

UNIVERSITI PUTRA MALAYSIA

A COGNITIVE SEMANTIC ANALYSIS OF METAPHORS OF INNOVATION IN EDUCATION IN LIM KOK WING'S WRITINGS

NOR ASIAH BINTI RAZALI

FBMK 2021 59



A COGNITIVE SEMANTIC ANALYSIS OF METAPHORS OF INNOVATION IN EDUCATION IN LIM KOK WING'S WRITINGS

By

NOR ASIAH BINTI RAZALI

Thesis Submitted to the School of Graduate Studies, Universiti Putra Malaysia, in Fulfilment of the Requirements for the Degree of Master of Arts

COPYRIGHT

All material contained within the thesis, including without limitation text, logos, icons, photographs, and all other artwork, is copyright material of Universiti Putra Malaysia unless otherwise stated. Use may be made of any material contained within the thesis for non-commercial purposes from the copyright holder. Commercial use of material may only be made with the express, prior, written permission of Universiti Putra Malaysia.

Copyright © Universiti Putra Malaysia



Abstract of thesis presented to the Senate of Universiti Putra Malaysia in fulfilment of the requirement for the degree of Master of Arts

A COGNITIVE SEMANTIC ANALYSIS OF METAPHORS OF INNOVATION IN EDUCATION IN LIM KOK WING'S WRITINGS

Ву

NOR ASIAH BINTI RAZALI

July 2020

Chairman : Associate Professor Sabariah binti Md Rashid, PhD

Faculty: Modern Languages and Communication

In this day and age, innovation is not an alien concept. It is prevalent in our spheres of life and it has been discussed in varied disciplines, including education. The discussion on innovation in the context of education has been published in various documents, such as educational magazines, books and blogs. One example of such a documentation is the writings on innovation by a renowned figure associated with innovation in education, namely, Tan Sri Dr. Lim Kok Wing, compiled in a book titled "The Future is Coming". In education, innovation is required to transform the education system to prepare the future generation to be future- ready for innovation-driven economy. In this light, various studies were conducted to examine the importance of innovation towards people, society, organisation and the world. Despite the importance of innovation, people are still struggling to adopt and adapt innovation in their life due to the lack of comprehension toward the concept. Therefore, it is important to examine the concept of innovation particularly through the metaphorical expressions in order to investigate peoples' conception, perspectives and belief toward the concept of innovation specifically in the current education landscape of Malaysia. This study investigates the conceptualisation of innovation in the context of education through the writings of Tan Sri Dr Lim Kok Wing. Specifically, it aimed 1) to unravel the conceptual metaphors of innovation in the context of education and 2) to examine how the unravelled metaphors reflect his conceptions of innovation in education.

In total, 42 written texts on innovation by Tan Sri Lim Kok Wing, published in the book "The Future is Coming" were included as data of the study. The data were analysed using Lakoff and Johnson's (1980) Conceptual Metaphor Theory. Findings of the study unravelled seven salient conceptual metaphors underlying the expressions related to innovation in education. These metaphors involve the mappings of the source domains of JOURNEY, WAR,

OBJECT, HUMAN BEING, SPORT, BUILDING, and FORCE to the target domain of INNOVATION. In addition, two salient conceptual metaphors, namely, INNOVATION IS A JOURNEY and TO INNOVATE IS TO MOVE were identified. The unravelled metaphors underlying the writings on innovation suggest that innovation is conceived as a long process which requires careful planning. It is also conceived as a sport, in which the aspects of competition, teamwork and effort are highlighted. The findings of the study provide insight into how innovation is conceived, specifically from the lens of Lim Kok Wing which would be beneficial for the audience to have a better comprehension on innovation.



Abstrak tesis yang dikemukakan kepada Senat Universiti Putra Malaysia sebagai memenuhi keperluan untuk ijazah Master Sastera

ANALISIS KOGNITIF SEMANTIK PENGGUNAAN METAFORA INOVASI DALAM KONTEKS PENDIDIKAN DALAM PENULISAN LIM KOK WING

Oleh

NOR ASIAH BINTI RAZALI

Julai 2020

Pengerusi : Profesor Madya Sabariah binti Md Rashid, PhD

Fakulti : Bahasa Moden dan Komunikasi

Pada hari ini, inovasi bukan lagi satu konsep yang asing. Inovasi merangkumi kehidupan seharian kita dan juga telah dibincangkan dalam pelbagai disiplin ilmu termasuk dalam bidang pendidikan. Perbincangan mengenai inovasi di dalam konteks pendidikan telah pun diterbitkan di dalam pelbagai dokumen seperti majalah pendidikan, buku-buku dan juga melalui blog. Satu contoh dokumentasi ini ialah penulisan mengenai inovasi yang diterbitkan oleh seorang tokoh yang terkenal dalam bidang inovasi pendidikan iaitu Tan Sri Lim Kok Wing di dalam bukunya yang bertajuk "The Future Is Coming". Di dalam konteks pendidikan, inovasi diperlukan untuk mengubah sistem pendidikan bagi melahirkan generasi yang bersedia untuk ekonomi berlandaskan inovasi. Ke arah matlamat ini, pelbagai kajian telah dijalankan untuk membuktikan kepentingan inovasi tehadap manusia, masyarakat, organisasi, dan juga dunia. Namun, orang ramai masih bergelut untuk menerimapakai inovasi ke dalam hidup mereka kerana kekurangan pemahaman terhadap konsep tersebut. Oleh itu, konsep inovasi haruslah dikaji melalui ekspresi metafora untuk menyiasat konsepsi, perspektif dan kepercayaan sesorang terhadap konsep inovasi terutamanya dalam landskap pendidikan semasa di Malaysia. Kajian ini adalah untuk menentukan metafora konsepsi inovasi dalam konteks pendidikan menerusi penulisan Tan Sri Lim Kok Wing. Secara khususnya, ianya bertujuan untuk 1) mengkaji penggunaan metafora konsepsi inovasi dalam konteks pendidikan dan juga 2) untuk mengkaji bagaimana metafora konsepsi inovasi.mencerminkan konsepsi Tan Sri Lim Kok Wing terhadap inovasi dalam pendidikan.

Secara keseluruhannya, terdapat 42 teks mengenai inovasi yang ditulis oleh Tan Sri Lim Kok Wing di dalam bukunya yang bertajuk "*The Future Is Coming*" telah disertakan sebagai data kajian. Data terkumpul telah dianalisis berdasarkan Lakoff dan Johson's (1980), Teori Metafora Konsepsi. Dapatan

kajian ini menunjukkan terdapat tujuh metafora konsepsi yang berdasarkan ekspresi metafora inovasi dalam pendidikan. Metafora-metafora ini memetakan domain sumber, PERJALANAN, PEPERANGAN, OBJEK, MANUSIA, SUKAN, BANGUNAN dan DAYA kepada domain sasaran INOVASI. Tambahan lagi, dua metafora konseptual iaitu PROSES INOVASI IALAH SATU PERJALANAN dan UNTUK MENGINOVASI IALAH UNTUK BERGERAK telah dikenalpasti. Metafora dalam penulisan Tan Sri Lim Kok Wing mengenai inovasi mencadangkan bahawa inovasi dianggap sebagai satu proses yang memerlukan satu perancangan yang rapi. Ia juga dianggap sebagai sukan, dimana aspek persaingan, kerjasama dan usaha ditekankan untuk memenangi sukan tersebut. Kesimpulannya, hasil kajian ini memberi gambaran bagaimana konsep inovasi difahami, khususnya dari kaca mata Lim Kok Wing yang boleh memberi manfaat kepada pembaca untuk mendapatkan pemahaman yang lebih terperinci mengenai konsep inovasi.

ACKNOWLEDGEMENTS

Writing this thesis started off as a race but years after years, it is becoming more like a long journey. After all the wrong turns, dead-ends and obstacles encountered, I finally reached the destination that seemed impossible before. Reaching the end of this journey would never be possible without the guidance of my supervisor, Assoc. Prof. Dr Sabariah Md Rashid who never failed to bring me on the right track and Assoc. Prof. Dr Afida Binti Mohamad Ali who eased the journey to the completion of this thesis. No amount of words can express how thankful I am for their support and guidance.

The journey was long but thankfully I was never alone. My parents, Razali Latiff and Salmi Salleh constantly motivated me to keep going when I felt like giving up. Truthfully, this thesis would have never been completed if not for them. To my brothers and sisters, thank you for being the source of joy and laughter, which sometimes make me forget that I had a thesis to write. To my brothers and sisters from another mother, I am truly blessed to meet you along the way. I especially want to thank Ummi Syakirah and Carolline Eveth for being my study buddies, movie buddies, gossip buddies, singing buddies and sometimes hiking buddies.

Lastly, to the person who holds great importance in my life, the friend who had become the boyfriend and now has been upgraded to the husband. This Masters journey that we started together has now come to an end. Thank you, Akmal Zarin, for your limitless support, understandings, and patience throughout the journey. Thank you for pausing your games to listen to the questions you do not know the answer to. Thank you for doing the dishes when I was occupied with the writing. All in all, thank you for being there for me.

Thank you

This thesis was submitted to the Senate of Universiti Putra Malaysia and has been accepted as fulfilment of the requirement for the degree of Master of Arts. The members of the Supervisory Committee were as follows:

Sabariah binti Md Rashid, PhD

Associate Professor Faculty of Modern Language and Communication Universiti Putra Malaysia (Chairman)

Afida binti Mohamad Ali, PhD

Associate Professor
Faculty of Modern Language and Communication
Universiti Putra Malaysia
(Member)

ZALILAH MOHD SHARIFF, PhD

Professor and Dean School of Graduate Studies Universiti Putra Malaysia

Date: 9 December 2021

Declaration by graduate student

I hereby confirm that:

- this thesis is my original work;
- quotations, illustrations and citations have been duly referenced;
- this thesis has not been submitted previously or concurrently for any other degree at any institutions;
- intellectual property from the thesis and copyright of thesis are fully-owned by Universiti Putra Malaysia, as according to the Universiti Putra Malaysia (Research) Rules 2012;
- written permission must be obtained from supervisor and the office of Deputy Vice-Chancellor (Research and innovation) before thesis is published (in the form of written, printed or in electronic form) including books, journals, modules, proceedings, popular writings, seminar papers, manuscripts, posters, reports, lecture notes, learning modules or any other materials as stated in the Universiti Putra Malaysia (Research) Rules 2012;
- there is no plagiarism or data falsification/fabrication in the thesis, and scholarly integrity is upheld as according to the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) and the Universiti Putra Malaysia (Research) Rules 2012. The thesis has undergone plagiarism detection software

Signature:	Date:	

Name and Matric No: Nor Asiah binti Razali, GS48476

Declaration by Members of Supervisory Committee

This is to confirm that:

- the research conducted and the writing of this thesis was under our supervision;
- supervision responsibilities as stated in the Universiti Putra Malaysia (Graduate Studies) Rules 2003 (Revision 2012-2013) are adhered to.

Signature:	
Name of Chairman of Supervisory	
Committee:	Associate Professor Dr. Sabariah binti Md Rashid
Committee.	Account Forecon Dr. Gabanar Sina Ma Nacina
Signature:	
Name of Member of Supervisory	
Committee:	Associate Professor Dr. Afida binti Mohamad Ali

TABLE OF CONTENTS

		Page
APPROV DECLAR LIST OF LIST OF	<i>K</i> VLEDGEMENTS /AL ATION	i iii v vi viii xiii xiii
CHAPTE	RIDI	
1	INTRODUCTION 1.1 Background of the Study	1 1 2 4 4 5 7 7 7 8 8 9 11
2	2.1 Introduction 2.2 Approaches to Metaphor 2.2.1 Traditional Approach 2.2.2 Conceptual Metaphor Theory (CMT) 2.3 Criticism towards Conceptual Metaphor Theory 2.4 Critical Metaphor Analysis (CMA) 2.5 Past Studies on Metaphor 2.6 Summary of the Chapter	12 12 12 12 14 17 20 21 24
3	METHODOLOGY 3.1 Introduction 3.2 Research Design 3.3 Data of the Study 3.3.1 Data Collection Procedures 3.3.2 AntConc Software 3.4 Data Analysis Procedures 3.4.1 Metaphor Identification Procedure (MIP) 3.4.2 Metaphor Interpretation	25 25 25 25 26 26 28 29 32

		3.4.3 Metaphor Explanation	34
	3.5	Pilot Study	35
	3.6	Summary of the Chapter	39
4		INGS AND DISCUSSION	40
	4.1	Introduction	40
	4.2	Frequency of Metaphorical Expressions in Lim Kok	
		Wing's Writings	40
	4.3	Conceptual Metaphors of Innovation in Education	41
		4.3.1 The Process of Innovation is a Journey	43
		4.3.2 Innovation is War	53
		4.3.3 Innovation is an Object	58
		4.3.4 Innovation is a Human Being	62
		4.3.5 Innovation is a Sport	66
		4.3.6 Innovation is a Building	70
		4.3.7 Innovation is a Force	74
		4.3.8 Other Conceptual Metaphors	77
	4.4	Lim Kok Wing's Conceptions of Innovation in	
		Education	80
	4.5	Summary of the Chapter	88
5	SUM	MARY, CONCLUSION AND RECOMMENDATION	89
	5.1	Introduction	89
	5.2	Summary of the Study	89
	5.3	Major Findings of the Study	89
	5.4	Contributions of the Study	92
	5.5	Limitations of the Study	92
	5.6	Recommendations for Further Research	93
	5.7	Conclusion	93
	FEREN		94
Bl	ODATA	OF STUDENT	104
DI.	IRI ICA	TION	105

LIST OF TABLES

Table		Page
2.1	Example of Conceptual Metaphors and Metaphorical Expressions	19
3.1	Total Number of the Articles and Number of Words	26
3.2	Total Number of the Articles and Number of Words	32
3.3	Agreement Measures for Cohen's Kappa	37
3.4	Frequency of the Metaphorical Expressions of INNOVATION in the Context of Education in the Pilot Study	38
4.1	Summary of the Analysed Data	41
4.2	Conceptual Metaphors of Innovation	42
4.3	Mappings between the Source Domain JOURNEY and the Target Domain INNOVATION	44
4.4	Mappings between the Source Domain MOVEMENT and the Target Domain INNOVATION	51
4.5	The Mapping of Source Domain WAR between the Target Domain INNOVATION	54
4.6	The Mapping between Source Domain of OBJECT and Target Domain of INNOVATION	59
4.7	Mappings between the Target Domain INNOVATION and the Source Domain HUMAN BEING	63
4.8	Mappings between the Target Domain INNOVATION and the Source Domain RACE	67
4.9	The Mapping of Source Domain BUILDING between the Target Domain INNOVATION	71

LIST OF FIGURES

Figure		Page
1.1	Mapping of Source Domain and Target Domain	9
2.1	Canonical Linguistic Forms of Metaphor	14
2.2	Metaphorical Expressions Related to ARGUMENT IS WAR	15
2.3	Target and Source Domain of the Conceptual Metaphor ARGUMENT IS WAR	16
2.4	Mappings of the Source Domain WAR onto the Target Domain ARGUMENT	17
3.1	Concordance Tool	27
3.2	Data Analysis Procedures	28
3.3	The Concordance Lines for 'Innovation' Keyword	30
3.4	Metaphor Identification Procedure	31
3.5	Symmetric Measure	36
4.1	Tokens of Lexical Items Related to JOURNEY Metaphor in the Conceptualisation of Innovation using KWIC Search	43
4.2	Tokens of Lexical Items Related to MOVEMENT Metaphor in the Conceptualisation of Innovation using KWIC Search	50
4.3	Tokens of Lexical Items Related to WAR Metaphor in Characterising Innovation using KWIC Search	54
4.4	Tokens of Lexical Items Related to OBJECT Metaphor in Characterising Innovation using KWIC	58
4.5	Tokens of Lexical Items Related to HUMAN BEING Metaphor in Characterising Innovation in Education using KWIC Search	63
4.6	Tokens of Lexical Items Related to SPORT Metaphor in Characterising Innovation using KWIC Search	67
4.7	Tokens of Lexical Items Related to BUILDING Metaphor in Characterising Innovation in Education using KWIC Search	70



LIST OF ABBREVIATIONS

CM Conceptual Metaphor

CMT Conceptual Metaphor Theory

CMA Critical Metaphor Analysis

ME Metaphorical Expression

MIP Metaphor Identification Procedure

KWIC Key Word in Context

CHAPTER 1

INTRODUCTION

1.1 Background of the Study

Metaphor was traditionally regarded as a language ornament until Lakoff and Johnson (1980, 2003) claimed that metaphor is more than a piece of literary tool which is pervasive in our everyday life. In the book *Metaphors We Live by*, Lakoff and Johnson (1980) discussed that metaphor reflects our conceptual system. As such, metaphor acts as a reasoning tool that is routinely used to make sense of abstract and unfamiliar concepts by drawing knowledge and experiences from concepts that are easier to comprehend (Singh, 2010; Bougher, 2012; Landau, Robinson, & Meier, 2014). For instance, understanding the abstract ideas about morality in terms of physical experience with dirt and cleanliness (Zhong & House, 2014).

In accordance with this perspective, metaphor is described as a cognitive mechanism whereby a target domain is mapped onto a source domain by making association between the two domains. Simply put, "the essence of metaphor is understanding and experiencing one kind of thing in terms of another" (Lakoff and Johnson, 1980, 2003: 5). In the light of this view, this cognitive mechanism structures our understandings of a complex concept through the mapping of a simpler and more familiar concept. For instance, mapping life onto the domain of a journey as evoked by the conceptual metaphor LIFE IS A JOURNEY, enables life to be talked in terms of journey (e.g. to be at the crossroads, to stray from the path).

The pervasiveness of metaphor is attested in both scientific and non-scientific writings (Robson, 1985). On the one hand, in scientific writing, metaphor is used in establishing terminologies, expressing abstract concepts and developing hypothesis (Robson, 1985). Such examples include the lifetime of a chloride, polypeptide chain, electron cloud, wormhole and a cDNA library. Such complexities and unfamiliar terms were simplified using more familiar terms namely, lifetime, chain, cloud and library which generate images that heightened our understandings of the concepts.

On the other hand, in non-scientific writing a huge number of metaphorical expressions were discovered in news reports, speeches, brochures, advertisements and diaries on a broad spectrum of subjects. For instance, in the field of economy, business discourse is often analysed to investigate how economists perceive economy through the use of metaphor such as in the diachronic study conducted by Burgers and Ahrens (2020). In their study, they

examined the change in metaphorical framing of the economic metaphors describing TRADE in a corpus of 225 years of US State of the Union Addresses (1790-2014). Its finding revealed five source domains of trade that are predominant, namely, PHYSICAL OBJECT, BUILDING, CONTAINER, JOURNEY, and LIVING BEING. The findings of the study revealed that the systematic mappings between the domains are mostly stable and only the CONTAINER source domain change during the period.

Meanwhile, in a case study by Guo (2013) who examined fifty Chinese news reports on Geely's (Chinese global automotive company) acquisition of Volvo suggested that the acquisition of Volvo is perceived as MARRIAGE by the Chinese media which indicated the dominance of Geely over Volvo. Besides economic discourse, political speeches have also been examined to find out how metaphor was used by politicians to persuade citizens, as those demonstrated in Semino and Masci (1996), Ghazali (2004), Zurina et.al. (2014), and Rajandran (2013). In addition, studies of metaphor in the social sphere ranged from topics of health such as medicine (Warren, 1991), cancer (Semino, 2008; Semino et. al., 2018), and others, namely, immigration (Ana, 1999; Musolff, 2015; Nguyen & McCallum, 2015) and environment (Skinnemoen, 2009).

There has been an increasing amount of literature on metaphor research in different areas. Most research on metaphor has been carried out to investigate how metaphor is used in conceptualising abstract concepts, such as EMOTION (Kövecses, 1990; Luo, 2016; Fatemeh, Imran & Norsimah, 2014), LOVE (Kövecses, 1986; Lv & Zhang, 2012; Gavelin, 2016; El Amin, 2017) and TIME (Santiago et.al, 2007; Hamdi, 2010). For example, in many cultures, TIME is conventionally understood as MONEY. Metaphorical expressions such as 'you're wasting my time', 'this gadget will save your hours', 'can I borrow your time?' 'I've invested a lot of time on you' and time is priceless' suggest that TIME is understood and experienced as something valuable which is MONEY. The conceptualisation of TIME IS MONEY is pervasive and systematic, it connects concepts that are abstract, vague or unknown to concepts that are familiar through personal, shared or cultural experience (Lakoff & Johnson, 2003).

In addition, metaphor has also been studied in the political field examining politicians' ideologies, perspectives and attitudes towards certain concepts (Semino & Masci, 1996; Mio, 1997; Charteris-Black, 2004; Zurina et.al, 2014). Adding to the literature on metaphor research, this study focuses on the conceptualisation of INNOVATION in the discourse of education.

1.1.1 Concept of Innovation

In recent years, there has been renewed interest in innovation. A vast scholarly literature has emerged on various aspects of innovation (Fagerberg, 2004).

Innovation has been discussed and widely used as a slogan in many social and political fields. According to Godin (2015), innovation has become a value per se which gains veneration and publicity. However, due to its increased popularity, the term innovation has often been incorrectly used and overexploited to the extent of diluting its meaning in the process (Hyndman, 2018). As a result, "innovation has lost its descriptive function where it now means anything, everything and nothing" (Godin, 2015, p.8).

There are many definitions that have been used to describe innovation. For instance, "the term innovation is used to refer to the concept of change or a specific type of change that is human-made and deliberate" (Godin, 2015, p.2). Godin explains that many terms come under the umbrella of innovation, such as change, novelty, reformation, revolution and invention. This is in line with *Oxford Advanced Learners Dictionaries*' (2020) definition of innovation as a process of innovating, a new method, idea or product. Focusing on the aspect of commercialisation, Feldman (2004) termed innovation as the commercial realisation of the value of the invention or the receipt of an economic return. In a simpler word, innovation is about doing things in new and clever ways that engender efficiency and value (Barkoczy & Wilkinson, 2019).

The significance of innovation has been reported in studies on economic growth and development (Fagerberg, 2004; Feldman, 2004; Cooter et al., 2011; Bryce, 2014; Ranchordás, 2015; Schmutzler et al., 2017; Barkoczy & Wilkinson, 2019; Broughel & Thierer, 2019). According to Schmutzler et al. (2017), innovation is regarded as the foundation of success in modern economy at regional and national levels. They asserted that innovation and innovative practices have been documented in a large body of academic literature as it is a catalyst for a sustainable economic growth. On top of economic growth and technological development, innovation has substantially improved human's well-being and living standards as well as changed our culture (Broughel & Thierer, 2019).

For this reason, innovation is regarded as an endowment that everyone should have. In the foreword of *The Future is Coming* (2012), Dato' Seri Panglima Maximus Johnity Ongkili, the former Minister of Science, Technology and Innovation of Malaysia asserted that innovation is becoming more vital among the Malaysian society and emphasised that every Malaysian needs to embrace innovation as a way of life. Thus, the society should be aware of the importance of innovation, particularly, in education because it is very critical in this rapidly evolving environment. According to *Malaysia Education Blueprint* (2013: 229), innovation and creativity spirit should be integrated in the Malaysian education system for it to stay relevant in the future. In order to generate new possibilities and to create new knowledge, the modern societies need to acquire high-order thinking skills, i.e., creative thinking and innovation which are greatly needed in order to replace the traditional and less effective ways in both scientific and non-scientific sectors. In a speech on the *Eleventh Malaysia Plan* (2015), the sixth Prime Minister Dato' Sri Najib Razak emphasised a strong association between

innovation and productivity. These two aspects capable of determining the success and survival of an organisation.

Even though innovation has been the subject of many writings, especially in the sphere of business and technology, Godin (2015) criticised the lack of research that focus on the most important part of innovation that is the concept itself. In his book *Innovation Contested*, he lucidly discussed the meaning of innovation and its representation over time as well as explaining the chronology of when the word first emerged and changed according to different contexts.

In recent years, innovation has been discussed in many different contexts (Winthrop et.al., 2016). The concept is not only popular in scientific and technical sectors, but also in the field of social sciences and humanities. For instance, Lim (2012) emphasised that innovation must not be limited to business and technology but beyond in order to create an innovative nation. In education, innovation is often deliberated to find a new way to deliver knowledge effectively whereby a lack of it may affect the teaching and learning process as well as hinder students' creativity. Because of its importance, innovation study has received substantial attention across a number of discipline in recent years. Similarly, this study focuses on the concept of innovation and its conceptualisation.

1.1.2 Innovation in Education

In the context of education, innovation is a critical component in making sense of learning experiences (*Developing the Cambridge Learner Attributes*, 2018). It has a pivotal role in transforming the education system in order to prepare the human capital needs for innovation-driven industries in the future (*Malaysia Education Blueprint*, 2013: 64).

Considering the importance of innovation in many fields as politics, business, science and technology, it would be relevant to focus on the concept of innovation within the field of education. Specifically, the current study focuses on the metaphor of innovation in education and how they reflect the user's conception of innovation within the discourse.

1.1.3 Innovation in Lim Kok Wing's Writings

In the Malaysian education context, innovation is an aspect that is strongly linked to Tan Sri Lim Kok Wing who frequently discusses innovation in his speeches and blog writings. Being the founder of Limkokwing Creative University, he is renowned for his innovative ideas, and has been bestowed the title *Father of Innovation in Creative Education* by the Malaysia government, recognising his

ingenuity in turning Malaysian education into a global brand (QS Asia News Network, 2017). This award reflects his unique approach to education i.e., a 'pioneering educational model' (QS Asia News Network, 2017). He has changed the landscape of education in his university by breaking the tradition and changing the way knowledge is delivered and acquired. Apart from being awarded with the title *Father of Innovation in Creative Education*, he is also appointed as the Technical Education and Vocational Training (TVET) advisor due to his significant contribution to the development of TVET in Malaysia (Mohd Husni, 2018). Lim Kok Wing's creative approach in education is not only recognised in Malaysia, but also worldwide in which the current Bostwana president, Mokgweetsi Masisi regards Lim Kok Wing's approach to tertiary education as unique and refreshingly different (Kanono, 2020).

Innovation is the thrust of Limkokwing Creative University envisioned by Tan Sri Lim Kok Wing as outlined in its vision and mission, i.e., to produce graduates who are creative, innovative and exposed to the global business climate. Lim Kok Wing designed the university as a hub for innovation and capacity-building that trains human capital for developing countries. This is in line with his ambition to empower people with skills, knowledge and mindset that will transform developing countries into innovative nations. The vision and mission of the university reflect Tan Sri Lim Kok Wing's passion in changing the education scenario, i.e., to be more innovative and future-ready.

Numerous speeches and articles were delivered by him in multifarious conferences, seminars and workshops to express his views and idea on the subject of innovation. Thus, in this regard it would be insightful to investigate how this concept is perceived by Tan Sri Lim Kok Wing in the discourse of education.

1.2 Statement of the Problem

Within the area of cognitive semantics, researchers have focused on the study of conceptual metaphor in various discourse, such as immigration, war, politics, crime, environment and healthcare. Such interest is motivated by the recognition that metaphor is more than just a figure of speech but also a figure of thought (Lakoff, 1986), hence metaphor does not only belong to language but also to reasoning.

The pervasiveness of metaphor is attested in our everyday life with the number of metaphors that exists around us. People utilised metaphors either consciously or unconsciously in communicating their mind. Since metaphor is capable of simplifying complex and abstract concept into a concept that is simpler and more familiar, people often resort to metaphor without even noticing them. Therefore,

many concepts have been discussed using metaphors such as CANCER, EMOTION, EDUCATION et cetera.

The pervasiveness of metaphor in everyday life has fuelled various studies on multifarious concepts to shed light on how the mind works. Metaphor studies has been regarded beneficial in understanding the cognitive framework on how people view their world (Tracy, 2019). The cognitive aspect of metaphor has revealed the underlying conceptual metaphor that governs our thinking through the use of metaphorical expressions. In this regard, metaphors structure our perception and are capable of reflecting people's conception, belief and perspective of a particular concept.

One of the concepts that has often been discussed in today's world is innovation. This buzzword can be found almost anywhere and everywhere. Innovation is regarded integral in every organisation in order for it to stay relevant and evolving. In education, innovation is related to the transformation of the education system to prepare the future generation to be future-ready for innovation-driven economy. Towards this goal, many prominent figures have discussed the concept of innovation to educate the society on the idea of innovation and its importance. Various studies were conducted to document the importance of innovation for people, society, organisation and the world.

Such is the importance of innovation that it has been one of the aspects focused on in research in the educational context (Kovacs, 2017; Biasi et al., 2020; Noor Hanim, 2020; Barichello et al., 2020). Within the Malaysian education scenario, innovation is often linked to a figure of Leadership of Innovation and Globalisation in Education, Tan Sri Lim Kok Wing. His "craft in innovative education vields of thousands tens of industry-ready youth"(https://www.limkokwing.net/malaysia/news/article/tan_sri_limkokwing_n amed global leader in innovative education and philanthrophy), and his aspirations and accomplishments in transforming education are depicted in his speeches and writings. In this light, it would be enlightening to examine innovation in the context of education from the lens of a successful mastermind of innovation in education documented in his speeches. Moreover, investigating how the concept of innovation is conceived can be approached using the cognitive semantics approach, which focuses on the use of metaphorical expressions to reveal peoples' conception, perspectives and belief toward the concept of innovation. The unravelled metaphors underlying expressions related to innovation in education are capable of simplifying a complex and abstract concept such as innovation, and would be useful in understanding its complexity.

To date, there is hardly any published study on metaphor of innovation in education, particularly on how innovation is conceived in education. Thus, bearing this gap in the literature in mind, this study seeks to examine how

innovation is conceptualised in discourse related to innovation in education by Lim Kok Wing, the father of innovation in creative education.

1.3 Objectives of the Study

This study aimed to examine the use of metaphors of innovation in education as conceived by Tan Sri Dato' Paduka Dr Lim Kok Wing. Specifically, the study sought to achieve the following objectives:

- To identify and analyse the conceptual metaphors which underlie the metaphorical expressions related to innovation in Lim Kok Wing's writings.
- 2. To examine how the unravelled conceptual metaphors reflect Lim Kok Wing's conception of innovation in education

1.4 Research Questions

This study is guided by the following research questions:

- 1. What are the conceptual metaphors which underlie the metaphorical expressions related to innovation in Lim Kok Wing's writings?
- 2. How do the unravelled conceptual metaphors reflect Lim Kok Wing's conception of innovation in education?

1.5 Scope of the Study

This study focuses on the metaphors related to the concept of innovation in the context of education as manifested in Tan Seri Lim Kok Wing's writings. It also deals with how the unravelled conceptual metaphors reflects his perspective of innovation in the aforementioned context. The limitations of the study are as follow. First, this study is situated within the paradigm of cognitive semantics that emphasises how Lim Kok Wing conceived innovation based on the unravelled metaphorical expressions.

Second, this study is restricted to the metaphors used by Tan Sri Lim Kok Wing in his writings. Thus, the selected writings are related to the concept of innovation in education conveyed in English. In this regard, the sources of the data for this study are also limited to those extracted from a book by Tan Sri Lim Kok Wing entitled *The Future Is Coming* (2012) and his personal blog that can be accessed via the link http://founder.limkokwing.net/blog/.

Third, this study aims to examine how Lim Kok Wing conceived innovation based on the unravelled conceptual metaphors, however, this study does not focus on the persuasive aspects of the metaphor. In this light, the study does not concern the persuasive aspect of metaphor, i.e. how the metaphor influences the readers' thinking towards some course of action.

1.6 Significance of the Study

This study focuses on the conceptual metaphor of innovation in the context of education as manifested in Lim Kok Wing writings. It contributes to the cognitive semantic research by elucidating how innovation is conceptualised in metaphorical expressions as this topic has received little attention from researchers despite its popularity in the media.

Apart from the cognitive semantic analysis, this study uncovers Lim Kok Wing's perspective on innovation based on the metaphors utilised. In this regards, the findings of the study will have insightful implications on how a renowned figure in the field of education conceived innovation as it is essential to understand the concept of innovation through the view of an expert.

Finally, this study is also providing an insight of how the use of metaphors are capable of uncovering peoples' thoughts, ideologies and perspectives. Therefore, this study can be beneficial for people who are interested in the ability of metaphor as a persuasion device and a tool to uncover people's thought.

1.7 Theoretical Framework

This study is grounded on the Conceptual Metaphor Theory (CMT) (Lakoff & Johnson, 1980) which suggests that human conceptual system is largely metaphorical in nature and it constructs our thoughts and actions. The CMT is adopted in the study to elucidate the mappings and the meanings evoked by the conceptual metaphors. Lakoff and Johnson's CMT challenged the traditional view of metaphor by claiming that (1) metaphor is a property of concepts, and not of words; (2) metaphor functions to aid the understanding of certain concepts, instead of fulfilling artistic or aesthetic purpose; (3) metaphor is not always grounded on similarity; (4) metaphor is used effortlessly in daily life by everyone; and (5) metaphor is indispensable in human thought and reasoning (Kövecses, 2002, p.viii).

Essentially, conceptual metaphors involve mappings of aspects from a source domain to a target domain: TARGET DOMAIN IS SOURCE DOMAIN. The domains share one or more characteristics that enables the source domain to be understood in terms of another domain (target) (Lakoff & Johnson, 2008),

namely, the target and source domains. Typically, the source domain is a concrete concept, whereas the target domain is abstract. In other word, metaphor is a cross domain mapping from the source domain to target domain as illustrated in Figure 1.1.

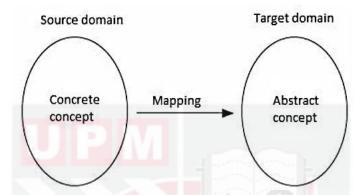


Figure 1.1 : Mapping of Source Domain and Target Domain (Source: Fang, 2014, p.79)

For instance, in Women, Fire and Dangerous Things, Lakoff (1987) conceptualised ANGER AS FIRE using the following metaphorical expressions:

- i. He was breathing fire.
- ii. Those are inflammatory remarks.
- iii. She was consumed by anger.

The source domain FIRE, which is concrete and tangible is mapped onto the target domain ANGER which is an abstract concept. Lakoff and Johnson (1980) termed the lexical unit of utterance used in a text as metaphorical expression while 'conceptual metaphor' is referred to the systematic mapping. Other examples of conceptual metaphors that are conventional are LOVE IS JOURNEY/GAME, ARGUMENT IS WAR/HEAT and LUST IS HUNGER.

1.8 Definition of Terms

The key terms of the study are defined below to assist the readers in having a better comprehension of these terms as used in the study.

Metaphor

The definition of metaphor in this study is from the cognitive view which regards metaphor as result of conceptual mapping that occurs at cognitive level.

Metaphorical Expressions

These refer to linguistic units of an utterance or a text that is used nonconventionally to express an underlying conceptual metaphor. Lakoff (1993) defined them as linguistic expressions that is the surface realisation of crossdomain mapping. The CMT claims that metaphorical expressions are systematically motivated by underlying conceptual metaphors. For instance, metaphorical expressions such as food for thought, half-baked idea, let me chew on that for a while, digest that information and the teacher spoon-fed them the information are motivated by the conceptual metaphor IDEAS ARE FOOD.

Conceptual Metaphors

Conceptual metaphor is a cross-domain mapping by means of the formula A IS B or A AS B: TARGET DOMAIN IS SOURCE DOMAIN. Lakoff and Johnson (1980) defined conceptual metaphors, as understanding and experiencing one kind of things in terms of another.

Conceptual Domains

A conceptual domain can be described as any coherent organization of experience. According to Radden & Dirven (2007), conceptual domain is the general field that a category or frame belongs in a given situation. There are two main types of conceptual domains used in a conceptual metaphor; source and target domains. The source domain refers to a concept that is used in metaphor studies to provide the means of understanding another concept manifested in the abstract domain (Lakoff, 1987). On the other hand, target domain is the domain that we try to understand through the source domain. Examples of common target domains are life, arguments, love, theory, idea, lust and social organizations while journey, sport, war, building, food, plants et cetera are source domains (Kövecses, 2002, p. 4).

Metaphor of Innovation

The metaphorical expressions used in describing innovation and innovation related concept in the writings on innovation in education. For example, 'we crave for innovation'. In this example, innovation is conceptualised as FOOD.

1.9 Structure of the Thesis

This thesis is divided into five major chapters. Chapter one discusses the background to the study, justifications of key aspects related to the focus of study, problem statement, the objectives of the study and the research questions that guide the study. This is then followed by a discussion of the significance and the scope of the study as well as definition of terms related to this study. Chapter two constitutes the review of current related literatures. It presents an overview of recent studies conducted on conceptual metaphors. The chapter particularly discusses and present an overview of previous related studies. The third chapter discusses the research methodology. The focus in this section is primarily on the research method, method of data analysis, data collection procedure and data analysis procedure, as well as the pilot study.

Chapter four presents the conceptual metaphors underlying metaphorical expressions identified in the writings on innovation in education, followed by the discussions on how innovation is conceived by Lim Kok Wing. Detailed descriptions alongside the metaphorical expressions found in the writings are provided. Finally, chapter five presents the summary, major findings, limitations and contributions of the study as well as the recommendations for future studies.

1.10 Summary of the Chapter

This chapter has discussed the fundamental aspects of the study, such as the background of the study, statement of the problem, objectives of the study, the research questions, significance of the study and the scope of the study as well as the theoretical framework and terms related to the study. It has elucidated the metaphors of innovation particularly in the writings of education and justified the need for this study.

REFERENCES

- Ahrens, K., & Zeng, H. (2017). Conceptualizing EDUCATION in Hong Kong and China (1984-2014). In *Proceedings of the 31st Pacific Asia Conference on Language, Information and Computation*, 303-311.
- Alarcón, P., Díaz, C., & Vergara, J. (2015). Chilean preservice teachers' metaphors about the role of teachers as professionals. *Elicited Metaphor Analysis in Educational Discourse*, *3*, 28
- Ana, O. S. (1999). Like an animal I was treated': Anti-immigrant metaphor in US public discourse. *Discourse & society*, 10(2), 191-224.
- Balbachan, F. (2006). Killing time: metaphors and their implications in lexicon and grammar. Metaphorik. de, 10, 6-30, p.9.
- Barasa, M.N & Opande, I. N. (2017). The Use of Animal Metaphors in the Representation of Women in Bukusu and Gusii Proverbs in Kenya. Africology: *The Journal of Pan African Studies*, 10(2), 82-108.
- Barrichello, A., & Morano, R. S. (2020). The importance of education in the context of innovation and competitiveness of nations. *International Journal of Education Economics and Development*. 11(2), 204-224.
- Barkoczy S., Wilkinson T. (2019) Innovation, Start-Ups and Venture Capital. In: Incentivising Angels. Springer Briefs in Law. Springer, Singapore.
- Biasi, B., Deming, D. J., & Moser, P. (2020). Education and Innovation. In M. J. Andrews, A. Chatterji, J. Lerner & S. Stern (Eds.), *The role of innovation and entrepreneurship in economic growth*. University of Chicago Press
- Bougher, L. D. (2012). The case for metaphor in political reasoning and cognition. *Political Psychology*, 33(1), 145-163.
- Broughel, J., & Thierer, A. D. (2019). Technological Innovation and Economic Growth: A Brief Report on the Evidence. *Mercatus Research Paper Forthcoming*.
- Bryce, R. (2014). Smaller faster lighter denser cheaper: How innovation keeps proving the catastrophists wrong. *Public Affairs*.
- Burgers, C. F., & Ahrens, K. (2020). Change in metaphorical framing over time:

 Metaphors of TRADE in 225 years of State of the Union addresses
 (1790-2014). Applied Linguistics.

 https://doi.org/10.1093/applin/amy055

- Brown, P. U., Parsons, S. C., & Worley, V. (2005). Pre-Service Teachers Write about Diversity: A Metaphor Analysis. *Scholar-Practitioner Quarterly*, 3(1), 87-102.
- Businaro, U. L. (1983). Applying the biological evolution metaphor to technological innovation. *Futures*, *15*(6), 463-477.
- Charteris-Black, J. (2004). Corpus approaches to critical metaphor analysis. Springer, p. 90 & p.158.
- Charteris-Black, J. (2011). *Politicians and rhetoric: The persuasive power of metaphor*. Springer.
- Clausner, T. & W. Croft. (1997). Productivity and schematicity in metaphors. Cognitive Science, 21(3), 247-282, p.260.
- Cooter, R., Edlin, A. S., Litan, R. E., & Priest, G. L. (2011). The importance of law in promoting innovation and growth. *Rules for Growth: Promoting Innovation and Growth Through Legal Reform*, 1-22.
- Dancygier, B. (2016). Figurativeness, conceptual metaphor, and blending. In *The Routledge Handbook of Metaphor and Language*, 46-59, Routledge, p.9.
- Dávid, G., & Furkó, B. P. (2015). The Journey Metaphor in Mediatized Political Discourse. *Acta Universitatis Sapientiae*, *Philologica*, *7*(2), 7-20.
- Deignan, A. (1999). Corpus-based research into metaphor. Researching and applying metaphor, 177-199, p.180.
- Deignan, A. (2005). *Metaphor and Corpus Linguistics*. Amsterdam / Philadelphia: John Benjamins.
- Developing the Cambridge learner attributes. (2018). Cambridge Assessment and International Education. https://www.cambridgeinternational.org/Images/417069-developingthe-cambridge-learner-attributes-.pdf
- Dobrovol'skij, D. & E. Piirainen. (2005). *Figurative Language: Cross-cultural and Cross-linguistic Perspective*. Amsterdam: Elsevier
- El Amin, M. I. (2017). Conceptual Metaphors of Love in "Happy New Year"—A Poem by Suad Al Sabah.
- Eleventh Malaysia Plan 2016 2020. (2015). *Anchoring Growth on People*. Kuala Lumpur: Percetakan Nasional Malaysia Berhad
- Everitt B. (2006). *Medical Statistics from A to Z: A Guide for Clinicians and Medical Students*. Cambridge University Press: Cambridge

- Fagerberg, J. (2004). *Innovation: A guide to the literature*. Georgia Institute of Technology.
- Fatemeh, S., Imran Ho, A., & Norsimah, M. A. (2014). A cognitive study of happiness metaphors in Persian and English. *Procedia-social and Behavioral Sciences*, *118*, 110-117.
- Fauconnier, G. (1994). *Mental spaces: Aspects of meaning construction in natural language*. Cambridge University Press, p.1.
- Feldman, M. (2004). The significance of innovation. Rotman School of Management, University of Toronto, 1-14.
- Fisher-Ari, T. R., & Lynch, H. L. (2015). Archeology, legos, and haunted houses: novice teachers' shifting understandings of self and curricula through metaphor. *Journal of Curriculum Studies*, *47*(4), 529-552.
- Flusberg, S. J., Matlock, T., & Thibodeau, P. H. (2018). War metaphors in public discourse. *Metaphor and Symbol*, 33(1), 1-18.
- Forceville, C. (2011). The journey metaphor and the source-path-goal schema in Agnès Varda's autobiographical gleaning documentaries. *Beyond cognitive metaphor theory:Perspectives on literary metaphor*, 281-297.
- Gavelin, E. (2016). Conceptual metaphors: a diachronic study of LOVE metaphors in Mariah Carey's song lyrics.
- Gatti, L., & Catalano, T. (2015). The business of learning to teach: A Critical Metaphor Analysis of one Teacher's journey. *Teaching and Teacher Education*, 45, 149-160.
- Ghazali, K. (2004). The Rhetoric of Dr. Mahathir Mohamad: A Critical Discourse Perspective. University of Malaya Press.
- Godin, B. (2015). Models of innovation: Why models of innovation are models, or what work is being done in calling them models? *Social Studies of Science*, *45*(4), 570-596, p.2 & p.8.
- Gozzi, R. (1999). The power of metaphor: In the age of electronic media. *ETC:* A review of general semantics, 56(4), 380-404.
- Gropstra, E. (2012). *Metaphors used by innovation consultants: How metaphors shape innovation consulting* (Master's thesis, University of Twente).
- Guo, S. (2013). Metaphor studies from the perspective of critical discourse analysis: A case study of business acquisition. *Theory and Practice in Language Studies*, *3*(3), 475.

- Hamdi, S. (2010). Time as a moving entity in English and in Arabic: A Comparative Cognitive Analysis. *Metaphorik. de*, *19*(1), 7-21.
- Hartmann-Mahmud, L. (2002). War as metaphor. *Peace Review*, 14(4), 427432, p.427.
- Hyndman, J., (2018, April 9). *Let's Stop Using the Word 'Innovation.* Quinn Allan. Retrieved from https://www.quinnallan.com.au/market-newsitem/lets-stop-using-word-innovation/
- Imamović, A. (2013). Metaphor and metonymy in legal texts. *Jezikoslovlje*, 14(2), 295-306.
- Innovation. (2020). In Oxford Advanced Learners Dictionaries. Retrieved from https://www.oxfordlearnersdictionaries.com/definition/english/innovation?q=innovation
- Kanono, R. (2020, January 23). TAN SRI LIMKOKWING: The Education Maverick. The Patriot. https://www.thepatriot.co.bw/news/item/7877tansri-limkokwing-the-education-maverick.html
- Kimmel, M. (2009). Metaphors of the EU constitutional debate—Ways of charting discourse coherence in a complex metaphor field. *Metaphorik. de*, 17, 49-100, p.72.
- Kivinen, O., & Ristela, P. (2010). From constructivism to a pragmatist conception of learning. *Oxford Review of Education*, 29(3), 363-375. http://dx.doi.org/10.1080/03054980307442
- Koc, M. (2013). Student teachers' conceptions of technology: A metaphor analysis. *Computers & Education, 68,* 1-8.
- Kovacs, H. (2017). Learning and Teaching in Innovation: why it is important for education in 21st century. Neveléstudomány. 5, 45-60. 10.21549/NTNY.18.2017.2.4.
- Kövecses, Z. (1986). *Metaphors of anger, pride and love: A lexical approach to the structure of concepts.* John Benjamins Publishing.
- Kövecses, Z. (1990). Emotion concepts. New York: Springer
- Kövecses, Z. (1995). Metaphor and the folk understanding of anger. In *Everyday conceptions of emotion*, 49-71. Dordrecht: Springer.
- Kövecses, Z. (2002). Cognitive-linguistic comments on metaphor identification. Language and Literature, 11(1), 74-78, p.viii & p.4.
- Kövecses, Z. (2003). *Metaphor and emotion: Language, culture, and body in human feeling.* Cambridge University Press.

- Kövecses, Z. (2008). Conceptual metaphor theory: Some criticisms and alternative proposals. *Annual Review of Cognitive Linguistics*, *6*(1), 168-184.
- Kovecses, Z. (2010). *Metaphor: A Practical Introduction*. Oxford University Press.
- Kövecses, Z. (2011). Methodological issues in conceptual metaphor theory. Windows to the mind: Metaphor, metonymy and conceptual blending, 23-40.
- Lakoff, G. & Johnson, M. (1980). Metaphors We Live by. The University of Chicago Press. (Vol. 59). The University of Chicago Press, p.30. https://doi.org/10.2307/414069
- Lakoff, G. (1986). The meanings of literal. Metaphor and Symbol, 1(4), 291296.
- Lakoff, G. (1992). Multiple selves: the metaphorical models of the self-inherent in our conceptual system.
- Lakoff, G. (1993). The contemporary theory of metaphor. *In A. Ortony (Ed.), Metaphor and thought 2nd Ed.*, 202-250. Cambridge, UK: Cambridge University Press.
- Lakoff, G. (2014). Mapping the brain's metaphor circuitry: Metaphorical thought in everyday reason. *Frontiers in human neuroscience*, *8*, 958.
- Lakoff, G., & Johnson, M. (2003). *Metaphors we live by.* The University of Chicago Press.
- Lakoff, G., & Johnson, M. (2008). *Metaphors we live by*. The University of Chicago Press.
- Lakoff, G., & Kövecses, Z. (1987). The cognitive model of anger inherent in American English. *Cultural Models in Language and Thought*, 195-221.
- Lakoff, G., Espenson, J., & Schwartz, A. (1991). *Master Metaphor List. Second draft copy*. University of California at Berkeley, p.36.
- Landau, M. E., Robinson, M. D., & Meier, B. P. (2014). The power of metaphor: Examining its influence on social life. *American Psychological Association*. Washington, DC: APA
- Landis, J. R., & Koch, G. G. (1977). The measurement of observer agreement for categorical data. *Biometrics*, 159-174.
- Lim Kok Wing (2012). *The Future is Coming: Transform Now.* Published by www.printnasional.com.my.

- Lopez-Gonzalez, H., Guerrero-Solé, F., Estévez, A., & Griffiths, M. (2018). Betting is loving and bettors are predators: A conceptual metaphor approach to online sports betting advertising. *Journal of gambling studies*, *34*(3), 709-726.
- Luo, L. (2016). Conceptualization of Sadness Metaphor in English. *Studies in Literature and Language*, *13*(6), 20-26.
- Lv, Z., & Zhang, Y. (2012). Universality and variation of conceptual metaphor of love in Chinese and English. *Theory and practice in language studies*, 2(2), 355.
- Malaysia Education Blueprint 2013-2025. (2013). *Preliminary Report. Preschool to Post-Secondary Education*. Ministry of Education Malaysia.
- Mason, L. (2018). A critical metaphor analysis of educational technology research in the social studies. *Contemporary Issues in Technology and Teacher Education*, 18(3), 538-555.
- McCartney, M. (2014). The fight is on: military metaphors for cancer may harm patients. *BMJ: British Medical Journal (Online)*, 349.
- Mio, J. S. (1997). Metaphor and politics. Metaphor and symbol, 12(2), 113-133.
- Musolff, A. (2015). Dehumanizing metaphors in UK immigrant debates in press and online media. *Journal of Language Aggression and Conflict*, 3(1), 41-56.
- Mohd Husni, M. N. (2018, January 16). Lim Kok Wing dilantik penasihat TVET. HMetro. https://www.hmetro.com.my/mutakhir/2018/01/304239/limkok-wing-dilantik-penasihat-tvet
- Noor Hanim, R. (2020). Innovation in education: Barriers and facilitating factors. *European Journal of Education Studies*.
- Nguyen, L., & McCallum, K. (2015). Critical Metaphor Analysis from a Communication perspective: A case study of Australian news media discourse on Immigration and Asylum Seekers. *ANZCA*. Queenstown.
- Nurul Nadia, M. & Sabariah, M. R. (2014): Cat Metaphors in Malay and English Proverbs. *Social and Behavioural Sciences*, *118*, 335-342
- Offstein, E. H., & Neck, C. P. (2003). From acing the test to touching base: the sports metaphor in the classroom. *Business Communication Quarterly*, 66(4), 23-35.
- Ogarkova, A. (2007). Green-eyed monsters: a corpus-based study of the concepts of ENVY and JEALOUSY in modern English. *Metaphorik. de*, 13, 87-147.

- Pineau, E. L. (1994). Teaching is performance: Reconceptualizing a problematic metaphor. *American Educational Research Journal*, 31(1), 3-25.
- Pitcher, R. (2013). Using metaphor analysis: MIP and beyond. *The Qualitative Report*, 18(34), 1-8, p.7.
- Potts, A., & Semino, E. (2019). Cancer as a Metaphor. *Metaphor and Symbol*, 34(2), 81-95.
- Pragglejaz Group. (2007). MIP: A method for identifying metaphorically used words in discourse. *Metaphor & Symbol*, 22(1), 1–39.
- Price, J. H., & Murnan, J. (2004). Research limitations and the necessity of reporting them. *American Journal of Health Education* 35, 66-67
- QS Asia News Network. (2017, November 2). A global game changer. https://qswownews.com/limkokwing-global-game-changer/
- Radden, G., & Dirven, R. (2007). Cognitive English grammar (Vol. 2). John Benjamins Publishing.
- Rajandran, K.(2013). Metaphors for Malaysia's economic transformation programme. *Kajian Malaysia*, 31(2), 19.
- Rakova, M. (2002). The philosophy of embodied realism: A high price to pay? *Cognitive Linguistics*, 13(3), 215-244.
- Ranchordás, S. (2015). Does sharing mean caring: Regulating innovation in the sharing economy. *Minn. JL Sci. & Tech.*, 16, 413.
- Reppen, R. (2010). Building a corpus: what are the key considerations? In *The Routledge handbook of corpus linguistics*, 59-65. Routledge.
- Richards, I.A. (1936). The Philosophy of Rhetoric, London: Oxford University Press.
- Robson, S. J. (1985). The use of metaphor in scientific writing. (Master's Thesis, Iowa State University)
- Romano, C. (2011, July 3). *What's a Metaphor for?* The Chronicle of Higher Education. Retrieved from http://chronicle.com/article/Whats-aMetaphor-For-/128079/
- Rozaimah, R., & Nor Hashimah, J. (2014). Metaphor of AMOK in traditional Malay text corpora: an analysis using the Hybrid Theory. *ProcediaSocial and Behavioral Sciences*, *118*, 412-419.

- Sabariah, M. R., Pabiyah, H. & Nurul Nadia, M. (2012). Farm animal metaphors in Malay and Arabic figurative expressions: Implications for language learning. *International Journal of Applied Linguistics and English Literature*, 1(7), 33-39. https://doi: 10.7575/ijalel.v.1n.7p.33
- Santa Ana, O. (2002). Brown tide rising: Metaphors of Latinos in contemporary American public discourse. University of Texas Press.
- Santiago, J., Lupáñez, J., Pérez, E., & Funes, M. J. (2007). Time (also) flies from left to right. *Psychonomic Bulletin & Review*, *14*(3), 512516.
- Schmutzler, J., Suarez, M., Tsvetkova, A., & Faggian, A. (2017). Introduction. A context-specific two-way approach to the study of innovation systems in developing and transition countries. In *Innovation in Developing and Transition Countries*. Edward Elgar Publishing.
- Segrave, J. O. (2000). The sports metaphor in American cultural discourse. *Culture, Sport, Society, 3*(1), 48-60, p.48. https://doi.org/10.1080/14610980008721862
- Semino, E. (2008). *Metaphor in discourse*. Cambridge: Cambridge University Press.
- Semino, E., & Masci, M. (1996). Politics is football: Metaphor in the discourse of Silvio Berlusconi in Italy. *Discourse & Society*, 7(2), 243-269.
- Semino, E., Demjén, Z., & Demmen, J. (2018). An integrated approach to metaphor and framing in cognition, discourse, and practice, with an application to metaphors for cancer. *Applied Linguistics*, 39(5), 625-645.
- Semino, E., Demmen, J., Demjén, Z., Koller, V., Hardie, A., Rayson, P., & Payne, S. (2015). A computer-assisted study of the use of violence metaphors for cancer and end of life by patients, family carers and health professionals. *International Journal of Corpus Linguistics*, 20(2), 205-231.
- Šeškauskienė, I., Stepančuk, J. (2014). The Evidence Speaks for Itself: Metaphors in Courtroom Hearings. *Filologija*, *19*, 102–120.
- Silaški, N., & Đurović, T. (2011). The NATURAL FORCE metaphor in the conceptualisation of the global financial crisis in English and Serbian. Zbornik Matice srpske za filologiju i lingvistiku, 54(1), 227-245, p.231.
- Singh, K. (2010). Metaphor as a tool in educational leadership classrooms. *Management in Education*, *24*(3), 127-131.
- Skinnemoen, J. (2009). *Metaphors in climate change discourse* (Master's thesis, University of Oslo).

- Skorcynska, H. (2001). Metaphor in scientific business journals and business periodicals: An example of the scientific discourse popularisation. Ibérica, Revista de la Asociación Europea de Lenguas para Fines Específicos, 3, 43-60
- Solée, R. V., Valverde, S., Casals, M. R., Kauffman, S. A., Farmer, D., & Eldredge, N. (2013). The evolutionary ecology of technological innovations. *Complexity*, *18*(4), 15-27.
- Sontag S. (1978) Illness as a Metaphor. Penguin, Harmondsworth, Middlesex.
- Steen, G. (1999). From linguistic to conceptual metaphor in five steps. Amsterdam Studies in The Theory and History of Linguistic Science Series 4, 57-78, p. 68.
- Steen, G. J. (2011). The contemporary theory of metaphor—now new and improved! Review of Cognitive Linguistics. *Published under the auspices of the Spanish Cognitive Linguistics Association*, 9(1), 26-64.
- Stefanowitch, A. (2007). Words and their metaphors. A corpus-based approach. In A. Stefanowitch & S.Th. Gries (Eds.,) *Corpus-based Approaches to Metaphor and Metonymy*, 63–105. Berlin: Mouton de Gruyter.
- Sweetser, E. (1990). From etymology to pragmatics: Metaphorical and cultural aspects of semantic structure (Vol. 54). Cambridge University Press.
- Talmy, L. (2000). Toward a Cognitive Semantics Volume 1: Concept Structuring Systems. Bradford Book.
- Tengku Farah, T. M., Afida, M. A., Rafik-Galea, S. and Zalina, M. K (2012). Getting physical with the market: A study of metaphors in the Business Times. *Pertanika Journal of Social Sciences & Humanities*, 20(3), 881896.
- Tracy, S. J. (2019). Qualitative research methods: Collecting evidence, crafting analysis, communicating impact. John Wiley & Sons.
- Turkkila, K. (2014). Do near-synonyms occur with the same metaphors: A comparison of anger terms in American English. *Metaphorik. de*, *25*, 129-154.
- Turner, M., & Lakoff, G. (1989). More than cool reason: A field guide to poetic metaphor. *Journal of Women's Health*.
- Ullman, S. (1962). *An introduction to the science of meaning*. New York: Barnes & Nobel.
- Ungerer, F., & Schmid, H. J. (1996). An Introduction to Cognitive Linguistics Text Second Ed. New York: Routledge

- Urbonaitė, J. (2015). A cross-linguistic study of metaphor in legal research articles: the case of criminal justice. *TELL ME 2014*, 13.
- Warren, V. L. (1991). The 'medicine is war' metaphor. *Hec Forum*, *3*(1), 39-50. Netherlands: Springer.
- Winthrop, R., McGivney, E., Williams, T., & Shankar, P. (2016). Innovation and Technology to Accelerate Progress in Education. *Background Paper for Education Commission*. *Centre for Universal Education (CUE) at The Brookings Institution*.
- Yusuf, A. Y. (2019). The Interface between Politics and Football in Language Use: A Conceptual Metaphor Theory. *Ansu Journal of Language and Literary Studies*, 1(5).
- Zhong, C. B., & House, J. (2014). Dirt, pollution, and purity: A metaphorical perspective on morality. In M. J. Landau, M. D. Robinson, & B. P. Meier (Eds.) *The power of metaphor: Examining its influence on social life,* 109-132. Washington, DC: APA Press.
- Zinken, J. (n.d.). Levels of schematicity in metaphor: Basic level source concepts.
- Zurina, M. N., Zalina, M. K., Mohd Sharifudin, Y., & Rosya Izyanie, S. (2014). A Case Study On Conceptual Metaphors Used in A Speech by Yab Datuk Sri Najib Tun Razak. The 9th Language for Specific Purposes Seminar' and 'The 6th Global Advances in Business Communication Conference.