ ‘criticizing meeting’,
ask__them__parents__children__couples__brothers__sisters...go__proceed__thei
r__mutual__monitor, __bone-and-flesh__fight-each-other, opposed-to__ethics,
opposed-to__humanities__DE__violent__conflict

*Every family is asked to hold ‘criticize meeting’, in which all the family members,
father and mother, son and daughter, husband and wife, brothers and sisters...
all monitor each other and fight each other, which is unethical and inhumane.*

In Example 15, when 骨肉 *grou* bone-flesh ‘bone and flesh’, of which neither is the qualia role specified nor is the metaphorical meaning accessible at the lexical level, is put in a clause, the metaphorical meaning emerges. 骨肉 *grou* bone-flesh ‘bone and flesh’ refers to family members, from which emerges FAMILY IS FLESH, as flesh refers to members related by blood (e.g. parents, children, brothers and sisters) and by marriage (e.g. husband and wife). The role emerges at the clause level telic, i.e. 肉 *rou* ‘flesh’ carries family ties.

On the other hand, the clause where the lexeme 骨肉 *grou* bone-flesh ‘bone

and flesh’ is embedded also strengthens their constitutive roles in relations to the whole human body, which is triggered by the use of 成仇 *chengchou* become-enemy ‘fight each other’. We thus need to move a step further to take the whole human body as the source domain. The metaphor retrieved here, with family as the target domain, is FAMILY IS A HUMAN BODY.



血肉 *xierou* blood-flesh ‘blood and flesh’, more complicated than 骨肉 *gourou* bone-flesh ‘bone and flesh’, has two usages: One refers to the body, and the other to family or ancestral ties. As the basic meaning 血肉 *xierou* blood-flesh is ‘blood and flesh’, it reasonably represents the human body, as in Example 16:

Example 16

因此__也__唯有__我們__深切__了解，和平__是__不可能__坐待__倖致__的，所以__長期__以來，無日__不__在__以__血肉__捍衛__和平！

Thus__also__only__we__in-depth__understand,

peace__SHI__impossible__sit-and-wait__by-luck-attain__DE,

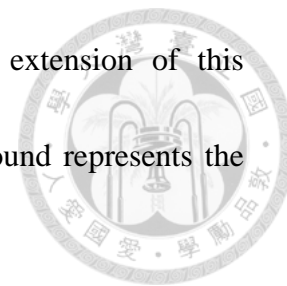
so__long-term__since,

every-day__NEG__ASP__use__blood-and-flesh__defend__peace!

Thus we are the only ones who understand well that we cannot sit and wait for peace passively. That’s why for a long while, we have been fighting for peace with our body.

Example 16 reveals that ‘blood and flesh’ functions as a metonym, i.e. BLOOD AND

FLESH FOR HUMAN BODY. However, there is another meaning extension of this compound, which is discussed in Chapter 4.1 above: This compound represents the ancestry ties, which is repeated as Example 17 below:



Example 17

千萬__僑胞__血肉__相連、忘__身__於__外 (Chiang K._611010)

Tens-of-thousands__overseas-Chinese__blood-flesh__connect,

forget__body__PREP__outside Tens of thousands of overseas Chinese are connected genetically and they do not care about their own safety.

The use of the lexical item 相連 *xianglian* connect ‘connect’ activates the ancestral ties out of the 血肉 *xierou* blood-flesh ‘blood and flesh’, from which ANCESTRY IS FLESH metaphor is formulated.

We would like to point out that, when 肉 *rou* ‘flesh’ in 血肉 *xierou* blood-flesh ‘blood and flesh’ is used metonymically (FLESH FOR BODY), it is coerced to perform the telic role, as 肉 *rou* ‘flesh’ functions to form the human body. When the metaphor ANCESTRY IS FLESH is retrieved, the 肉 *rou* ‘flesh’ in this compound also perform the telic role, but the function is to carry ancestry ties.

The morpheme-word 肉 *rou* ‘flesh’ does not specify any role at the lexical level, but its telic role emerges when it is put in clauses, i.e. forms the human body.

Moreover, 肉 *rou* ‘flesh’ in the context does not work as a metaphor but as a metonym: FLESH FOR BODY.



Example 18

而且__這__五億__人，更__是__在__鐵幕__以內__嚮往__我們__政府，呼號
__待__救，有__血__有__肉__的__世界__四分之一__以上__的__人群！

(Chiang K._501010)

And__these__50-million__people,

still__SHI__PREP__iron-curtain__inside__year-for__we__government,

cry-out-in-distress__wait__rescue,

have__blood__have__flesh__DE__world__quarter__above__DE__crowd!

And the 50 million people are one quarter of all the people in the world who are living behind the iron curtain, yearning for our government and crying out for help.

Table 17 below reveals the senses, levels of interpretation and the qualia roles of the lexical items containing 肉 *rou* ‘flesh’. The qualia roles of the senses of 肉 *rou* ‘flesh’ at both the lexical and clausal levels do not show much versatility. When Sense 1 is activated at the lexical level, 36 tokens do not specify any qualia roles. Only 2 tokens perform the telic role. Neither formal nor agentive role is found in Sense 1. At the clausal level, all the 36 tokens which specify no role at the lexical level are coerced to perform the telic role. On the other hand, there is only one token of Sense 2

which specifies no role at either the lexical or the clausal level.²⁵



Table 17. Qualia roles, senses and levels of interpretation of lexical items containing 肉

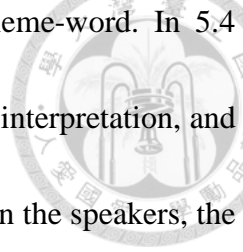
rou ‘flesh’

Qualia Roles	Sense 1		Sense 2	
	Lexical level	Clausal level	Lexical level	Clausal level
Unspecified	36	0	1	1
Telic	2	38	0	0
Total	38	38	1	1

Like the tendency detected in the lexical items containing 血 *xie* ‘blood’, the token number without specified role drops, and that of the telic rises, when the interpretation moves from the lexical to the clausal level. This is attributed to the coercion occurring at the clausal level. The difference between 血 *xie* ‘blood’ and 肉 *rou* ‘flesh’ not only lies in the diversification of the types of lexical items, but also in the sense which predominates: it is the blood flowing out of the body or body parts (Sense 2) which predominates the lexical item containing 血 *xie* ‘blood’, it is the flesh adhered to the living (Sense 1) which takes the majority.

The morphological structures of the lexical items containing 肉 *rou* ‘flesh’ also expose the lack of versatility of these lexical items, which are realized as

²⁵ We have to point out that, the constitutive role performed by 肉 *rou* ‘flesh’ discussed in the analysis is not included, because it is the constitutive role of the human body as a whole.



modifier-modified and coordination compounds, and as a morpheme-word. In 5.4 below, we analyze the lexical items based on the sense, the level of interpretation, and the structure of lexical item. We then explore the interaction between the speakers, the conceptual mappings using flesh as the source concept, and the qualia roles at the clausal level so as to uncover how the change of the political context influences the use of metaphor/metonym.

5.4 Sense 1: Lexical and clausal levels

Sense 1 is the major sense of the lexeme containing 肉 *rou* ‘flesh’. In this section we discuss Sense 1 realized first at the lexical level then at the clausal level. Table 18 demonstrates the morphological structures, the qualia roles at the both levels, and the number of tokens of each role.

Table 18 indicates that coordination structure predominates, with 84.22% of all the lexical items, followed by the morpheme-word (10.52%), and then by modifier-modified (5.26%). Moreover, the tendency identified in the analysis of 血 *xie* ‘blood’ in Chapter 4 also applies here. That is, the non-telic role, which is the unspecified role in this case, tend to be converted to the telic role when the reading moves from the lexical to the clausal level. We thus can see that 肉 *rou* ‘flesh’ without any role retrieved at the lexical level is assigned the telic role at the clausal level,

which occurs to the coordination structure and the morpheme-word.

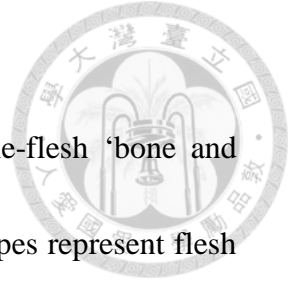


Table 18. The structures, qualia roles of 肉 *rou* ‘flesh’ under Sense 1

Structure	Total number of tokens (& percentage)	Qualia role at lexical level	No. of tokens	Qualia role at clausal level	No. of tokens
Modifier-modified	2 (5.26%)	Telic	2	Telic	2
Coordination	32 (84.22%)	Unspecified	32	Unspecified	0
		Telic	0	Telic	32
Morpheme-word	4 (10.52%)	Unspecified	4	Unspecified	0
		Telic	0	Telic	4
Total			38		38

5.4.1 Sense 1 and the morphological structures

Unlike the lexical items containing 血 *xie* ‘blood’, which are realized mostly as modifier-modified structure, the words containing 肉 *rou* ‘flesh’, in terms of token numbers, are realized predominantly as coordination structure, and subsequently as morpheme-word and modifier-modified structure respectively. The analysis below is divided according to the morphological structures, and the discussion on the lexical and clausal levels are merged for easy comparison.



A. Coordination structure

There are two types of coordination structures: 骨肉 *gurou* bone-flesh ‘bone and flesh’ and 血肉 *xierou* blood-flesh ‘blood and flesh’. These two types represent flesh as a constituent of the whole human body. 血肉 *xierou* blood-flesh ‘blood and flesh’ is already discussed in Chapter 4. 肉 *rou* ‘flesh’ in the word 骨肉 *gurou* bone-flesh ‘bone and flesh’ behaves similarly to that in 血肉 *xierou* blood-flesh ‘blood and flesh’, i.e. one of the essential components forming the human body.

As mentioned previously, the telic role is retrieved when the interpretation moves from the lexical level to the clausal level. When it is 骨肉 *gurou* bone-flesh ‘bone and flesh’, the 肉 *rou* ‘flesh’ refers to ANCESTRY IS FLESH (Example 15). When it is 血肉 *xierou* blood-flesh ‘blood and flesh’, 肉 *rou* ‘flesh’ refers either to ANCESTRY IS FLESH or FLESH FOR HUMAN BODY (Example 16).

B. Morpheme word

The morpheme word of 肉 *rou* ‘flesh’ is realized in parallel construction 有血有肉 *youxie-yourou* have-blood-have-flesh ‘with blood and flesh’, which has been discussed in Chapter 4 when we analyze 血 *xie* ‘blood’ as a morpheme word. We would like to reiterate that when a body part occurs as a morpheme-word, it refers to the element which composes a human body and does not specify any particular qualia

role. However, when the interpretation moves to the clausal level, 肉 *rou* ‘flesh’ plays the telic role, and the metonym FLESH FOR HUMAN BODY is retrieved.



C. Modifier-modified structure

There is only one type of lexical item of this structure: 肉體 *routi* flesh-body ‘body’, which emphasizes the telic role of 肉 *rou* ‘flesh’, that is, to form the human body.

This telic role is transferred to the clausal level. This character still performs the telic role when this lexical item is embedded in a clause.

5.4.2 Sense 2: Lexical and clausal levels

The type of lexical items with 肉 *rou* ‘flesh’ reveals more paucity when it comes to Sense 2. There is only one type and one token: 行屍走肉 *xingshizourou* ambulating-corpse-walking-meat ‘ambulating corpse and walking piece of meat’. It does not specify any particular role either at the lexical or the clausal level. Moreover, as pointed out in 5.2 above, two mechanisms of composition are involved in the comprehension of 肉 *rou* ‘flesh’ in this compound. First, it is understood as 肉 *rou* ‘flesh’ of Sense 1, when accommodation is employed. Second, the presence of this body part actually underscores the implication of the missing part to a question: What is a human being? When the mind-body dichotomy is taken into consideration, the

mental side is more consequential than the physical side in answering this question.



5.5 The speakers, the metaphors/metonyms and the qualia roles

We now move to the political discourse side. In this section, we investigate the interaction between the speaker, the metaphors/metonyms and the qualia roles so as to reveal whether the change of the political context affects the change of the use of this particular body part. Table 19 below demonstrates the information.

Table 19. The qualia roles, conceptual mappings, and the speakers under Sense 1 of 肉 *rou* ‘flesh’

Sense 1		Speaker				
Qualia role	Conceptual mappings	Chiang K.	Chiang C.	Lee T.	Chen S.	Ma Y.
Telic 44 (70.97%)	ANCESTRY IS FLESH	21	1	0	1	0
	FLESH FOR BODY	15	0	0	0	0
Total (A)		36	1	0	1	0
Total token of words of the speeches (B)		67,627	9,990	21,240	30,322	26,117
Per 1000 words ((A)/(B)*1000)		0.53	0.1	0	0.03	0

Table 19 shows the use of the lexical forms with 肉 *rou* ‘flesh’ as one of the morphemes dropped drastically from Chiang K. to Chiang C., from 0.53‰ to 0.1‰, and it is not favored by presidents following Chiang K.: Only Chiang C. and Chen S.

employed it once respectively. It seems that this body part is overlooked by all the presidents except Chiang K..

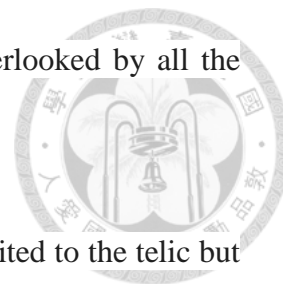


Table 19 also exposes that, not only does the qualia role is limited to the telic but also the metaphor and metonym are limited to ANCESTRY IS FLESH and FLESH FOR BODY. When the one type one token of Sense 2, the speaker of which is Chiang K., is considered, it is more obvious that the lexical items composed of 肉 *rou* ‘flesh’ is almost exclusively utilized by Chiang K., as indicated by Table 20 below:

Table 20. The senses, metaphors/metonyms and the speakers of 肉 *rou* ‘flesh’

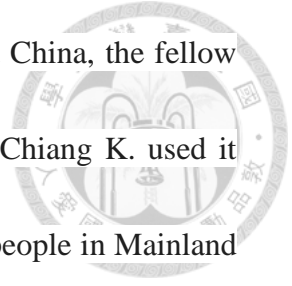
Sense	Metaphors/metonyms	Chiang K.	Chiang C.	Lee T.	Chen S.	Ma Y.
1	ANCESTRY IS FLESH	21	1	0	1	0
	FLESH FOR BODY	15	0	0	0	0
2	FLESH FOR BODY	1	0	0	0	0
Total		37	1	0	1	0

The following discussion focuses on the ANCESTRY IS FLESH, since it is used by three presidents: Chiang K., Chiang C., and Chen S..

5.5.1 ANCESTRY IS FLESH

This metaphor is realized by 血肉 *xierou* blood-flesh ‘blood and flesh’ and 骨肉 *gurou* bone-flesh ‘bone and flesh’. For the 21 tokens used by Chiang K., it is not

surprising to see all the tokens referring to the people in Mainland China, the fellow countrymen whom Chiang K. identified himself with. Moreover, Chiang K. used it first to point out how the CCP distorted family relations, and how people in Mainland China suffered. More importantly, Chiang K. intended to evoke solidarity among the listeners to fight the CCP led by Mao, and to rescue the people who had been descended from the same ancestors, as shown in Example 19 below:



Example 19

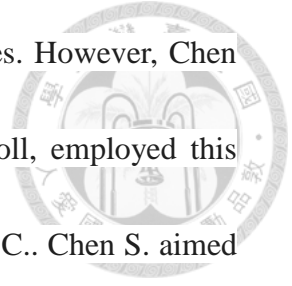
誰__又__能__說__這__種__眼見__骨肉__凍__餓、社會__黑暗__的__匪軍，
還__會__忍心__為匪__所__驅使，而__延長__其__父子、兄弟、夫婦、兒女
[...]的痛苦？(Chiang K._511010)

who__again__can__say__this__CL__witness__bone-and-flesh__frozen__hungry,
society__dark__DE__bandit-soldiers,
still__will__be-hardhearted-enough__by-bandits__that__urge-to,
so__lengthen__their__father-and-son, brothers, husband-and-wife, children [...]
DE__pain?

Who can say that the soldiers of the CCP, having witnessed their kindred suffering and the dark side of the society, can still be so hardhearted to take the order by Mao and lengthen the pain of their fathers, sons, brothers, husbands, wives, and children?

Chiang C.'s use of this metaphor is skipped, because, unsurprisingly, there is no

remarkable difference between Chiang C.'s and Chiang K.'s usages. However, Chen S., as a president who had been born in Taiwan and won the poll, employed this metaphor in a way far different from that of Chiang K. and Chiang C.. Chen S. aimed to take a more inclusive attitude to put all the people migrating to and settling down in Taiwan under the same lineage, and to regard them as descendants from the same ancestor, as indicated in Example 20 below:



Example 20

不論__是__1949年__以前__或__以後__來到__台灣__,也__不管__是__「新
__台灣__之__母」__或__「新__台灣__之__子」,任何__人__只要__是__在
__台灣__這__塊__土地__上__安身立命、俯仰__生息,即使__懷抱__著__
不同__的__理想__與__故土__的__情感,全部__都__是__骨肉__同胞。(Chen
S._951010)

Whether__SHI__1949__before__or__after__come-to__Taiwan__,

also__whether__SHI__‘new__Taiwan__DE__mother’

__or__‘new__Taiwan__DE__son’.

Any__person__as-long-as__SHI__PREP__Taiwan__this__CL__land__above__

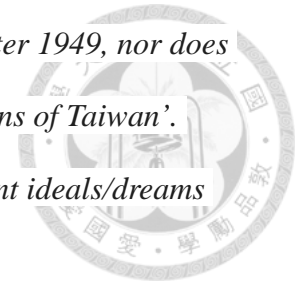
settle-down-and-get-on-with-their-pursuit, face-downward-and-upward__live,

even-though__embrace__ASP__different__DE__ideals__and__homeland__DE__

__affections, entire__all__SHI__bone-and-flesh__compatriot

It does not matter whether they arrived in Taiwan before or after 1949, nor does it matter whether they are 'new mothers of Taiwan' or 'new sons of Taiwan'.

Those who settle down and live in Taiwan, though with different ideals/dreams and nostalgia to their homelands, are our fellow countrymen.

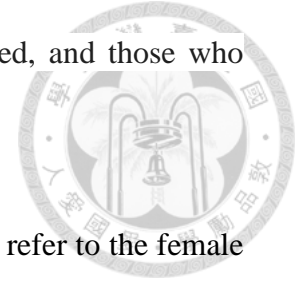


Chen S.'s use of ANCESTRY IS FLESH in the broadest sense to include the whole population in Taiwan as the descendants from the same ancestor has its background. The words referring to those who migrated to Taiwan before and after 1949, and the referents 'new mothers of Taiwan' and 'new sons of Taiwan' merit attention.

Taiwan has long been a place for immigrants. The most recent wave of immigrants occurring in 1949, immediately after the ROC government led by the KMT lost the civil war to the CCP, led to the KMT's ruling of Taiwan and its application of the dichotomy of 'civilized/primitive', 'savior/saved', 'elegant/vulgar', etc. to the China-Taiwan distinction as a means to 'efface the Taiwan subjectivity' (黃綉庭 Huang 2006: 49). The KMT regime, recognizing the Chinese identity and taking reunifying Taiwan and China as an ultimate goal, suppressed political protestants who promoted the Taiwanese identity and Taiwan independence, thus creating clashes between Taiwanese²⁶ and 'Mainlanders'. With the democratization in late 1980s and localization/Taiwanization movements in 1990s and early 2000s, the

²⁶ Taiwanese refer to those who had settled down in Taiwan before the end of World War II. They include Southern Min and Hakka people from China and the indigenous people (劉阿榮 Liu 2007).

division between Taiwanese and Mainlanders seemed to be eroded, and those who identified themselves as Taiwanese was rising (劉阿榮 Liu 2007).

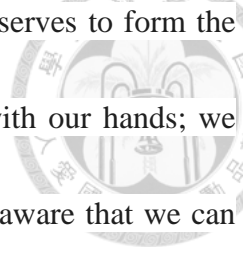


The terms ‘new mothers of Taiwan’ and ‘new sons of Taiwan’ refer to the female spouses from other countries, especially from the Southeast Asia (SE Asia) and the People’s Republic of China (PRC). Taiwan, with its comparatively advantageous economy during 1980s till present, has been attracting women—mainly from SE Asia and the PRC—to marry men in Taiwan. The marriage-related female immigrants from these areas to Taiwan and their children have their significance in the demographic structure of Taiwan: In 2011, among the 100 newborns, 8 were born by female spouses from SE Asia and 4 by Chinese female spouses (楊艾俐 Yang 2012).

Chen S.’s creative usage of the ANCESTRY IS FLESH metaphor thus can be viewed as rhetoric to call for integration of ethnic groups, which differs from Chiang K.’s and Chiang C.’s use of this metaphor. The difference is attributable to the changing political/societal contexts.

5.6 The possible explanation of the less versatile use of 肉 *rou* ‘flesh’

We would like to address the lack of versatility detected in the word types containing 肉 *rou* ‘flesh’ and metaphor/metonym with 肉 *rou* ‘flesh’ as the source concept. We think this is attributed to the fact that this body part, though concrete, does not have a



clearly perceivable function to a person's life, though we know it serves to form the human body. We see ourselves walking with our legs, grasping with our hands; we also feel our heart beating, our stomach starving, etc. We are also aware that we can function because our organs and limbs work well and coordinate with each other. Though these parts are composed of flesh, we think it is these specific body parts/organs working. When a part of our body gets hurt, we won't say our flesh is hurt but we clearly identify it is our finger, arm, ankle, knee, back, etc. which is hurt.²⁷ We know flesh forms the human body, but the process of formation is hardly detectable. That is, we don't look at a person's body being formed. We have terms such as 血虛 *xiexu* blood-feeble 'lack of blood', 貧血 *pinxie* lack-blood 'anemia', 骨鬆 *gusong*/骨質疏鬆 *guzhishusong* bone-quality-loose 'osteoporosis', and 脈象虛 *maixiangxu* meridian-feeble 'feeble pulse/meridian', which may impact our life and damage our health. However, 肉多 *rouduo* flesh/meat-more 'more flesh/meat' and 肉少 *roushao* flesh/meat-less 'less flesh/meat' are not lexical items to refer to a person's health, but more likely to one's diet. In a word, flesh, one of the major elements composing our body, is the most 'invisible' part compared with other components, because it is supposed to be existing. 肉 *rou* 'flesh' thus presents the

²⁷ We are aware of the emergence of an expression 肉痛 *rou tong* 'flesh-hurt'. Originally it is defined as the aching of the human body, a realization of FLESH FOR BODY. It has also undergone meaning extension to refer to a feeling/emotion which is similar to 'reluctance (to spend an amount of money)', as the example provided by the MOE dictionary: 後來他父親肉痛這錢 'Later on his father was reluctant to give away the money'.

lest versatility regarding the types of lexical forms and source concept for figurative meanings.



5.7 Summary

Only a paucity of research on flesh utilized to refer to something else can be found, which seems to reflect a fact: flesh is apt to be ignored, despite the majority of human body is composed of flesh. We argue this is ascribed to the fact that this body part does not have a definable, visible function to a person. Sense division is needed, as the lexical forms containing 肉 *rou* ‘flesh’ found in the corpus show the difference: That from a living person and that from a dead body.

Only two figurative meanings are identified from the lexical forms containing 肉 *rou* ‘flesh’: ANCESTRY IS FLESH and FLESH FOR BODY. The tendency perceived in the qualia role conversion in the analysis of 血 *xie* ‘blood’ is also found here. That is, 肉 *rou* ‘flesh’ without a specified role at the lexical level is coerced to perform the telic role at the clausal level.

Aside from the significance of the qualia structure in the analysis of this body part, generative mechanisms also come into play in the comprehension of the fixed idiom 行屍走肉 *xingshizourou* ‘ambulating-corpse-walking-meat’ ‘ambulating corpse and walking piece of meat’. This idiom is understood first through the activation of

‘accommodation’, i.e. 肉 *rou* ‘flesh’ in this idiom is apprehended in the same way people understand 肉 *rou* ‘flesh’ of a living person, and the corresponding metaphor and metonym are A DEAD PERSON IS A LIVING PERSON and FLESH FOR BODY respectively.

It is also interpreted via ‘exploitation’, which, resorting to the body-mind dichotomy, selects the physical constituent of a human being, i.e. the body, which is metonymized by flesh. The selection, nonetheless, highlights the significance of the missing part to a human being: the mind. The metaphor retrieved from the application of this mechanism is A PERSON WITHOUT MIND IS A WALKING PIECE OF MEAT.

The speakers’ diverging uses of the same metaphor expose the impact brought about by the changing political/societal context. The inspection of the ANCESTRY IS FLESH metaphor by Chiang K., Chiang C. and Chen S. reflects their different backgrounds: Chiang K. and Chiang C. employ it to show their identification with Mainland Chinese and to blame the CCP for their brutality, whereas Chen S. utilizes it to accommodate all those who settle down in Taiwan, regardless of the time of their arrival, the race, and the reasons for their immigration.

Chapter 6 Data Analysis: 骨 *gu* ‘bone’

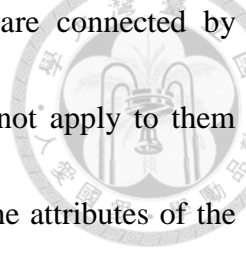


The Chinese character 骨 *gu* ‘bone’ is usually compounded with 肉 *rou* ‘flesh’ and 血 *xie* ‘blood’ in the coordination structure, as in the lexical items 骨肉 *gurou* bone-flesh ‘bone and flesh’ and 骨血 *guxie* bone-blood ‘bone and blood’, the former of which, we believe, is formed due to the fact that they are attached to each other in anatomy, and the latter to the fact that bone, or bone marrow, is where blood is produced.

6.1 Previous studies on bone metaphors

There is a paucity of research related to 骨 *gu* ‘bone’. Li (2015), in his talk, explains how this body part is used metaphorically to convey emotions, e.g. 痛心入骨 *tongxinrugu* hurt-heart-enter-bone represents the intensity of one’s anger,²⁸ and 毛骨悚然 *maogusongran* hair-bone-horrified vividly denotes one’s fear. In Chapter 5, we talk about Levi-Strauss (1969) finding that ‘of the same bone’ and ‘of the same flesh’ refer to two categories of kinship in the Tibetan language. The members categorized as ‘of the same bone’ are descendants of the same ancestor and are forbidden to get

²⁸ Whereas Li (2015) argues the fixed idiom serves to express anger, the MOE dictionary defines this fixed idiom as 傷心、怨恨到了極點 ‘extreme sadness and hatred’.

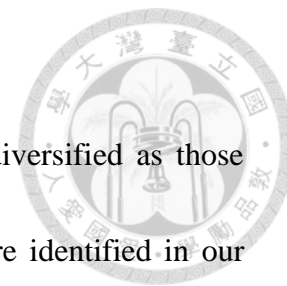


married to one another, whereas those as ‘of the same flesh’ are connected by legitimate marriages and the prohibition against intermarry does not apply to them (Levi-Strauss 1969: 373). The kinship terminology also conveys the attributes of the two body parts: the rigidity of the bone and the fluidity of the flesh. Mixco (1992), in his study of the semantic association between *ancestor* and *pubic hair* in the culture of the Kiliwa,²⁹ finds that the Kiliwan’s particular use of leg hair/bone to signify ancestor is a vestige of the widespread bipolar metaphoric dichotomy in the world’s cultures: the bone and the flesh, which echoes Levi-Strauss’ discovery. This dichotomy equalizes bone with rigidity whereas flesh with fluidity or formlessness. Moreover, with the opposing features reflected in the flesh-ash and the bone-ash, and some of the North American cultures’ belief that bone is where one of a person’s multiple souls is harbored, the soul residing in bone, symbolizing the eternity, also represents the vitality and qualities of the person.

The above indicates a long tradition for bone to represent emotion, place for soul (i.e. the quality/temperament/characteristic), and kinship. The formal trait, rigidity, also contributes to the metaphorical use of bone in those languages.

²⁹ The Kiliwa is a Yuman-speaking tribe of aboriginals in Baja California (Mixco 1992).

6.2 Metaphor identification



The types of lexical items containing 骨 *gu* ‘bone’ are not so diversified as those containing 血 *xie* ‘blood’. Only 11 types of such lexical forms are identified in our corpus: 骨山 *gushan* bone-mountain ‘mountain of bones’, 骨肉 *grou* bone-flesh ‘bone and flesh’, 骨架 *gujia* bone-frame ‘skeleton’, 骨幹 *gugan* bone-stem ‘backbone’, 骨嶽血淵 *guyue-xieyuan* bone-mountain-blood-pool ‘high mountain of bones and pool of blood’, 傲骨 *aogu* pride-bone ‘proud (bone)’, 背脊骨 *beijigu* spine-bone ‘spine’, 刻骨銘心 *kegumingxin* engrave-bone-imprint-heart ‘engraved in the bones and imprinted on the heart’,³⁰ 脫胎換骨 *tuotaihuangu* take-off-body-change-bone ‘completely reborn’, 手骨 *shougu* hand-bone ‘bone of the arm’, and 脊樑 *jilian* spine-beam ‘spine’. The last word 脊樑 *jilian* spine-beam ‘spine’, though not containing the character 骨 *gu* ‘bone’, is included in the analysis, as 脊樑 *jilian* spine-beam ‘spine’ refers to the spine.

We apply the modified MIP procedure introduced in Chapter 3 to figure out whether the character 骨 *gu* ‘bone’ is metaphorically used against its basic contemporary meaning provided by the MOE dictionary: 動物體內支持身體的支架組織 ‘The frame inside the body of an animal which supports the body.’ Based on

³⁰ Regarding 刻骨銘心 *kegumingxin* engrave-bone-imprint-heart ‘engraved in the bones and imprinted on the heart’, we think this compound specifies the constitutive role of 骨 *gu* ‘bone’: The surface on which the script is engraved. However, 刻骨 *kegu* refers to the intensity of pain/suffering in the clause: 那種刻骨銘心的苦楚 ‘the extremely pain’. This compound is discarded because it is a case of hyperbole rather than a conceptual metaphor.

this meaning, there is only one word in which the morpheme 骨 *gu* ‘bone’ has undergone meaning extension at the lexical level: 傲骨 *aogu* pride-bone ‘proud (bone)’, which is defined as 高傲不屈的氣骨 ‘lofty and unyielding temperament’. It shows the specific character residing in the bone. Apparently the meaning of 骨 *gu* ‘bone’ in this word deviates from the basic meaning and should be determined as metaphorical.

Regarding the other compounds 骨山 *gushan* bone-mountain ‘mountain of bones’, 骨嶽血淵 *guyue-xieyuan* bone-mountain-blood-pool ‘high mountain of bones and pool of blood’, 骨肉 *grou* bone-flesh ‘bone and flesh’, 骨架 *gujia* bone-frame ‘skeleton’, 骨幹 *gugan* bone-stem ‘backbone’, 背脊骨 *beijigu* spine-bone ‘spine’, 脫胎換骨 *tuotaihuangu* take-off-body-change-bone ‘completely reborn’, etc., the lexical unit 骨 *gu* ‘bone’ within these compounds do not undergo meaning changes at the lexical level. Whether they are metaphorically used should be scrutinized at the clause level.

6.3 The qualia structure of 骨 *gu* ‘bone’

The qualia structure of 骨 *gu* ‘bone’ is spelled out as follows:

bone

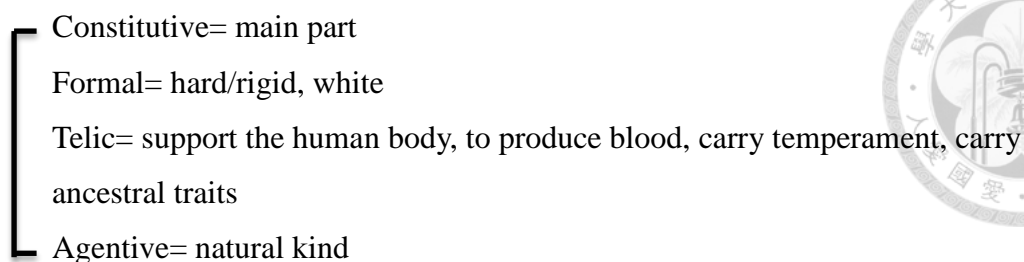


Figure 8. The qualia structure of 骨 *gu* ‘bone’

Figure 8 indicates that the constitutive role of 骨 *gu* ‘bone’ is left blank, as we focus on 骨 *gu* ‘bone’ being related to the human body rather than the constituents of 骨 *gu* ‘bone’ being related to 骨 *gu* ‘bone’. The formal role includes ‘hard/rigid and white’. All the bones are structured as a frame inside the human body, which functions to support the body. Its telic role is obvious: ‘support the human body’. From the anthropological observation discussed in 6.1 above, bone also works as a place to ‘carry ancestral/genetic features’ and ‘carry temperament’. Its agentive role is natural kind.

We have noticed that, like the sense division which occurs to 血 *xie* ‘blood’ and 肉 *rou* ‘flesh’, the meaning of 骨 *gu* ‘bone’ should also be divided: One refers to the bone inside a living body, and the other to that of the dead. Moreover, taking into consideration of the compounds found in the corpus, we consider it necessary to add ‘main part’ as the constitutive role. The two sets of qualia structure are spelled out accordingly:

Table 21. Senses of 骨 *gu* ‘bone’ and the qualia structures

	Sense 1	Sense 2
Constitutive	Main part	...
Formal	Hard, white	Hard, white
Telic	Form the human body, carry ancestral features, carry temperament	...
Agentive	Natural kind	X which makes bones out of the body

Sense 1 of 骨 *gu* ‘bone’ basically inherits the roles in Figure 1, with the addition of the constitutive role (i.e. main part). Sense 2 refers to the bone of the dead. The constitutive and telic roles are left blank. The formal role is ‘hard’ and ‘white’, and the agentive role is ‘X which makes bones out of the body’.

We then check the three representations of the compounds containing 骨 *gu* ‘bone’. The representations and the corresponding compounds/morpheme word are listed below:

- (1) The lexical item with a specified role at the lexical level and the word’s metaphorical meaning is lexically accessed, e.g. 傲骨.
- (2) The lexical item with a specified role at the lexical level but the word’s metaphorical meaning is NOT lexically accessed, e.g. 骨幹, 骨山, and 骨嶽血淵.

- (3) The lexical item with NO specified role at the lexical level and the word's metaphorical meaning is NOT lexically accessed, e.g. 骨肉, 骨架, 背脊骨, 手骨, etc.



The first representation is exemplified by 傲骨 *aogu* pride-bone 'proud'. The compound 傲骨 *aogu* pride-bone 'proud' underscores the telic role at the lexical level, as 骨 *gu* 'bone' holds a specific trait 'pride'. The telic role is transferred from the lexical level to the clausal level, as indicated in Example 21:

Example 21

傲骨__的__祖先__們，正__視__著__我們__的__腳步... (Chen S._901010)

proud__DE__ancestor__PLU, PRG__watch__ASP__our__DE__footsteps

The ancestors with pride are looking at our steps...

In Example 21, bone is where the temperament 'pride' resides, which resonates with the belief that bone is where a soul, i.e. qualities, of a person resides in certain Northern American cultures discussed in Mixco (1992). The lexical item specifies a role, and the metaphorical meaning, TEMPERAMENT IS BONE, is accessible lexically.

The second representation, which involves the lexical item with a specified role at the lexical level but the word's metaphorical meaning is NOT lexically accessed, is

exemplified by 骨幹 *gugan* bone-stem ‘backbone’, 骨山 *gushan* bone-mountain ‘mountain of bones’, and 骨嶽血淵 *guyue-xieyuan* bone-mountain-blood-pool ‘high mountain of bones and pool of blood’. The lexical form 骨幹 *gugan* bone-stem ‘backbone’ refers to the backbone, which is the major part of the 骨 *gu* ‘bone’. Presenting the part-whole relations, we think 骨幹 *gugan* bone-stem ‘backbone’ realizes the constitutive role of 骨 *gu* ‘bone’. However, no metaphor can be identified at the lexical level. The metaphor brought about by the clausal context will be discussed in Example 29 below.

The character 骨 *gu* ‘bone’ in 骨山 *gushan* bone-mountain ‘mountain of bones’ and 骨嶽血淵 *guyue-xieyuan* bone-mountain-blood-pool ‘high mountain of bones and pool of blood’, at the first glance, seems to have gone semantic change, since it refers to dead people’s bones piled up to form a (tall) mountain. With the sense division of 骨 *gu* ‘bone’ in Table 21, which shows Sense 2 referring to dead people’s bones, 骨 *gu* ‘bone’ should be regarded literal in 骨山 *gushan* bone-mountain ‘mountain of bones’ and 骨嶽血淵 *guyue-xieyuan* bone-mountain-blood-pool ‘high mountain of bones and pool of blood’. The qualia role of 骨 *gu* ‘bone’ in 骨山 *gushan* bone-mountain ‘mountain of bones’ and 骨嶽血淵 *guyue-xieyuan* bone-mountain-blood-pool ‘high mountain of bones and pool of blood’ is the same: the agentive role, as it is what brings 山 *shan* ‘mountain’ and 嶽 *yue* ‘high

mountain' into being. Example 22 below conveys that 骨嶽 *guyue* bone-mountain refers to a high mountain which is brought into being by piles of bones.



Example 22

陷__我__七億__人民__於__反覆__打鬥、互相__殘殺__的__骨嶽__血淵

(Chiang K. _570101)

Frame__our__700-million__people__PREP__recurrent__fight,

mutual__slaughter__DE__mountain-of-bone__pool-of-blood

[He] framed our 700 million people into the high mountain of bones and the deep pool of blood which are formed by people fighting and killing each other endlessly.

In the use of these two lexical items, we first envision a mountain made of only bones. At this step, 骨山 *gushan* bone-mountain 'mountain of bones' and 骨嶽 *guyue* bone-mountain 'high mountain of bones' should be considered literal. But when they are interweaved into a clause, like Example 22, the metaphorical meaning emerges, i.e. 骨 *gu* 'bone' refers to LOSS OF LIFE. The metaphor emerging from this word can be formulated as LOSS OF LIFE IS LOSS OF BONE.

Regarding the third representation, in which the lexical item with NO specified role at the lexical level and the word's metaphorical meaning is NOT lexically

accessed, we take 骨肉 *gurou* bone-flesh ‘bone and flesh’, 骨架 *gujia* bone-frame ‘skeleton’, 背脊骨 *beijigu* spine-bone ‘spine’, 手骨 *shougu* hand-bone ‘bone of the arm’ for example.



骨肉 *gurou* bone-flesh ‘bone and flesh’ is the constitutive role which refers back to the human body. This compound does not specify any role of 骨 *gu* ‘bone’ at the lexical level, and its metaphorical meaning is not lexically accessible. When it is put into a clause, its telic role is retrieved, and the metaphorical meaning ANCESTRY/FAMILY TIE IS BONE emerges, as exemplified in Example 24 below:

Example 24

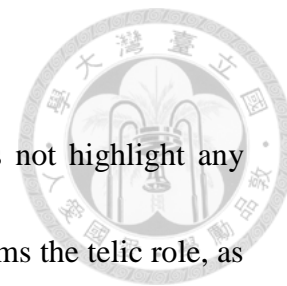
大陸__億萬__同胞__個個__和__我們__骨肉__相連，手足__相關 (Chiang C._721010)

Mainland-China__hundreds-of-millions__compatriot__each-and-every__and__we
__bone-and-flesh__connect, hand-and-foot__interrelate

Each of the hundreds of millions of the people in Mainland China is our kindred.

It is the lexical item 相連 *xianglian* connect ‘connect/link’ which draws out of the coordinated compound 骨肉 *gurou* bone-flesh ‘bone and flesh’ the meaning that 骨 *gu* ‘bone’ carries ancestral traits. Moreover, this metaphorical use reminds us of Levi-Strauss’ findings in the Tibetan language—the bone and the flesh refer to kin—despite the lack of the division between those related by an identical ancestor

and those related by legitimate marriage in Mandarin Chinese.



背脊骨 *beijigu* spine-bone is defined as ‘spine’, which does not highlight any specific role at the lexical level. When put into the clause, it performs the telic role, as it carries a certain (acquired) temperament, as shown in Example 25:

Example 25

要__在__我們__大陸__同胞__完全__奴化__的__背脊骨__上，建立__他__以__
__俄帝__直接__控制__的__軍事__工業__和__軍事__交通

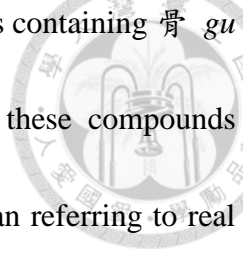
will__PREP__our__Mainland-China__compatriot__completely__enslaved__DE
__spine__on,

establish__his__use__Russian-imperialism__directly__control__DE__military__
industry__and__military__transportation

*[They] are going to establish on the completely enslaved spines of our fellow
countrymen the military industry and transportation directly controlled by USSR.*

背脊骨 *beijigu* spine-bone ‘spine’ follows an attribute, 奴化 *nuhua* enslaved ‘enslaved’, which indicates the trait of a person who accepts the state of being slaved and does not resist. Though acquired instead of innate, it is a trait housed in the spine.³¹

³¹ We are aware of the emergence of another metaphor the spine is a surface brought about by the use of 在...上 *zai...shang* ‘on’, as in 在我們大陸同胞完全奴化的背脊骨上. This metaphor is discarded, however, because it is not directly related to the human body.



There are several less embodied examples using the compounds containing 骨 *gu* ‘bone’ in the third representation. That is, the 骨 *gu* ‘bone’ in these compounds function as the sub-mappings of X IS A PERSON metaphor, rather than referring to real people whom the speaker identifies himself with. To begin with, 手骨 *shougu* hand-bone ‘bone of the arm’ in a Taiwanese proverb: 打斷手骨顛倒勇 ‘After one’s arm is broken and healed, the arm (a metonym of the person) will get stronger than ever instead of getting weaker’. 骨 *gu* ‘bone’ is literal at the lexical level, and does not specify any qualia role. The whole proverb still can be used literally, and 手骨 *shougu* hand-bone ‘bone of the arm’ conveys no metaphoricity at all. Nonetheless, when a bigger context is examined, it is found this proverb is a sub-mapping of TAIWAN IS A PERSON metaphor, as indicated in Example 26 below:

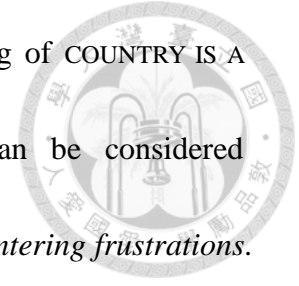
Example 26

「打斷__手骨__顛倒__勇」，臺灣__不但__沒有__被__金融__海嘯__擊倒，
反而__比__以前__更__有__信心 (Ma Y._981010)

‘Break__bone-of-arm__on-the-contrary__strong’,
Taiwan__not-only__PASS__finance__tsunami__beat-up,
instead__than__ever__even-more__have__confidence

*‘After one’s arm is broken and healed, the arm will get stronger than ever
(instead of getting weaker).’ Taiwan was not beaten up by the financial tsunami,
but is more confident than ever.*

TAIWAN IS A PERSON metaphor can be seen as a sub-mapping of COUNTRY IS A PERSON, and ‘Taiwan’ thus refers to the country and it can be considered personification of Taiwan. *Breaking the arm* is mapped onto *encountering frustrations*.



Still, there may be another reading for ‘Taiwan’. A place/country name can always represent the people in the place/country; ‘Taiwan’ in the TAIWAN IS A PERSON metaphor can therefore be interpreted as a metonym: TAIWAN FOR PEOPLE IN TAIWAN. If this reading is agreed, Example 26 above may not be so little embodied as it looks, because the speaker still identifies himself to the people in Taiwan.

The fixed idiom 脫胎換骨 *tuotaihuangu* take-off-body-change-bone ‘completely reborn’ is another example for less embodied use. The MOE dictionary provides the definition which has its origin in Taoism: 原指修煉得道，脫換凡人之軀殼而成仙。比喻澈底改變。 ‘Originally it refers to a person who tries to make him-/herself immortal succeeds and takes off the mortal body. It is used to describe someone who changes completely.’ The character 骨 *gu* ‘bone’ is metonymic rather than metaphorical in this basic contemporary meaning; i.e. change of the body is change of the bones, and BONE FOR BODY is retrieved. In our corpus, it is under the X IS A PERSON metaphor, as indicated in Example 27 below:

Example 27

讓__臺灣__經濟__結構、國民__生活__品質__以及__政府__部門__脫胎換骨。

make__Taiwan__economy__structure,

nationals__living__quality__and__government__take-off-body-change-bone

So that the economic system, living quality of the people and the government departments and agencies of Taiwan can be changed completely.



Example 27 shows the target concepts range from THE ECONOMIC SYSTEM, THE LIVING QUALITY OF THE PEOPLE to THE GOVERNMENT DEPARTMENTS AND AGENCIES, onto which the source domain PERSON is mapped. The contextual meaning of the idiom is ‘complete change in essence’, which is realized through ‘the change of the bone’. In other words, the bone is regarded as something which carries the essence of a person. We can formulate the metaphor as A PERSON’S ESSENCE IS HIS/HER BONE, which can be simplified to ESSENCE IS BONE.

Example 28 below poses another complicated case which consists of several layers of mappings.

Example 28

如果__將「拼__經濟」和「大__改革」比喻為__台灣__前進__的__兩__個__輪子，那麼__憲政__體制__的__改造__工程__無疑__是__支撐__整__部__車子__的__骨架__支柱。(Chen S._921010)

if__take__‘expedite__economy’__and__‘big__reformation’

__metaphorized-as__Taiwan__move-forward__DE__two__CL__wheel,

then__constitution__system__DE__transformation__engineering__undoubtedly__
_SHI__support__whole__CL__car__DE__skeleton__pillar

If we compare ‘expedite economy (development)’ and ‘big reformation’ to the two wheels which bring Taiwan forward, the Constitutional reformation engineering is undoubtedly the frame holding up the whole car.

Taking a close look at the lexical item 骨架 *gujia* bone-frame ‘skeleton’, we can find it refers to the ‘skeleton’ which supports a car. Therefore, A CAR IS A PERSON metaphor and THE CONSTITUTIONAL REFORMATION ENGINEERING IS A SKELETON are retrieved.³² If we go a step further up, TAIWAN IS A CAR metaphor is retrieved due to the use of ‘forward moving’ as well as ‘two wheels’. From TAIWAN IS A CAR and A CAR IS A PERSON, we can draw out TAIWAN IS A PERSON, of which THE CONSTITUTIONAL REFORMATION ENGINEERING IS A SKELETON is a sub-mapping. 骨架 *gujia* bone-frame ‘skeleton’ is assigned the telic role, as it functions to support first the CAR, then the PERSON. This can be illustrated by the following diagram (Figure 9):

³² We are aware that, within THE CONSTITUTIONAL REFORMATION ENGINEERING IS THE SKELETON metaphor, there exists THE CONSTITUTIONAL REFORMATION IS AN ENGINEERING metaphor. Moreover, the use of 支柱 *pillar* reveals a building metaphor. However, since we focus on the human body part metaphor, these are not discussed in the main text.

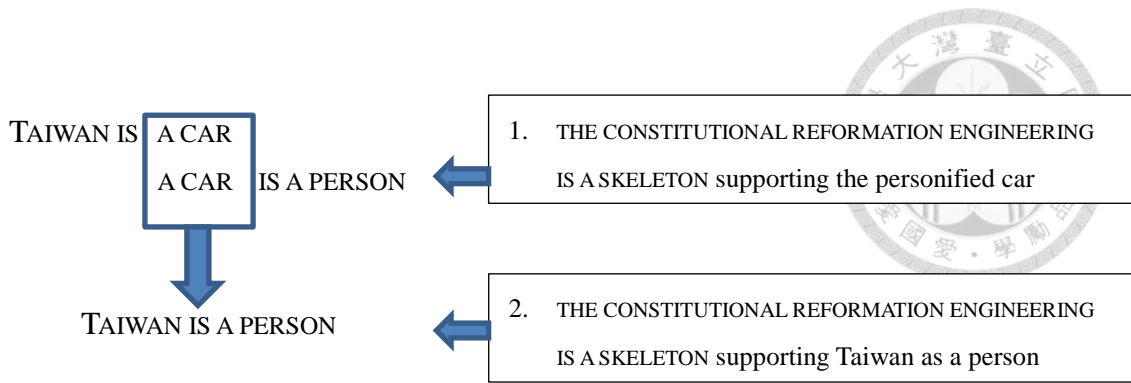


Figure 9. The mappings of Example 28

Table 22 shows the senses, levels of interpretation and the qualia roles of lexical items containing 骨 *gu* ‘bone’.

Table 22. Qualia roles, senses and levels of interpretation of lexical items containing 骨 *gu* ‘bone’

Qualia Roles	Sense 1		Sense 2	
	Lexical level	Clausal level	Lexical level	Clausal level
Unspecified	32	1	0	0
Constitutive	1	1	0	0
Telic	1	32	0	0
Agentive	0	0	3	3
Total	34	34	3	3

The qualia roles of the senses of 骨 *gu* ‘bone’ at both the lexical and clausal levels present more versatility than those of 肉 *rou* ‘flesh’ addressed in Chapter 5.

When Sense 1 is activated at the lexical level, there are 32 tokens from which no

specific role is retrieved. Only two tokens have specific roles: The one is the constitutive and the other the telic role. At the clausal level, 32 out of the 34 tokens perform the telic role, and one the constitutive and one without specified role. When it comes to Sense 2, there are only three tokens performing the agentive role at the lexical level, which is later transferred to the clausal level.

The tendency identified in the lexical items containing 血 *xie* 'blood' and 肉 *rou* 'flesh' also applies to the analysis of 骨 *gu* 'bone'. That is, when the interpretation shifts to the clausal level, the token numbers of the unspecified and constitutive roles drop while the token number of the telic role rise, due to the coercion occurring at the clausal level. Sense 2 is limited in both types and tokens, and the qualia role, i.e. agentive, remains the same at the lexical and clausal levels.

In the sections to follow, we discuss the interactions between senses, morphological structures, and qualia roles at different levels.

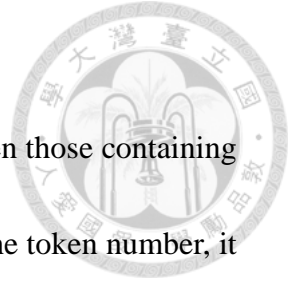
6.4 Sense, morphological structures and qualia roles

The discussion of Sense 1 is divided according to the morphological structure: coordination, modifier-modified and verb-object structures. The structures, qualia roles and token numbers are displayed in Table 23.

Table 23. The structures, qualia roles of 骨 *gu* ‘bone’ under Sense 1

Structure	Total number of tokens (& percentage)	Qualia role at lexical level	No. of tokens	Qualia role at clausal level	No. of tokens
Modifier-modified	8 (23.53%)	Unspecified	6	Unspecified	1
		Constitutive	1	Constitutive	1
		Telic	1	Telic	6
Verb-object	5 (14.71%)	Telic	5	Telic	5
Coordination	21 (61.76%)	Unspecified	21	Unspecified	0
		Telic	0	Telic	21
Total			34		34

Table 23 shows that, in terms of the token number, the coordination structure ranks the highest, with 61.76%, among all the three structures, followed by the modifier-modified (23.53%) and by verb-object (14.71%). If we focus on the differences between the token numbers at the lexical and clausal levels, it is obvious that the telic role becomes the most prominent qualia role, when we interpret the lexical items at the clausal level, regardless of the morphological structure. That is, in the coordination structure, the 21 tokens of unspecified role at the lexical level are converted to the telic role at the clausal level. This conversion applies to the words of modifier-modified structure, with the token number of the unspecified role declining from 6 to 1, and that of the telic role rising from 1 to 6, when the interpretation moves from the lexical to the clausal level. When it comes to the verb-object structure, the telic role at the lexical level is transferred to the clausal level.



6.4.1 Sense 1: Lexical and clausal levels

The diversity of the lexical items containing 骨 *gu* 'bone' is between those containing 血 *xie* 'blood' and those containing 肉 *rou* 'flesh'. In the light of the token number, it is coordination structure ranking the highest. However, regarding the types of lexical items, the modifier-modified structure tops. Our discussion is in accordance with the number of types. That is, we discuss the modifier-modified structure first, then verb-object, and finally coordination. Moreover, we merge the discussion on the lexical and clausal levels, as the variety is not as high as that of the words consisting of 血 *xie* 'blood'.

A. Modifier-modified structure

Though the token number is not the highest, this structure is realized by six types: 骨架 *gujia* bone-frame 'skeleton', 骨幹 *gugan* bone-stem 'backbone', 傲骨 *aogu* pride-bone 'proud', 背脊骨 *beijigu* spine-bone 'spine', 手骨 *shougu* hand-bone 'bone of the arm' and 脊樑 *jilian* spine-beam 'spine'. Except 傲骨 *aogu* pride-bone 'proud', of which 骨 *gu* 'bone' performs the telic role, 骨 *gu* 'bone' in the rest lexical items does not specify any role at the lexical level.

When we interpret these types at the clausal level, these types are coerced to perform the telic role. 骨幹 *gugan* bone-stem 'backbone', which is the backbone of

the human body, is activated to represent the major part, as indicated in Example 29

below:



Example 29

我們__不僅__無法__處於__這__一__鬥爭__陣營__之外，而且__每__一__國民__都__是__此__一__鬥爭__中__的__主要__骨幹。

We__not-only__cannot__stay__this__one__fight__camp__outside,
and__every__one__national__all__SHI__this__one__fight__amid__DE__main__
_backbone

We cannot only exclude ourselves from the camp, but each of us is also the backbone in this fight.

Example 29 presents another less embodied metaphor, in which ‘the fight’ is personified, and all the nationals form the backbone of the personified fight. As the backbone is defined by the MOE dictionary as 聯合許多骨頭而成，為保持形體的支架 ‘The frame which is formed by linking many bones and functions to support the body’, and by zdict as 指骨骼的主幹 ‘The major part of the skeleton’. The definitions underscore the function—to support, and an attribute—the feature of being main. We argue the use of the term 骨幹 *gugan* bone-stem ‘backbone’ activates the telic role (to hold up the body), and the constitutive role (being the main part), and the metaphor retrieved is THE MAIN MEMBERS IN AN EVENT IS THE BACKBONE, which can

be simplified as THE MAJOR PART IS THE BACKBONE



B. Verb-object structure

This structure is realized as 脫胎換骨 *tuotaihuangu* take-off-body-change-bone ‘completely reborn’. At the lexical level, 骨 *gu* ‘bone’ does not specify any role. It refers to part of the human body. When the behavior of the lexical items in the clause is considered, it performs the telic role, as bone is regarded to carry the essence of a person, and the metaphor is ESSENCE IS BONE, as indicated in Example 27 above.

C. Coordination structure

With the highest token number, this structure is realized by only one type: 骨肉 *gurou* bone-flesh ‘bone and flesh’. Referring to ‘bone and flesh’, this lexical item does not specify any role at the lexical level. When it is positioned into clauses, it is understood as family members or kindred; i.e., it carries familial ties and performs the telic role.

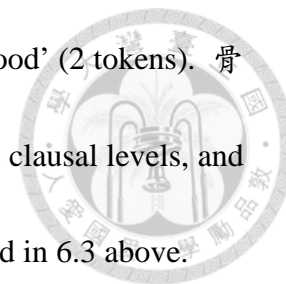
6.4.2 Sense 2: Lexical and clausal levels

Only two types of lexical items realize Sense 2 of 骨 *gu* ‘bone’: 骨山 *gushan* bone-mountain ‘mountain of bones’ (1 token) and 骨嶽血淵 *guyue-xieyuan*

bone-mountain-blood-pool ‘high mountain of bones and pool of blood’ (2 tokens). 骨

gu ‘bone’ in both performs the agentive role at both the lexical and clausal levels, and

the metaphor emerging is LOSS OF LIFE IS LOSS OF BONE, as discussed in 6.3 above.



6.5 The speakers, the conceptual mappings and the qualia roles

We now move to the exploration of the interaction between the speakers, the conceptual mappings and the qualia roles. As Sense 2 is solely used by Chiang K., we do not make a table showing how the words containing 骨 *gu* ‘bone’ of Sense 2 are used. We only compare how the lexical items of Sense 1 behave (Table 24).

Table 24. The qualia roles, conceptual mappings, and the speakers under Sense 1 of 骨 *gu* ‘bone’

Sense 1		Speaker				
Qualia role	Conceptual mappings	Chiang K.	Chiang C.	Lee T.	Chen S.	Ma Y.
Telic 33	ESSENCE IS BONE	0	0	0	0	5
	THE MAJOR PART IS THE BACKBONE	1	0	0	0	0
	ANCESTRY IS BONE	19	1	0	1	0
	THE CONSTITUTIONAL REFORMATION ENGINEERING IS A SKELETON	0	0	0	1	0
	TEMPERAMENT IS BONE	3	0	0	1	0
Total (A)		23	1	0	3	5
Total token of words of the speeches (B)		67,627	9,990	21,240	30,322	26,117
Per 1000 words ((A)/(B)*1000)		0.34	0.10	0	0.10	0.19

Table 24 shows a clear drop from Chiang K. to Chiang C., from 0.34‰ to 0.10‰. The metaphor with 骨 *gu* ‘bone’ as the source concept does not occur at all in Lee T.’s speeches. The curve rises in Chen S.’s regime, and keeps on going up in Ma Y.’s governance.

What catches attention is the ANCESTRY IS BONE metaphor, which is realized solely through the use of 骨肉 *gurou* bone-flesh ‘bone and flesh’ by Chiang K., Chiang C. and Chen S.. Since this is already discussed in Chapter 5 above, the discussion is not repeated here. But we would like to point out that as both 骨 *gu* ‘bone’ and 肉 *rou* ‘flesh’ are the basic parts forming the human body, and both develop during gestation, it is reasonable that they comprise a lexical item to refer to familial or ancestral relations in Mandarin Chinese. Bone referring to familial ties is also found in other cultures, as demonstrated in Levi-Strauss (1969) and Mixco (1992).

The metaphor TEMPERAMENT IS BONE is employed by Chiang K. and Chen S., two presidents with opposing nation identities and diverging career backgrounds. It can be inferred that the people whom this metaphor is mapped onto should differ. Chiang K. used this metaphor to evoke determination and solidarity among the listeners, as shown in Example 30 below:

Example 30

同胞__們！今日__只要__我們__人人__都__能__向__金門__軍民__同胞__
看齊，挺起__脊樑，立定__腳跟，團結一致[...]那__我們__今日__既經__贏
得__了__這__第一__回合__的__勝利。(Chiang K._471010)

compatriot__PLU!

Today__as-long-as__we__everyone__all__can__toward__Kinmen__armed-forc
e-and-people__compatriot__emulate, straighten__spine, stand-upright__heel,
unite-ourselves [...]

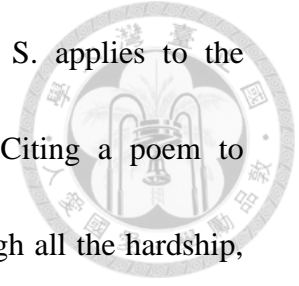
then__we__today__already__win__ASP__this__first__round__DE__victory

*My fellow countrymen! As long as we can emulate the armed force and people in
Kinmen, straighten ourselves and stand upright, and unite ourselves [...] then we
have already won the first round of the war.*

The phrases 挺起脊樑，立定腳跟 remind the listener of Chiang K.'s identify as a general to call attention to his soldiers/subordinates. Or it can be said that he regarded all the nationals his soldiers/subordinates. With the lexical item 脊樑 *jilian* spine-beam 'spine' collocated with 挺起 *tingqi* straighten-up 'straighten-up', it indicates confidence and fortitude.

Another example is discussed as Example 25 above, in which the temperament dubbed onto the Mainland Chinese people is enslavedness. Through the use of that example, the speaker actually accused the CCP of enslaving the Chinese.

On the other hand, the identical metaphor used by Chen S. applies to the ancestors of Taiwanese people, as discussed in Example 21. Citing a poem to commemorate how the Taiwan people's ancestors had gone through all the hardship, Chen S.'s use of this metaphor asked the listener to identify themselves as Taiwanese rather than Chinese.



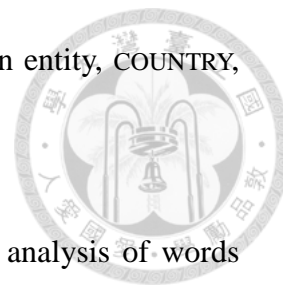
6.6 Summary

The body part 骨 *gu* 'bone' has a long been utilized to represent emotion, temperament and familial/genetic relations in quite a few languages, including Mandarin Chinese. Our data analysis uncovers that, among all the lexical forms, the semantic change on 骨 *gu* 'bone' occurs to only one lexical form, i.e., 傲骨 *aogu* 'pride-bone' 'proud'. The metaphorical meanings of the other compounds are activated at the clausal levels.

Sense division is necessary because the compounds found in our corpus present two meanings of 骨 *gu* 'bone': the bone of a living person, and that of a dead one. The division raises the accuracy in retrieving the qualia roles, and furthermore facilitates correct formulation of the conceptual mappings.

Anthropomorphism occurs to four types, or 40% of all the types of the compounds containing 骨 *gu* 'bone' in our corpus data. That is, they are metaphors

under the overarching X IS A PERSON. What is personified can be an entity, COUNTRY, or an event noun, FIGHT.



The tendency that the telic role predominates is clear in the analysis of words containing 骨 *gu* 'bone' of Sense 1. That is, the types and tokens with unspecified roles at the lexical level tend to be transformed to the telic role at the clausal level. Regarding the lexical forms consisting of 骨 *gu* 'bone' of Sense 2, the role retrieved at the lexical level is agentive, which is directly transferred to the clausal level.

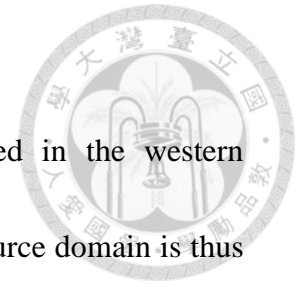
The impact brought about by the socio-political context onto the country leaders' metaphor use is apparent. Though none of the metaphors identified is used by all the five presidents, an identical metaphor employed by presidents of different eras still reveals the influence. The metaphor ANCESTRY IS BONE is an obvious example, which demonstrates exactly whom Chiang K., Chiang C. and Chen S. identified themselves with. Moreover, the utilization of TEMPERAMENT IS BONE by Chiang K. and Chen S. respectively also reflects their different political and societal environments lead to their diverging uses of the same metaphor.

Chapter 7 Data Analysis: 脈 *mai* ‘meridian’



The Chinese character 脈 *mai* ‘meridian’ poses an intriguing case. The MOE dictionary defines this character as 分布人與動物周身，使血液流通而循環不窮的血管。如：「動脈」、「靜脈」 ‘The blood vessels, distributed all over the human body and animal body, carry blood everywhere. E.g. “artery” and “vein”’. However, when Tradition Chinese Medicine (TCM) is taken into consideration, 脈 *mai* ‘meridian’ refers to something broader. Instead of simply blood vessels, arteries and veins, 脈 *mai* ‘meridian’ refers to the internal circulation system, and the substance to be circulated is not limited to blood. The character is in some cases translated to ‘meridian’ which refers to the system connecting the organs and limbs. The system functions to circulate 氣 *qi* ‘vital energy’ and blood, with the former pushing the latter. Taking this translation/definition, we think the concept of 脈 *mai* ‘meridian’ should be regarded as part of the body in which life-sustaining substances are held through, rather than merely the blood vessels in anatomy. The elements circulated through the meridians are both visible and invisible, the former of which is blood and the latter 氣 *qi* ‘energy’.

7.1 Previous studies on 脈 *mai* ‘meridian’ as a source domain



The definition of 脈 *mai* ‘meridian’ in TCM is not recognized in the western knowledge. Conceptual metaphors with 脈 *mai* ‘meridian’ as the source domain is thus missing from research. Yu (1995), comparing the metaphorical expressions of anger and happiness in English and Chinese, finds that ‘blood vessel’ and ‘vein’ are used in sentences denoting anger in the two languages respectively. But the metonym³³ formulated is INTERNAL PRESSURE FOR ANGER. According to Goatly (2007: 121), the blood vessels, arteries and veins, are mapped to inanimate landscape: artery refers to ‘important road or railway’ and vein to ‘narrow layer of mineral in rock’. The uniqueness of 脈 *mai* ‘meridian’ in TCM makes it a topic yet to be explored in the research on embodiment or conceptual metaphors.

7.2 Metaphor identification

Since this part of body includes both blood vessels and the ‘imagined lines’, it is not as concrete as the other body parts in definition. The incidence of this body part which is used metaphorically is thus lower than that of 血 *xie* ‘blood’ and 骨 *gu* ‘bone’.

There are eight types of lexical items containing 脈 *mai* ‘meridian’: 命脈 *mingmai*

³³ Yu take them as metonym rather than metaphor because, according to Lakoff and Kovecses (1987: cited in Yu 1995: 66), it exploits the principle ‘THE PHYSIOLOGICAL EFFECTS OF AN EMOTION STAND FOR THE EMOTION’.

life-meridian ‘life and meridian’, 國脈民命 *guomaiminming*
country-meridian-people-mission ‘the life meridian of a country and the people’s
mission’, 絡脈 *gemai*,³⁴ 一脈相承 *yimaixiangcheng* one-meridian-continue ‘to
come down in one continuous line’, 脈動 *maidong* pulsation ‘pulsation’, 脈絡
mailuo meridian-network ‘network of meridian/context’, 血脈 *xiemai*
blood-meridian ‘meridian in which blood and *qi* circulate’, 筋脈 *jinmai*
vein-meridian ‘the channel circulating *qi* and blood’.



The modified MIP procedure proposed in Chapter 3 is applied so as to reveal whether this unit 脈 *mai* ‘meridian’ has undergone meaning extension against its basic contemporary meaning following the TCM: The blood vessels which circulates blood and the imaginary line which circulates 氣 *qi* ‘energy’. We find the morpheme 脈 *mai* ‘meridian’ in the idioms 國脈民命 *guomaiminming* country-meridian-people-mission ‘the life meridian of a country and the people’s mission’, 一脈相承 *yimaixiangcheng* one-meridian-continue ‘to come down in one continuous line’, has undergone meaning extension at the lexical level. On the other hand, 命脈 *mingmai* life-meridian ‘life and meridian’, 脈動 *maidong* pulsation

³⁴ This lexical item 絡脈 is discarded from the analysis, because it is not found in either dictionary, and the meaning cannot be inferred, even though we are sure it is used metaphorically, as in 我們三民主義的國民革命，為爭取世界四分之一人口的獨立自由，與整個人類爭自由反侵略的歷史，**絡脈一體，息息相關** ‘Our revolution under the Three Principles of the People, aiming to fight for the independence and freedom for the quarter of the world’s population, is closely linked to the history where the whole human beings have been striving for freedom and fighting against invasion.’ (CKS_520101).

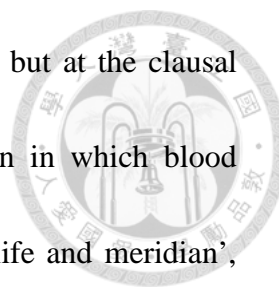
‘pulsation’, 脈絡 *mailuo* meridian-network ‘network of meridian/context’, 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’, 筋脈 *jinmai* vein-meridian ‘the channel circulating qi and blood’ do not display metaphorical extension when only the lexical context is considered.

The meaning of 國脈 *guomai* country-meridian in the idiom 國脈民命³⁵ is 國家的命脈, ‘the life and meridians of a country’ which places the unit 脈 *mai* ‘meridian’ under the less embodied metaphor, i.e. X IS A PERSON. As 脈 *mai* ‘meridian’ refers to the circulating system to sustain the life of a country rather than a person, the meaning of this lexical item has undergone changes. The other lexical item 一脈相承 *yimaixiangcheng* one-meridian-continue means 由一個血統或一個派別承傳沿襲下來 ‘(Something) coming down from one lineage or group/cliq/sect’ in the MOE dictionary. The morpheme 脈 *mai* ‘meridian’ here does not refer to the basic contemporary meaning but to a lineage, which is further extended to represent a group/cliq/sect.

Regarding the other lexical items 命脈 *mingmai* life-meridian ‘life and meridian’, 脈動 *maidong* pulsation ‘pulsation’, 脈絡 *mailuo* meridian-network ‘network of meridian/context’, 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’, 筋脈 *jinmai* vein-meridian ‘the channel circulating qi and

³⁵ We only examine the first part 國脈 *guomai* country-meridian of this coordinated modifier-modified compound, since 命 *ming* ‘life’ is not one of the body parts under analysis.

blood’, the meaning extension does not occur at the lexical level, but at the clausal level. Furthermore, except 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’ and three cases of 命脈 *mingmai* life-meridian ‘life and meridian’, which are employed by the speakers to refer to the people whom the speakers are empathized or identified with, the other lexical items are used in the less embodied manner. That is, the metaphorical expressions function as a sub-mapping of X IS A PERSON metaphor. This point will be investigated later.



7.3 The qualia structure of 脈 *mai* ‘meridian’

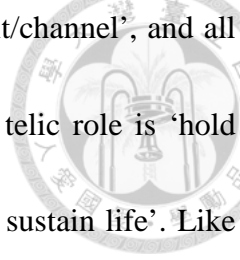
Since 脈 *mai* ‘meridian’ refers to something broader than what is defined by the MOE Dictionary and should be regarded as an internal circulation system carrying both 氣 *qi* ‘energy’ and 血 *xie* ‘blood’, we present the qualia structure below:

meridian

- Constitutive= ...
- Formal= conduit or channel, network
- Telic= holds life-sustaining substances through the body to sustain life, carries ancestral genetic ties
- Agentive= natural kind

Figure 10. The qualia structure of 脈 *mai* ‘meridian’

Figure 10 indicates that 脈 *mai* ‘meridian’ does not have the constitutive role, as it is the relations between 脈 *mai* ‘meridian’ and the human body as a whole the we



focus on. The formal role includes of 脈 *mai* ‘meridian’ is ‘conduit/channel’, and all the conduits/channels form a network inside the human body. Its telic role is ‘hold life-sustaining substances, visible or invisible, through the body to sustain life’. Like 骨 *gu* ‘bone’, when it is part of compounds 血脈 *xie mai* blood-meridian ‘meridian in which blood and qi circulate’ or 一脈相承 *yimaixiangcheng* one-meridian-continue ‘to come down in one continuous line’, another telic role emerges: ‘carry ancestral/genetic traits’. The agentive role of 脈 *mai* ‘meridian’ is natural kind.

Unlike lexical items containing 血 *xie* ‘blood’, 肉 *rou* ‘flesh’, and 骨 *gu* ‘bone’, of which there are sense division, the sense of 脈 *mai* ‘meridian’ is not divided. We think this is attributed to the fact that 脈 *mai* ‘meridian’ is not as tangible as the other three body parts, and half of it functions as a channel carrying the invisible vital energy, also intangible, to all parts of the human body.

We then examine whether the three representations identified in Chapter 3 apply to the compounds containing 脈 *mai* ‘meridian’. The three representations and the corresponding compounds/morpheme word are shown below:

- (1) The lexical item with a specified role at the lexical level and the word’s metaphorical meaning is lexically accessed, e.g. 國脈民命, 一脈相承.
- (2) The lexical item with a specified role at the lexical level but the word’s

metaphorical meaning is NOT lexically accessed, e.g. 脈動.

- (3) The lexical item with NO specified role at the lexical level and the word's

metaphorical meaning is NOT lexically accessed, e.g. 命脈, 脈絡, 血脈, 筋脈



Regarding the first representation, the qualia role of 脈 *mai* 'meridian' in the coordinated modifier-modified compound 國脈民命 *guomaiminming* country-meridian-people-mission 'the life meridian of a country and the people's mission' is telic, because 脈 *mai* 'meridian' function to hold through substances to sustain the 'life' of the country.

Example 31

今天__中興__復國__之__役，實在__是__國脈__民命

Today__resurgence__re-establishing-the-country__DE__battle,

actually__SHI__country-meridian__people-mission

The battle of country restoration is actually the key factor whether the country can keep on going.

Example 31 reveals several layers of mappings: First of all, COUNTRY IS A PERSON.

What keeps a country existing is understood as what sustains a person's life, from which we can formulate THE FACTOR KEEPS A COUNTRY EXISTING IS MERIDIAN.

The second representation is exemplified by the lexical item 脈動 *maidong* pulsation ‘pulsation’. 脈 *mai* ‘meridian’ in this lexical item performs the agentive role, because it is what brings about the movement. Again, this lexical item is used in a less embodied manner. That is, it is a sub-mapping of X IS A PERSON metaphor, as in Example 32 below:



Example 32

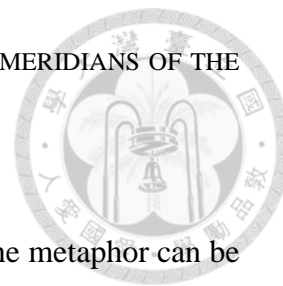
台灣__做為__地球村__中__的__一__員，與__國際__社會__的__脈動__息息
相關，也__無法__自__外__於__全球__景氣__的__潮流。

Taiwan__as__global-village__amid__DE__one__member,
with__international__society__DE__pulsation__closely-related,
also__cannot__self__exclude__PREP__global__economy__DE__trend

*Taiwan, as a member of this global village, is closely interacting with the change
of the international community, and cannot exclude itself from the global
economy.*

According to Example 32, the international community is personified: THE INTERNATIONAL COMMUNITY IS A PERSON. 脈動 *maidong* pulsation ‘pulsation’ can refer either to pulse, a tangible movement, i.e. ‘the regular contraction and expansion of the arteries with each beat of the heart’ (MacMillan online), or the less tangible one, i.e. the movement of meridians. The metaphor thus formulated is THE MOVEMENT OF

THE INTERNATIONAL COMMUNITY IS THE PULSE/MOVEMENT OF THE MERIDIANS OF THE BODY.



The third representation, of which neither the qualia role nor the metaphor can be identified at the lexical level, is exemplified by 命脈 *mingmai* life-meridian ‘life and meridian’, 脈絡 *mailuo* meridian-network ‘network of meridian/context’, 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’, 筋脈 *jinmai* vein-meridian ‘the channel circulating qi and blood’. Except 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’ and three tokens of 命脈 *mingmai* life-meridian ‘life and meridian’, the uses of these word types and tokens occur in the less embodied structure. For example, 命脈 *mingmai* life-meridian ‘life and meridian’, ranking the highest among the eight types, occurs in sentences such as the following one:

Example 33

台灣[...]也__不能__把__經濟__的__命脈__和__所有__的__籌碼__都__「鎖__在__中國」。 (Chen S._950101)

Taiwan[...]also__cannot__BA__economy__DE__life-meridian__and__all__DE__chips__all__‘lock__PREP__China’.

Taiwan cannot ‘lock in China’ the life and the life-sustaining circulation system of economy and all the chips.

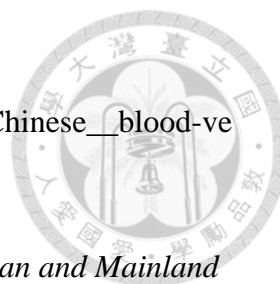
Two possible readings for what is personified are identified in Example 33 above. First, we may say it is ECONOMY IS A PERSON metaphor, and the meridians function to sustain the life of economy. However, the ambiguity of Chinese syntactic structure triggers the second reading: it can be interpreted as TAIWAN IS A PERSON, and ECONOMY IS THE MERIDIANS WHICH SUSTAIN THE LIFE OF TAIWAN.

(We would like to remind the reader not to confuse the metaphorical extension occurring to these words with that occurring to the compound 國脈 *guomai* country-meridian ‘the life meridian of a country’ discussed previously, despite both present sub-mappings of X IS A PERSON metaphor. 命脈 *mingmai* life-meridian ‘life and meridian’, 脈動 *maidong* pulsation ‘pulsation’, etc. undergo meaning change only when they are placed in clauses. That is, the meaning extension is triggered by the clausal context. On the other hand, the metaphorical extension of 國脈 *guomai* country-meridian ‘the life meridian of a country’ occurs at the lexical level: the lexical context leads to the semantic change.)

Take 血脈 *xieimai* blood-vessel-and-meridian, which refers to the people with whom the speakers identify themselves, as exemplified in Example 34 below:

Example 34

四十餘__年__來，臺灣海峽__的__分隔__並__不能__否定__所有__中國人__
血脈__相連__的__事實 (Lee T._701010)



More-than-40__year__come,

Taiwan-Strait__DE__divide__entirely__cannot__deny__all__Chinese__blood-ve
ssel-and-meridian__connect__DE__truth

For around forty years, the Taiwan Strait which separates Taiwan and Mainland

China cannot negate the fact that all the Chinese people share the same blood.

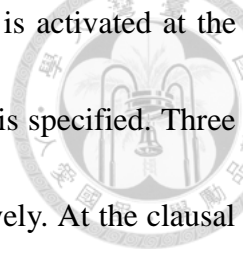
脈 *mai* ‘meridian’ at the lexical level refers to the conduits, which does not specify a qualia role. But when the lexical item occurs in a clause, it is clear that 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’ refers to the ancestry, which is activated by the word 相連 *xianglian* connect ‘connect’. The qualia role thus emerges. Like the function of blood, 脈 *mai* ‘meridian’ also carries ancestral ties. The metaphor retrieved from the clause is ANCESTRY IS MERIDIAN.

Table 25 shows the senses, levels of interpretation and the qualia roles of lexical items containing 脈 *mai* ‘meridian’.

Table 25. Qualia roles, levels of interpretation of lexical items containing 脈 *mai*

‘meridian’

Qualia Roles	Lexical level	Clausal level
Unspecified	17	0
Formal	0	1
Telic	3	22
Agentive	2	0
Total	22	23



According to Table 25, when the sense of 脈 *mai* ‘meridian’ is activated at the lexical level, there are 17 tokens of which none of the qualia roles is specified. Three and two tokens function as the telic and the agentive roles respectively. At the clausal level, one token comes out as the formal role, and 22 as the telic role. The agentive role declines to zero. Concerning the discrepancy between the numbers of tokens of the roles at the lexical and clausal levels, it is caused by the addition the formal role which emerges at the clausal level.

The fourth hypothesis is once again testified. That is, the telic role should be the most productive in the representation of body part metaphors. When the interpretation stays at the lexical level, this tendency is unobvious. Nonetheless, the interpretation at the clausal level reveals this tendency. It is always the token numbers of the non-telic roles drop and that of the telic role rises, when we interpret the lexical items at the clausal level.

The analysis to follow is based on the morphological structures, which include coordination, modifier-modified, and subject-predicate structures. Table 26 shows the structures, qualia roles of 脈 *mai* ‘meridian’.

According to Table 26, the coordination structure ranks the highest, with 59.09% among all the three structures at the lexical level and 56.52% at the clausal level. The second highest structure is modifier-modified, with 27.27% and 26.09% respectively

at the lexical and clausal levels. The subject-predicate structure is the lowest, with

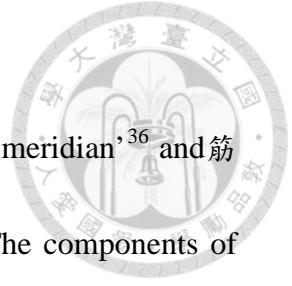
13.64% and 13.04% at the lexical and clausal levels.



Table 26. The structures and qualia roles of 脈 *mai* ‘meridian’

Structure	Total number of tokens (& percentage)	Qualia role at lexical level	No. of tokens	Total number of tokens (& percentage)	Qualia role at clausal level	No. of tokens
Modifier-modified	6 (27.27%)	Unspecified	4	6 (26.09%)	Unspecified	0
		Telic	2		Telic	6
Subject-predicate	3 (13.64%)	Telic	1	3 (13.04%)	Telic	3
		Agentive	2		Agentive	0
Coordination	13 (59.09%)	Unspecified	13	14 (56.52%)	Formal	1
		Telic	0		Telic	13
Total			22			23

The tendency that non-telic roles are converted to the telic role at the clausal level is evident. In the modifier-modified structure, the four tokens of unspecified role at the lexical level are assigned the telic role at the clausal level. In the subject-predicate structure, the two tokens of the agentive role are converted to the telic role when the interpretation moves to the clausal level. The change of the coordination structure is the most dramatic: all the 13 tokens without specific roles at the lexical level are assigned the telic role at the clausal level, with one of the tokens given the formal role.



A. Coordination

This structure is realized as 命脈 *mingmai* life-meridian ‘life and meridian’,³⁶ and 筋脈 *jinmai* vein-meridian ‘the channel circulating qi and blood’. The components of lexical items of this structure usually do not specify any role at the lexical level, as they refer back to the human body as a whole. However, when they are positioned in clauses, particular roles are coerced by the context.

Moreover, as discussed previously, the words containing 脈 *mai* ‘meridian’ are always function as a sub-mapping of X IS A PERSON metaphor. This is exemplified as

Example 35 below:

Example 35

唯有__徹底__斬斷__黑金__政治__盤根錯節__的__筋脈__,才__能__為__民主__政治__確保__向__上__提升__的__根基。(Chen S._921010)

Only__thorough__chop-off__corrupt-money__politics__twisted-roots-and-intricate-gnarls__DE__veins-and-meridian,

only__can__for__democracy__politics__guarantee__towards__up__lift__DE__foundation

Only when the network of the corruption is chopped off can we guarantee the positive development of democracy.

Example 35 reveals that the word 筋脈 *jinmai* vein-meridian ‘the channel

³⁶ The definition is given by

circulating qi and blood’ behaves as a sub-mapping of CORRUPTED POLITICS IS A PERSON. 筋脈 *jinmai* vein-meridian ‘the channel circulating qi and blood’ here not only functions as (metaphorical) channels holding through qi and blood to sustain the life of the person, but how they look is also revealed: 盤根錯節 *pangencuojie* twist-roots-gnarl-branches ‘twisted roots and gnarled branches’. 筋脈 *jinmai* vein-meridian ‘the channel circulating qi and blood’ in this example gains the formal role as it co-occurs with this idiom.³⁷

B. Modifier-modified

This structure is realized as 國脈民命 *guomaiminming* country-meridian-people-mission ‘the life meridian of a country and the people’s mission’, 脈絡 *mailuo* meridian-network ‘network of meridian/context’, and 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’. Except the telic role found in 國脈民命 *guomaiminming* country-meridian-people-mission ‘the life meridian of a country and the people’s mission’ at the lexical level, neither 脈絡 *mailuo* meridian-network ‘network of meridian/context’ nor 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’ has been given any specific

³⁷ We are aware that the idiom 盤根錯節 *pangencuojie* may trigger a source domain TREE/PLANT. However, this is a so-called image metaphor, which typically functions to demonstrate the appearance of the target domain. We thus focus on its function to describe the form/look of the target domain and discard its potential to trigger TREE/PLANT as the source domain.

role at the lexical level. At the clausal level, the telic role of 國脈民命 *guomaiminming* country-meridian-people-mission ‘the life meridian of a country and the people’s mission’ is directly transferred (Example 31), and the other two lexical items are assigned the telic role (Example 34 above).



C. Subject-predicate

The fixed idiom 一脈相承 *yimaixiangcheng* one-meridian-continue ‘to come down in one continuous line’ and the compound 脈動 *maidong* pulsation ‘pulsation’, of this structure, have gained specific roles at the lexical level. It is the telic role retrieved from 一脈相承 *yimaixiangcheng* one-meridian-continue ‘to come down in one continuous line’ and the agentive role in 脈動 *maidong* pulsation ‘pulsation’ at the lexical level. Since 一脈相承 *yimaixiangcheng* one-meridian-continue ‘to come down in one continuous line’ has the status of a clause, the telic role remains the same when it is put into a clause. On the other hand, 脈動 *maidong* pulsation ‘pulsation’ is assigned the telic role when the clausal context is taken into consideration.

7.4 The speakers, the conceptual mappings and the qualia roles

We now address the interactions between the qualia roles, conceptual mappings and the speakers, which are displayed in Table 27 below.

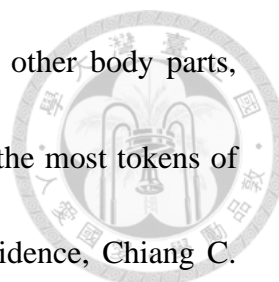


Table 27 shows a distribution which differs from that of the other body parts, when the speakers are considered. Chiang K. is not the one using the most tokens of 脈 *mai* ‘meridian’ but the one using the lest. In terms of the incidence, Chiang C. ranks the highest, with 0.30‰, followed by Chen S. (0.26‰), Lee T. (0.19‰) and Ma Y. (0.11‰).

Table 27. The qualia roles, conceptual mappings and the speakers of 脈 *mai* ‘meridian’

Qualia role	Conceptual mappings	Speaker				
		Chiang K.	Chiang C.	Lee T.	Chen S.	Ma Y.
Telic	CULTURE NETWORK IS MERIDIAN	0	0	0	0	1
	ACTIVITY IS PULSE	0	0	0	1	1
	ANCESTRY IS MERIDIAN	0	1	3	0	0
	NETWORK OF CORRUPTION IS MERIDIAN	0	0	0	1	0
	LIFE IS MERIDIAN	5	2	1	5	1
Formal	NETWORK OF CORRUPTION IS MERIDIAN	0	0	0	1	0
Total (A)		5	3	4	8	3
Total token of words of the speeches (B)		67,627	9,990	21,240	30,322	26,117
Per 1000 words ((A)/(B)*1000)		0.07	0.30	0.19	0.26	0.11

LIFE IS MERIDIAN is employed by all the five speakers. Analyzing this metaphor should enable us to see the interplay between the socio-political context and the metaphor use. This metaphor is realized through the use of 命脈 *mingmai*

life-meridian ‘life and meridian’ and 國脈民命 *guomaiminming*

country-meridian-people-mission ‘the life meridian of a country and the people’s

mission’. We first examine the linguistic context in which these lexical items are

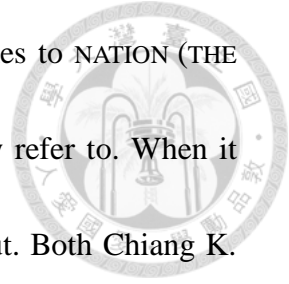
embedded and list the conceptual mappings retrieved.

Table 28 demonstrates that, in the light of the use of the LIFE IS MERIDIAN metaphor, Chiang K. and Chiang C. are similar whereas Lee T. and Chen S. are similar. Ma Y.’s use is similar to that of Chiang K. and Chiang C., but there exist differences due to the change of the socio-political context.

Table 28. The speakers and LIFE IS MERIDIAN metaphor

Speaker	Lexical forms (Number of tokens)	Conceptual metaphors (Number of tokens)
Chiang K.	命脈 (3) 國脈民命 (2)	1. NATION (THE PEOPLE) AND CULTURE IS A PERSON and HIS LIFE IS MERIDIAN. (1) 2. NATION (THE PEOPLE) IS A PERSON and HIS LIFE IS MERIDIAN. (2) 3. COUNTRY IS A PERSON and HIS LIFE IS MERIDIAN. (2)
Chiang C.	命脈 (2)	4. NATION (THE PEOPLE) AND CULTURE IS A PERSON and HIS LIFE IS MERIDIAN. (1) 5. NATION (THE PEOPLE) IS A PERSON and HIS LIFE IS MERIDIAN.
Lee T.	命脈 (1)	6. COUNTRY IS A PERSON and ECONOMY IS THE MERIDIAN WHICH SUSTAINS THE PERSON’S LIFE. (1)
Chen S.	命脈 (5)	7. TAIWAN (COUNTRY) IS A PERSON and ECONOMY IS THE MERIDIAN WHICH SUSTAINS THE PERSON’S LIFE. (4) 8. TAIWAN (COUNTRY) IS A PERSON and INTERNATIONAL TRADING IS THE MERIDIAN WHICH SUSTAINS THE PERSON’S LIFE. (1)
Ma Y.	命脈 (1)	9. CHINESE CULTURE IS A PERSON and HIS LIFE IS MERIDIAN. (1)

Regarding Chiang K.'s and Chiang C.'s usages, when it comes to NATION (THE PEOPLE) IS A PERSON, it is, unsurprisingly, the Chinese people they refer to. When it comes to CULTURE IS A PERSON, it is Chinese culture they talk about. Both Chiang K. and Chiang C., identifying themselves as Mainland Chinese people, consider the CCP the one who ruins the Chinese nation and culture. Regarding themselves as the leaders of the legitimate regime (i.e. ROC), Chiang K. and Chiang C. assign themselves the mission to guard the country, and to continue the Chinese nation and culture, as exemplified as Example 36 below:



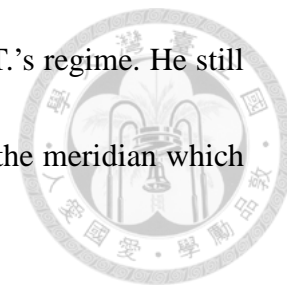
Example 36

今天__毛賊__匪偽__,不只__是__抹煞__了__現代__中國人__革命__奮鬥__的__業績__與__貢獻__,更__是__處心積慮__,要__斷送__中華民族__歷史__的__盛軌__,斫喪__文化__的__命脈 (Chiang K._620101)

Today__Mao-thief__bandit-fake(-regime)__,
not-only__SHI__erase__ASP__modern__Chinese-people__revolution__struggle__
__DE__accomplishment__and__contribution__,
still-more__SHI__seek-by-all-means__,
request__forfeit__Chinese-nation__history__DE__paragon__,
damage__culture__DE__life-meridian.

What the CCP led by Mao today not only erased the accomplishments and contributions made by the Chinese people, but are going to forfeit the Chinese historical paragon and damage the life meridian of Chinese (culture).

The meridian becomes something else when it comes to Lee T.'s regime. He still emphasizes the need to continue the life of the country. However, the meridian which sustains the life is economy, as indicated as Example 37 below:



Example 37

經濟__發展__是__社會__繁榮__的__憑藉__,也__是__國家__未來__生存__
發展__的__命脈。(Lee T. 860101)

Economy__develop__SHI__society__prosperous__DE__rely-on__,
also__SHI__country__future__survive__develop__DE__life-meridian.
*Economic development is what leads to societal prosperity, it is also the
meridian which sustains the country.*

Economy is the meridian which sustains the country's life is also utilized by Chen S., the only president from the DPP. Chen S. takes a step further to appeal to the listener that the meridian should be controlled by Taiwan rather than by China. Otherwise Taiwan may risk being annexed by China. This is exemplified as Example 38 below:

Example 38

中國__的__廉價__勞工__及__農產品__將__全面__攻佔__台灣__的__市場__
__,使__台灣__在__政治__上__還__沒有__被__統一__,經濟__已__先__
被__併吞__。唯有__將__台灣__經濟__發展__的__命脈__牢牢__掌握在__

自己__的__手__裡__，才能__確保__台灣__國家__的__永續__存在__與__
發展__。(Chen S._961010)

China__DE__cheap__labour__and__produce__will__overall__attack-and-occup
y__Taiwan__DE__market__，

make__Taiwan__PREP__politics__above__still__not-have__PASS__unified__，
economy__already__first__PASS__annex__.

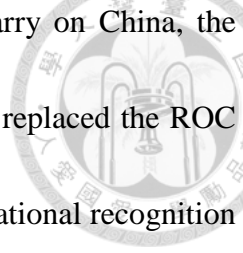
Only__take__Taiwan__economy__develop__DE__life-meridian__firmly__hold-
in__self__DE__hand__inside，

so-that__ensure__Taiwan__country__DE__sustainable__exist__and__develop.

*The cheap labor and produces will take the Taiwan market, which will enable
China to annex Taiwan economically before the political unification between
Taiwan and China. Only when we hold the economy in our hands can we ensure
Taiwan's sustainability and development.*

Ma Y. reiterates the importance of the ROC in sustaining the life of the Chinese culture. However, unlike Chiang K. and Chiang C., who accuse the CCP of destroying the Chinese culture, Ma Y. avoids naming the victimizer and articulates that ROC has been sustaining the Chinese culture for over 60 years.

The five presidents' utilization of the LIFE IS MERIDIAN metaphor testifies how the changing socio-political contexts lead to the differing uses of the same conceptual metaphor. Chiang K., the president who lost the civil war to the CCP, regarded the CCP as the bandits who had stolen China. Considering the ROC the only legitimate regime representing China, Chiang K. denied the PRC and labelled it as a fake regime.

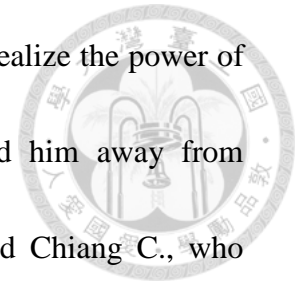


Moreover, he convinced himself that the ROC was the one to carry on China, the Chinese nation, and Chinese culture, despite the fact that the PRC replaced the ROC in the United Nations in 1971 and the subsequent shift of the international recognition from the ROC to the PRC. In the same vein, Chiang C. also took the same viewpoint, claiming the ROC the one to redeem the Chinese nation (the people) and culture from the CCP. They both personified the Chinese nation and culture, and thought they were the ones to sustain the life of the personified nation and culture.

Chiang K.'s and Chiang C.'s use of THE CHINESE NATION AND CULTURE IS PERSON metaphor has another explanation. The Chinese nation and culture can be read as metonyms of the country China, since the people in a country have long been used to represent the country, and culture is crucial to a country. Claiming to extend the life of the Chinese nation and culture, Chiang K. and Chiang C. actually intended to reconfirm and to convince the listener the legitimacy of ROC, because the ROC is the regime to sustain China, which is metonymized by the nation and culture of China.

When the power was passed over to Lee T. in late 1980s, what to sustain the life of the country became clearer: economy. During Chiang C.'s regime, Taiwan underwent rapid industrialization, which expedited the development of Taiwan economy and made Taiwan one of the Four Asian Tigers. In the late 1980s and the throughout 1990s, i.e. Lee T.'s regime, Taiwan experienced unprecedented prosperity.

The world trade and globalization made the leadership in Taiwan realize the power of economy. Lee T.'s policy of localization/Taiwanization also led him away from upholding the Chinese nation and culture. Unlike Chiang K. and Chiang C., who intended to restore the ROC in Mainland China, Lee T. directed the people's attention to the on-goings of Taiwan and regarded China as another country. He thus articulated economy is the meridian to sustain the life of a country.



Chen S. followed Lee T.'s rhetoric and Taiwanization policy, reiterating the importance of economy to Taiwan's sustainability. What's more, witnessing the increasing investment from Taiwan to China, and the growing economic/trading ties between Taiwan and China, Chen S. tried to refrain Taiwan businessmen from moving money to China. He thus kept on appealing to the listeners to take control of economy and not to rely on China for economic development.

When the power transition occurred again in 2008, and Ma Y. was elected the President, the ROC was questioned and challenged. Its legitimacy was questioned by those who held the 'one-China policy'. Its continuation was challenged by those who advocated Taiwan independence. Ma Y. thus needed to convince the listener the ROC's legitimacy in sustaining the Chinese culture and its significance in the development of Taiwan's economy and politics. Moreover, trying to maintain the cross-strait relations, Ma Y. took a friendly attitude toward China, avoiding labelling

the CCP as bandit or accusing the CCP of ruining Chinese culture.



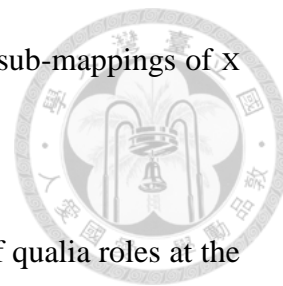
7.5 Summary

脈 *mai* ‘meridian’, with its particular definition in the TCM, has presented a picture differing from the previous three parts of the human body. Composed of tangible and imagined halves, 脈 *mai* ‘meridian’ is inherently less embodied than the others. The related research is limited in number and has little to do with the dissertation.

According to the findings, the metaphorical meaning of this body part is not usually lexically accessed, which means that whether it is metaphorically used depends on the clausal context. Despite its peculiarity in comparison with the other three, when this part embedded in compounds, the tendency found in the other three—that non-telic roles are converted to the telic role at the clausal level—is still obvious. Moreover, it is also found that the clausal context can activate a new role which is not retrieved at the lexical level.

The less-embodied use is prevalent in the speakers’ use of the words containing this body part, and this phenomenon is even more obvious than that found in the use of words containing 骨 *gu* ‘bone’. Except the use of the word 血脈 *xiemai* blood-meridian ‘meridian in which blood and qi circulate’ and the three tokens of 命脈 *mingmai* life-meridian ‘life and meridian’, which refer to people, the rest types

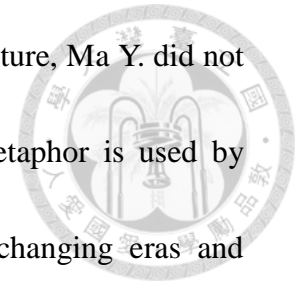
(71%, or 5 out of 7) and tokens (73%, or 16 out of 22) are used as sub-mappings of X IS A PERSON metaphor.



The morphological structure directly influences the retrieval of qualia roles at the lexical level. The role of the morpheme in compounds of the coordination structure is always unspecified, whereas that of the morpheme in modifier-modified and subject-predicate compounds can always be retrieved.

Regarding the interplay between the socio-political context, the qualia role and the conceptual metaphor, the correlations between the qualia roles and conceptual pairings exists, e.g. LIFE IS MERIDIAN and ANCESTRY IS MERIDIAN are correlated to the telic role. The metaphor LIFE IS MERIDIAN is scrutinized because it is used by all the five presidents. Examining how it varies in its use facilitates us to reveal the influence brought about by the differing political and societal contexts. To begin with, comparing the CCP to the victimizer of the Chinese nation and Chinese culture, Chiang K. and Chiang C. utilized this metaphor to express their determination to continue/restore the race and culture by eliminating the CCP. On the other hand, Lee T. and Chen S. clearly announced the factor to keep a country existing was economy, when Taiwan was enjoying the prosperity brought about by the rapid economic development. Moreover, Chen S.'s employment of this metaphor also functioned to dissuade the businessmen from making investment to China. While reassuring the

legitimacy and significance of ROC in maintaining the Chinese culture, Ma Y. did not dub the CCP as the destroyer. Scrutinizing how an identical metaphor is used by speakers' of different socio-political contexts reveals how the changing eras and circumstances lead to the changing mindsets.



Chapter 8 Conclusion



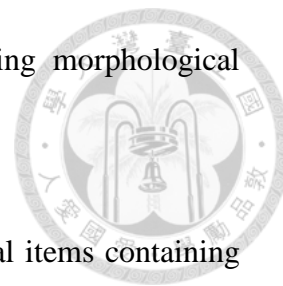
We have probed into how the four body parts, 血 *xie* ‘blood’, 肉 *rou* ‘flesh’, 骨 *gu* ‘bone’, and 脈 *mai* ‘meridian’, are used metaphorically/metonymically, and their correlations with the qualia structure, in the Taiwan Presidential Corpus. In the sections to follow, we will address the contributions of this dissertation from the methodological, theoretical and discursal aspects. We will also point out the difficulties we have encountered, and the direction for the future development of this research.

8.1 The contributions

8.1.1 Methodological contribution

Regarding metaphor analysis, we have modified the metaphor identification procedure (MIP, Pragglejaz Group 2007) and incorporated the qualia structure in the analysis of the conceptual mappings. The modified MIP is proposed because we think the original MIP may not work adequately for Chinese data owing to the particularity of Chinese word formation, and the modified version can better identify the metaphoricity of lexical forms in Chinese. The modification mainly involves (1) the determination of the basic contemporary meaning of a lexical unit, and (2) the

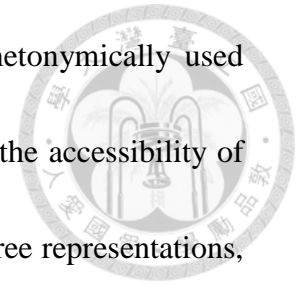
analysis of the body part terminology in compounds of differing morphological structures.



The reason for the modification lies in the fact that the lexical items containing corporeal words in Taiwan Presidential Corpus are mostly compounds, which are composed of a body part term and another/other character(s). The basic contemporary meaning thus cannot be determined based on a compound as a whole. Instead, the body part terms need to be extracted and examined on their own so as to reveal how these terms behave in the compound. The rationale behind this modified step is, when a word forms part of a compound, it usually undergoes metaphorical/metonymical extensions, except that it is part of a coordination structured compound. With the modified method, we can more efficiently identify the metaphoricity of the corporeal terminology.

Meanwhile, incorporating the qualia structure in the analysis of the metaphorically/metonymically used corporeal terms, we retrieve the qualia role(s) out of the metaphorical/metonymical use of a body part term. The qualia role retrieved at the lexical level may either be directly transferred to the clausal level, or may be converted to another role at the clausal level, which depend on the morphological structure of the lexical item and/or the context surrounding the lexical item. With the integration of the embodiment and the qualia structure from the generative lexicon,

we have identified three representations of the metaphorically/metonymically used corporeal terms, which are related to the qualia role retrieval and the accessibility of the metaphorical/metonymical meaning at the lexical level. The three representations, we claim, demonstrate the layeredness and interaction of the meaning extensions of body parts, which reinforces the human body as a whole in embodiment process.

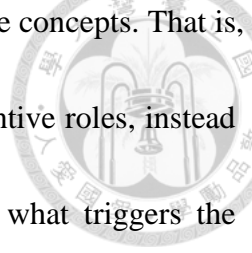


8.1.2 Theoretical Contributions

We have incorporated generative lexicon, specifically qualia structure, in the conceptual metaphor analysis and have established a correlation between the qualia role and the conceptual mappings which may underlie conceptual metaphors. For example, in our corpus data, a correlation exists:

- (1) between the telic role of 血 *xie* 'blood' and the mapping TEMPERAMENT IS BLOOD,
 - (2) between the telic role of 肉 *rou* 'flesh' and the mapping FLESH FOR BODY,
 - (3) between the telic role of 骨 *gu* 'bone' and the mapping ANCESTRY IS BONE,
 - (4) between the telic role of 脈 *mai* 'meridian' and the mapping LIFE IS MERIDIAN,
- etc.

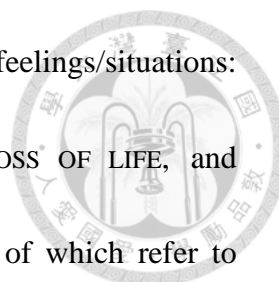
It has also been revealed that the functionality encoded in the qualia roles



constrains the conceptual pairings involving body parts as the source concepts. That is, the functionality of an entity, which is realized as the telic and agentive roles, instead of its descriptive facts, i.e. the constitutive and formal roles, is what triggers the conceptual mappings in which human body parts are mapped onto the target concepts. Our data analysis shows that the majority of the conceptual mappings are linked to the telicity and subsequently to the agentivity of the body parts at issue. Comparing the occurrences between the two roles, we can see the telic role is more dominant than the agentive role in terms of the activation of the conceptual mappings. This can contribute to the research on the identification/formulation of the principles constraining a conceptual metaphor (e.g. Ahrens 2010, Clausner and Croft 1997, Grady 1997).

Another issue discussed in this dissertation is the versatility of the four corporeal terms, which is represented in the word formation and the conceptual mappings with these body parts as the components. According to the data analysis, regarding the versatility, 血 *xie* ‘blood’ shows the highest versatility, followed by 骨 *gu* ‘bone’ and 脈 *mai* ‘meridian’; and 肉 *rou* ‘flesh’ indicates the least versatility. Furthermore, the notions represented by the four body parts also demonstrate this ranking, as indicated in Table 29 below.

According to Table 29, 血 *xie* ‘blood’ is activated to represent seven target



concepts, which refer directly to human beings or their activities/feelings/situations:

ANCESTRY, LIFE, TEMPERAMENT, MAKING EFFORT, SUFFERING, LOSS OF LIFE, and

metonym for BODY; 骨 *gu* ‘bone’ five target concepts, four out of which refer to

human beings (ANCESTRY, TEMPERAMENT, LOSS OF LIFE, ESSENCE), and one for the less

embodied use, i.e. CORE; 脈 *mai* ‘meridian’ four notions: two referring to a person,

i.e. ANCESTRY and LIFE,³⁸ and two less embodied uses, i.e. NETWORKS and ACTIVITY.

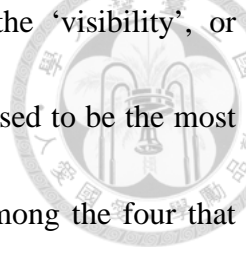
肉 *rou* ‘flesh’ is only mapped to ANCESTRY, and it functions as a metonym for HUMAN

BODY.

Table 29. The concepts represented by the four body parts

Target concepts	血	肉	骨	脈
ANCESTRY	V	V	V	V
LIFE	V			V
TEMPERAMENT	V		V	
MAKING EFFORT	V			
SUFFERING	V			
LOSS OF LIFE	V		V	
(Metonym) BODY	V	V		
ESSENCE			V	
(Less embodied) CORE			V	
(Less embodied) NETWORK				V
(Less embodied) ACTIVITY				V

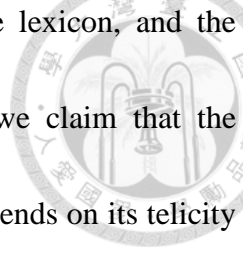
³⁸ The meridian is life functions both to refer to real people and to be used in the less embodied way, as discussed in Chapter 7.



The dissimilarity in versatility, we argue, is attributed to the ‘visibility’, or ‘visual perceptibility’, of these body parts. 血 *xie* ‘blood’ is supposed to be the most ‘perceivable’ among the four, because it is the only body part among the four that most people have the experience of seeing, as bleeding of small amount of blood is a common human experience. On the other hand, seeing 骨 *gu* ‘bone’ or (human) 肉 *rou* ‘flesh’ requires traumatic unusual events, and 脈 *mai* ‘meridian’ is comparatively abstract among the four. 骨 *gu* ‘bone’ forms a frame to support the body. 脈 *mai* ‘meridian’, though half imagined, is significant to a person’s life because it forms the network of conduits transmitting the life-sustaining substances, be it tangible (e.g. 血 *xie* ‘blood’) or intangible (e.g. 氣 *qi* ‘energy’). 肉 *rou* ‘flesh’ is the least visible part because it is supposed to be there, and its function is not easily detectable either. That is, it does not have clearly defined function to a person’s life.

We thus propose a hierarchy of versatility for these four intertwined body parts based on their visibility, and argue that 血 *xie* ‘blood’ is the most versatile in metaphorical use because of its highest visibility, followed by 骨 *gu* ‘bone’, 脈 *mai* ‘meridian’, and finally by 肉 *rou* ‘flesh’:

血>骨>脈>肉.



With the telicity from the qualia structure of the generative lexicon, and the visibility from embodiment, we can make prediction. That is, we claim that the potentiality for a body part to be activated for metaphorical use depends on its telicity and visibility. If a body part is high in both telicity and visibility, it is more likely to be activated for metaphorical use, and the metaphoricity always refers to real human beings. Otherwise, it is less likely to be used metaphorically, or its metaphoricity is directed to the less embodied use. This is explicated in Table 30.

Our proposal of the hierarchy of visibility and our claim to predict the potentiality for a body part to be used metaphorically can be attested by the empirical study of a balanced corpus: the Sinica Corpus. The Sinica Corpus, short for Academia Sinica Balanced Corpus of Modern Chinese used in Taiwan (Chen et al. 1996), is the first balanced modern Chinese corpus with part of speech tagging. The corpus data are culled from different fields: philosophy (8%), science (8%), society (38%), art (5%), life (28%), and literature (13%) (<http://app.sinica.edu.tw/cgi-bin/kiwi/mkiwi/kiwi.sh>). The lexical items in the Sinica Corpus are supposed to be more exhaustive and in more general uses than those in the Taiwan Presidential Corpus, and thus can be employed to testify the validity of the hierarchy and our prediction.

Table 30. The telicity and visibility of the four body parts at issue

	Telicity	Visibility	Potentiality for metaphorical use
血 <i>xie</i> ‘blood’	High	High	High, and referring to real people
骨 <i>gu</i> ‘bone’	Mid-high	High	Mid-high, and referring to real people more often than in less embodied use
脈 <i>mai</i> ‘meridian’	High	Low	Mid, and often in less embodied use
肉 <i>rou</i> ‘flesh’	Low	Low	Low

We first prove that the cognitive criterion—the hierarchy of the visibility of the four body parts—is linguistically significant, based on the belief that the visibility of a body part is reflected in its collocation with visual verbs, e.g. 見 *jian* ‘see’ and 看 *kan* ‘see’, and the number of compounds indicating visibility. We thus examine (1) the construction of 見 X and 看 and/or 見...X in Sinica Corpus, and (2) all the types of compounds with the four body parts as components, regardless of the metaphoricity and morphological structure. These compounds may come into the form comprising a body part term which is followed/preceded by one, two, or three characters.

Table 31 shows the four body parts in the constructions of 見 X, and 看 and/or 見...X. There are 15 tokens of 見血 *jianxie* see-blood ‘see blood’, all of which occur as part of the fixed idiom 一針見血 *yizhenjianxie* one-needle-see-blood ‘to the point’, but none of 見骨 *jiangu* see-bone ‘see bone(s)’, 見肉 *jianrou* see-flesh ‘see flesh’, and 見脈 *jianmai* see-meridian ‘see meridian’ can be found. We thereafter

examine the construction 看 and/or 見...X. The token numbers of the 看 and/or 見...血 still tops, followed by 看 and/or 見...肉, 看 and/or 見...骨, and no token is found in 看 and/or 見...脈. Calculating the percentage of these two constructions against the total token numbers of 見 X and of X as a morpheme word, we have found the constructions with 血 presents the highest percentage (9.22%), followed by those with 骨 (2.27%), 肉 (0.94%), and 脈 (0%), upon which the hierarchy of visibility of the four body parts is built: 血>骨>肉>脈.



Table 31. Constructions with the body parts as the object of verbs indicating vision

Constructions	X=血	X=骨	X=肉	X=脈
見 X	15	0	0	0
看 and/or 見...X	5	1	2	0
Total token of 見 X	15	0	0	0
Total token of X (morpheme word)	202	44	213	24
Percentage	9.22%	2.27%	0.94%	0%

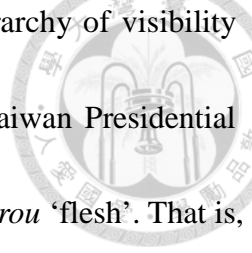
When it comes to the compound with the body part terms as a component, we investigate (1) compounds comprising the body part term followed by one, two, or three characters (e.g. 血漬 *xiezi* blood-stain ‘stain of blood’, 血淋淋 *xielinlin* blood-drip-drip ‘bleeding’, 血流如注 *xieliuruzhu* blood-flow-like-pour ‘blood streaming down’), and (2) compounds composed of the corporeal term preceded by

one, two or three characters (e.g. 白骨 *baigu* white-bone ‘white bone’, 皮包骨 *pibaogu* skin-cover-bone ‘skinny’, 粉身碎骨 *fenshensuigu* smash-body-crumble-bone ‘at the cost of one’s life’). We then calculate the ratio between the number of the types indicating the visual perceptibility against those of all the compounds and make Table 32.

According to Table 32, 血 *xie* ‘blood’ tops in terms of its visibility, with 152 types of all the compounds and 42.76% of compounds indicating visibility. 骨 *gu* ‘bone’ ranks the second highest, with 124 types of all the compounds and 12.10% of the compounds conveying visibility. The third highest is the compounds composed of 肉 *rou* ‘flesh’ preceded/followed by other characters, with 130 types of compounds and 6.15% of compounds denoting visibility. 脈 *mai* ‘meridian’ demonstrate the lowest visibility, with only 47 types of all the compounds and 2.13% of compounds specifying visual perceptibility.

Table 32. Compounds with the body parts as components and their visibility

Body part	Number of types of all compounds (A)	Number of types of compounds indicating visibility (B)	Ratio (B/A)
血 compounds	152	65	42.76%
骨 compounds	124	15	12.10%
肉 compounds	130	8	6.15%
脈 compounds	47	1	2.13%

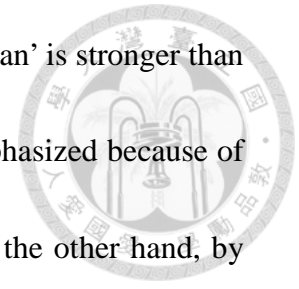


The analysis of the Sinica Corpus basically supports the hierarchy of visibility we have proposed previously based on the data analysis of the Taiwan Presidential Corpus, with a change of the rankings of 脈 *mai* ‘meridian’ and 肉 *rou* ‘flesh’. That is, 血 *xie* ‘blood’ and 骨 *gu* ‘bone’ rank the first and second highest in the light of visibility. However, 脈 *mai* ‘meridian’ precedes 肉 *rou* ‘flesh’ in the Taiwan Presidential Corpus while the opposite is true in the Sinica Corpus. This inconsistency, we argue, is mostly attributed to the less embodied nature of 脈 *mai* ‘meridian’ and partly to the corpus nature.

As discussed in Chapter 7, 脈 *mai* ‘meridian’ as a body part is not as tangible as the other three body parts at issue, because half of it functions as an intangible channel which holds through 氣 *qi*, the invisible vital energy, to all parts of the human body. 脈 *mai* ‘meridian’, composed of concrete and imagined halves, is thus inherently less embodied than the other three. The behavior of this body part is therefore less easily to be predicted and tend to ‘drift around’.

The nature of the corpora is another factor which causes the inconsistency. Taiwan Presidential Corpus is composed of a specific genre, i.e. political speech by the country leader, which in nature is far different from a general corpus such as the Sinica Corpus, a corpus consisting of a variety of genres. We argue it is the purpose of this specific genre which leads to the higher percentage of usage of the 脈 *mai*

'meridian' in the Taiwan Presidential Corpus, since 脈 *mai* 'meridian' is stronger than 肉 *rou* 'flesh' in the light of functionality, and functionality is emphasized because of the discourse purpose/function intrinsic in this specific genre. On the other hand, by definition 肉 *rou* 'flesh' is more tangible than 脈 *mai* 'meridian' cognitively, which leads to the higher percentage of its use in a general corpus, as there is no specific functionality of purpose shared by the genres collected in the general corpus



Our prediction that the telicity is what mainly activates a body part for metaphorical use is testified by the examination of all the two-character compounds with the four body parts positioned in front of and behind the other characters respectively in Sinica Corpus. That is, we examine how each of the four body parts behaves in the compounds of the following patterns:

X 血, 血 X

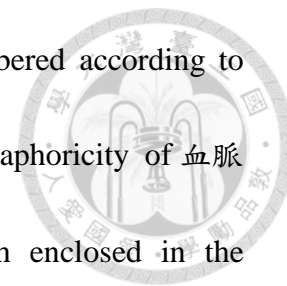
X 肉, 肉 X

X 骨, 骨 X

X 脈, 脈 X

We go through all the clauses/sentences containing these eight patterns of compounds, and check whether they are metaphorically used. To clearly present the interplay between the compounds and the conceptual mappings, when a compound is

assigned different types of metaphoricity, the compound is numbered according to number of types. Example 39 indicates the three types of metaphoricity of 血脈 *xiemai* blood-meridian, with the metaphors corresponding each enclosed in the brackets.



Example 39

- (a) 彷彿__根本__不__是__與__我們__**血脈**__相連__的__孩子 (ANCESTRY IS BLOOD)

As-if__fundamental__NEG__SHI__and__we__blood-meridian__connect__D
E__children

...as if they were not our children.

- (b) 不期然而然__地，我__立刻__**血脈**__貫張，坐立難安。(EMOTION IS BLOOD)

Unexpectedly__DE, I__immediately__blood-meridian__expand,
cannot-sit-or-stand

Unexpectedly, I got hot immediately and restless.

- (c) 不得不__當__空中飛人，回頭__依靠__臺灣__的__「經濟__**血脈**」。

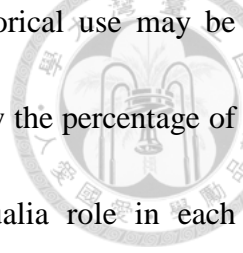
(Anthropomorphic: LIFE IS BLOOD)

Cannot-but__be__flying-trapeze (frequent flyer),

look-back__rely-on__Taiwan__DE__‘economy__blood-meridian’.

[They] cannot but become frequent flyers, coming back to rely on the economy of Taiwan.

Table 32 demonstrates the qualia roles correlated to the types of metaphorical

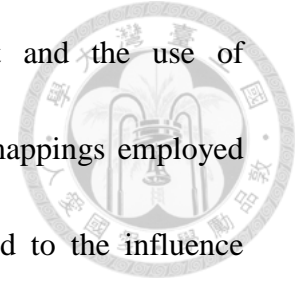


uses. This is not a one-on-one correlation, as a type of metaphorical use may be encoded in more than one qualia role. It is thus not feasible to show the percentage of each qualia role. Instead, we compare the number of each qualia role in each compounding pattern. E.g. for Sense 2 of 血 X, the agentive role is more dominant than the formal role, as there are 8 hits of the former but only 3 hits of the latter. The inspection of the qualia roles across all the compound types shows it is apparent that the telic role predominates in motivating the conceptual mappings with the body parts as the source concepts, except Sense 2 of 血 X, Sense 2 of X 血, and Sense 2 of X 骨 *gu* 'bone', in which the agentive role predominates.

8.1.3 The contributions to research on political discourse

Aside from the contribution to the method and theories of embodiment and generative lexicon, this dissertation also contributes to the research on political discourse, specifically on country leadership rhetoric. Previous studies on conceptual metaphors in this genre focus on the mappings with the social relations/institutions (e.g. FAMILY/RELIGION) or activities (e.g. JOURNEY/SPORTS) extending from the concept of 'human being' as the source domain. A paucity of attention has been paid to the most essential source concepts, those coming from the human body. We have made up what has been overlooked by providing the systematic analysis of the human body parts.

Scrutinizing the interplay between the socio-political context and the use of metaphors/metonyms, we have shown that identical conceptual mappings employed by all the five presidents behave divergently, which is attributed to the influence brought about mainly by the specific political/societal contexts in which the speakers were situated.



8.2 The difficulties and the future study

We have encountered difficulties which may show us the direction for the future studies. First, it is not easy to determine the visibility of the body part in compounds discussed in Section 8.1 above. We resort to our own intuition to decide whether a corporeal term in a compound manifest visibility or not. This could be solved by conducting a psycholinguistic survey with statistically significant number of subjects. However, due to the constraint of time and funding, this was not carried out in this dissertation. We think this can be a topic to be continued in the future study.

Another direction for the future study involves the political discourse. Several topics can be developed further. Take Chiang C., whose reign stretched over two periods, i.e. the authoritarian and the transition eras (Section 3.2 above). Comparing his uses of body parts in/across these two different eras should to shed light on the political discourse research. Analyzing the metaphorical/metonymical uses of other

body parts, e.g., 手 *shou* ‘hand’, 腳 *jiao* ‘foot’, 心 *xin* ‘heart’, 膽 *dan* ‘gallbladder’, in the Taiwan Presidential Corpus is another important topic. Take 心 *xin* ‘heart’, which tops among all the internal organs in the Taiwan Presidential Corpus (Figure 2). 心 *xin* ‘heart’ has been extensively explored (e.g. Pritzker 2007, Yu 1995, 2002, 2007) from the viewpoints of culture. Investigating how this body part behaves in the Taiwan Presidential Corpus with our method and comparing the analysis with the findings in the previous research would contribute not only to the political discourse research but also to the study of embodiment.

Still another direction involves the conceptual metaphor theory. What has been found in this dissertation focuses on the interactions/correlations between the qualia structure and the metaphorical behavior of human body parts. It will push forward the conceptual metaphor theory if the interaction/correlations can be testified between the qualia structure and source domains surrounding human beings and extending from human activities, e.g. JOURNEY, FOOD, PLANT, etc.

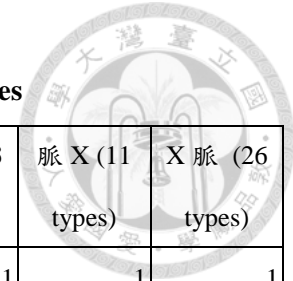


Table 33. Compounding patterns, number of types in total, senses, the morphological structures, and number of the qualia roles

	血 X (69 types)		X 血 (43 types)		骨 X (27 types)	X 骨 (57 types)		肉 X (53 types)	X 肉 (43 types)	脈 X (11 types)	X 脈 (26 types)
Sense	1	2	1	2	1	1	2	1	1	1	1
Modifier-modified	Telic: 18	Agentive: 8 Formal: 3	Telic: 3	Agentive: 1 Formal: 1	Telic: 5	Telic: 6	Agentive: 1	Telic: 2 Formal: 1 Agentive: 1	0	Telic: 1 Formal: 1	Telic: 4 Formal: 2
Coordination	Telic: 4	0	Telic: 1 Agentive: 1	0	Telic: 2	Constitutive: 1	0	0	Telic: 5	0	Telic: 1
Subject-predicate	0	0	0	0	0	0	0	0	0	Telic: 4	0
Verb-object	0	0	Telic: 2	Agentive: 10 Formal: 6	0	0	0	0	0	0	0
Noun-particle	0	0	0	0	Telic: 1 Constitutive: 1	0	0	0	0	0	0
Total	Telic: 22	Agentive: 8 Formal: 3	Telic: 6 Agentive: 1	Agentive: 11 Formal: 7	Telic: 8 Constitutive: 1	Telic: 6 Constitutive: 1	Agentive: 1	Telic: 2 Formal: 1 Agentive: 1	Telic: 5	Telic: 5 Formal: 1	Telic: 5 Formal: 2

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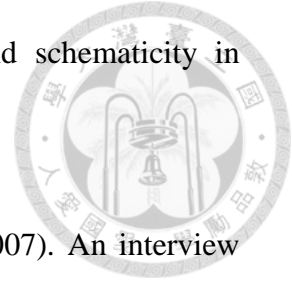
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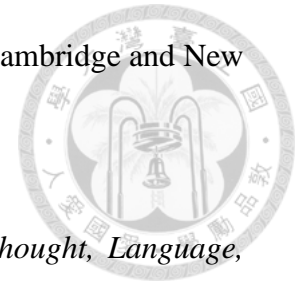
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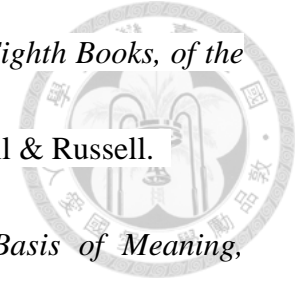
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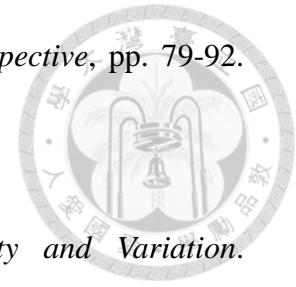
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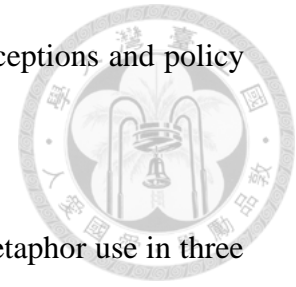
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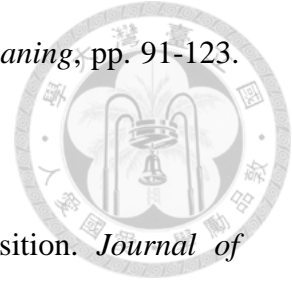
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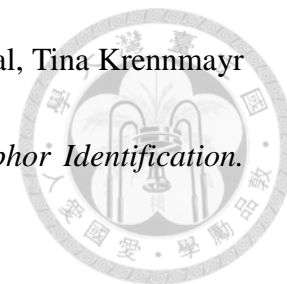
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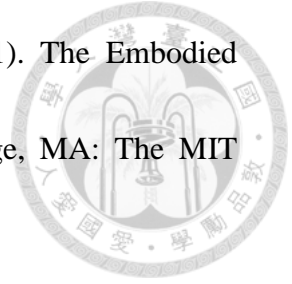
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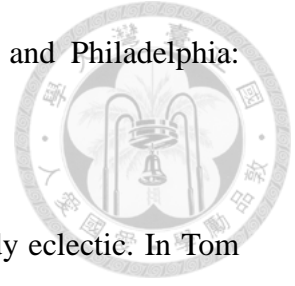
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