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| **RESEARCH ARTICLE**

The Metaphor in the Conceptualization of Innovation in Lim Kok Wing's Writings

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| **ABSTRACT**

The concept of innovation is prevalent and has been discussed in varied disciplines and published in various documents, such as educational magazines, books, and blogs. One example of such documentation is the writing on innovation by the late 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 future generations for an innovation-driven economy. This study examined the concept of innovation using metaphorical expressions in writing on innovation in education. Specifically, it aimed to unravel the metaphor in the writings and to examine how the unravelled metaphors reflect the conceptions of innovation in education. In total, 42 written texts on innovation were included as data of the study. The data were analyzed based on Lakoff and Johnson's Conceptual Metaphor Theory. The findings of the study revealed 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. The unravelled metaphors underlying the writings on innovation suggest that innovation is conceived as a long process, which requires careful planning. The findings of the study provide insights into how innovation is conceived using metaphor, reflecting the ideas of a renowned brainchild of innovation in education in Malaysia, Lim Kok Wing.

| **KEYWORDS**

Metaphor, innovation, conceptual metaphors theory, cognitive semantics

1. Introduction

One of the concepts that have often been discussed in today's world is innovation, which is regarded as integral in a globalized world. It is a criterion that is required in many contexts to stay relevant and evolving to keep up with the demands of today's world. A significant context for innovation in education is related to the transformation of the education system to prepare the future generation to be future-ready for the innovation-driven economy and the industrial revolution (IR4.0). Moving towards this goal, the concept of innovation in education has been discussed with the aim of examining how it is perceived. Accordingly, various studies were conducted to document the importance of innovation for people, society, organizations, 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., 2021; Noor Hanim, 2020; Barichello et al., 2020). Within the Malaysian education scenario, innovation is often linked to a figure of Leadership of Innovation and Globalization in Education, the late Tan Sri Lim Kok Wing. His "craft in innovative education yields tens of thousands of industry-ready youths", 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 writings. Investigating how the concept of innovation is conceived can be analyzed using the cognitive semantics approach, which focuses on the use of metaphorical expressions related to the examined concept to reveal peoples' conception, perspectives, and belief in it.

Within the area of cognitive semantics, researchers have focused on the study of conceptual metaphors in various discourses, 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 lives with the number of metaphors around us. People utilized metaphors either consciously or unconsciously in communicating their minds. Since metaphor is capable of simplifying complex and abstract concepts into a simpler and more familiar concept, people often resort to metaphor without even noticing them. Such a provoking claim on metaphor as pervasive has fuelled various studies on multifarious concepts to shed light on how the mind works. Metaphor studies have been regarded as beneficial as they provide a cognitive framework on how people view their world (Tracy, 2019). In other words, the cognitive aspect of metaphor has revealed the underlying conceptual metaphor that governs our thinking using metaphorical expressions. In this regard, metaphors structure our perception and are capable of reflecting people's conception, belief, and perspective of a particular concept. Drawing on 42 written texts on innovation, this study presents how innovation is conceptualized and how they reflect Lim Kok Wing's conceptualison of innovation in education.

2. Literature Review
According to Godin (2015), innovation has become a value per se that 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). To date, 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, which is in line with the definition of innovation as a process of innovating, a new method, idea, or product given by the Oxford Advanced Learners Dictionaries' (2020). In simpler words, innovation is about doing things in new and clever ways that engender efficiency and value (Barkoczy & Wilkinson, 2019).

The significance of innovation in many spheres of life has made it the subject of many writings and research, especially in the sphere of business and technology. Education is deemed indispensable in producing innovative human capital, as documented in Baumol (2005), in which they agreed on the importance of innovative learning in developing growth. However, Godin (2015) criticized the lack of research that focuses 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, such as education. To date, there is hardly any published study on innovation in education, particularly on how innovation is conceived in education. Thus, this study seeks to examine how innovation is conceptualized in discourse related to innovation in education by Lim Kok Wing, the father of innovation in creative education. Specifically, the objectives of the study are two-fold:

1.   To unravel the conceptual metaphors related to innovation in Lim Kok Wing's writings and how
2.   they reflect Lim Kok Wing's conception of innovation in education

2.1 Conceptual Metaphor Theory (CMT)
The basis of the CMT is the conceptual mapping that occurs at the cognitive level. This theory highlights the essential aspect of metaphor: understanding and experiencing one thing in terms of another (Lakoff & Johnson, 1980). This contemporary approach of metaphor differentiates between conceptual metaphors and metaphorical expressions, i.e., also known as linguistic metaphors. The conceptual metaphor is the cross-mapping between the two domains that occur at the cognitive level, which is in the formula of A is B, where A represents the target domain whereas B is the source domain; for instance, LOVE IS A JOURNEY, TIME IS MONEY, ARGUMENT IS WAR, and THEORIES ARE BUILDING. The target domain is the object/topic that is being talked about or commented upon. Whilst the source domain is the conceptual domain from which the metaphorical expressions were drawn. The conceptual metaphors are conventionally presented in the formula of TARGET DOMAIN IS SOURCE DOMAIN. The metaphorical expressions, on the other hand, are the expressions that deviate from their literal meanings by carrying the surface realization of their respective conceptual metaphors such as this will throw some light on the issue, their romance blossomed, and his ideas are warmly received.

Besides target and source domains, mapping is also a central idea in CMT. According to Kövecses (2010), the comprehension of the systematic mapping between the source domain and target domain is essential. Dancygier (2016) defined metaphoric mapping as a relation between the source domain and the target domain or also known as the systematic correspondence of the constituent elements between the two domains' structure. The metaphorical mapping between the source and target domains is largely an unconscious process. It is not purely abstract and arbitrary because it is shaped and constrained by our bodily experiences in the world.

2.2 Critical Metaphor Analysis

Critical Metaphor Analysis (CMA), which is a combination of Conceptual Metaphor Theory (CMT) and Critical Discourse Analysis (CDA), has been identified as a subfield of critical discourse analysis (Gatti & Catalano, 2015). Like critical discourse analysis, CMA aids in uncovering the practices and social relations using language (Mason, 2018). However, Charteris-Black (2004) pointed out that in CDA, there is an assumption of conscious intentions among language users that is consistent with constructivism (Kivinen & Ristela, 2010) in which leads to analyzing the ideological intentions of the language user. In contrast, CMA emphasizes primary bodily experience as an unconscious grounding. Therefore, it focuses on examining the language user's assumptions as underlying reasoning for their arguments, which may or may not be consciously invoked.

CMA is one of the analytical frameworks that is adapted in this study to reveal the covert (and possibly unconscious) intentions of language users. This framework is suitable for revealing language users' implied intentions and ideologies by combining both the cognitive and pragmatic aspects of metaphors (Charteris-Black, 2004). Influenced by pragmatism, this framework emphasizes the idea of unconscious experience. Charteris-Black (2004) asserted that metaphors could reveal the cultural and ideological assumptions of the language users even when it is not consciously intended. Charteris-Black (2004) outlined three stages of Critical Metaphor Analysis, namely metaphor identification, metaphor interpretation and metaphor explanation. The first stage, metaphor identification, consists of two parts: a close reading of the texts to identify 'candidate metaphor' and an evaluation to determine whether the candidate metaphor is metaphorical or non-metaphorical. The second part, metaphor interpretation, focuses on the analysis of metaphorical expressions to unravel the conceptual metaphor underlying a certain metaphorical expression in question. The third part, metaphor explanation, examines the underlying ways of thinking, attitudes, belief, or ideologies based on the unravelled conceptual metaphors.

The CMA framework has been used in many studies that aimed to reveal language users' intention using metaphors. For instance, in the field of education, metaphor analysis has been utilized in many studies to examine how teachers conceptualized their educational experiences (Brown, Parson & Worley, 2005; Gatti & Calano, 2015). The analysis has also been applied in popular educational discourse, with examinations of 'teacher as professional' as documented by Alarcón, Díaz and Vergara (2015) and the act of 'teaching as performance' metaphors in Pineau (1994). For instance, important metaphors used in education, such as the conduit metaphor of communication, education reform discourse, were revealed through examining several discourses related to education, technological race (Gozzi, 1999). On the other hand, in another study with a different focus, Zurina et al. (2014) examined metaphors for EDUCATION and the meanings evoked by the conceptual metaphor in the then Malaysian prime minister's opening speech at the 17th Conference of Commonwealth Education Ministers. The study's findings revealed that education was conceptualized as a MACHINE, JOURNEY, FORCE and SPORT, which highlight the aspects of productivity and efficiency, destination and routes encountered during the transformation, impact of education, and as the spirit of competition and training. To date, although there are some studies on the conceptualization of innovation in different fields, studies on the concept of innovation in education are rather scarce. Thus, the current study aims to further contribute to the literature on the conceptualization of innovation by focusing on innovation-related metaphors in Lim Kok Wing's writings.

3. Methodology

Data of this study comprised metaphorical expressions related to innovation in Lim Kok Wing writing. The metaphor identification (MIP) by the Pragglejaz Group (2007) was utilized to identify the metaphorical expressions. The identification of the metaphorical expressions generated a total of 196 metaphorical expressions related to innovation in education

3.1 Data Analysis

Data analysis was based on Lakoff and Johnson's (1980) Conceptual Metaphor Theory and the three steps of Charteris-Black's (2004) Critical Metaphor Analysis.

3.2 Metaphor Identification

This study employed the metaphor identification procedure (MIP) by the Pragglejaz Group (2007) to identify the metaphorical expressions. Firstly, the texts were read to establish a general understanding of the meaning. The entire discourse was read to determine keywords and candidate metaphors within the identification stage. The keywords or lexical units that are related to 'innovation' were determined using Dictionary by Merriam-Webster, Online Etymology Dictionary and based on the readings of the discourse. Subsequently, metaphorical expressions that are relevant to the focus of the study, i.e., innovation in education, were identified. The identification of the metaphor was made manually. To determine the linguistic metaphors, the basic meaning of each lexical unit/keyword was verified using dictionaries. Basic meanings generally are more concrete, related to bodily action, more precise and historically older (Pragglejaz Group, 2007). Subsequently, both meanings were compared to ascertain whether the basic meaning of the keyword is different from its contextual meaning. If they are different, the basic meaning and the contextual meaning were determined whether they are related by some similarities. The keyword is regarded as metaphorical if they share any similarities between them.

3.3 Metaphorical Interpretation

In this stage, the metaphorical expressions from the first step were utilized to examine the conceptual metaphors underlying the metaphorical expressions using Steen's 'from linguistic metaphors to conceptual metaphors in five steps (1999) and Lakoff and Johnson (1980) Conceptual Metaphor Analysis. The interpretation of the Conceptual Metaphor was also based on Kövecses' Common Source Domain (2010) and Master Metaphor List (1991). Metaphor expressions that were extracted from the writings were analyzed using Steen's Five steps analysis to unravel its conceptual metaphors. In the first step, the 'focus' of a metaphor is identified, which is the linguistic expression used non-literally in the writings. The second step deals with 'metaphorical idea identification', which is identifying the target domains/topics. The target and the source domain of a conceptual metaphor can be identified by making the connection between the metaphorical idea and the focus. Step 3 involves the process of identifying the underlying comparison between the focus and the idea. The fourth step requires interpretation of the focus and the identification of the vehicle, Steen's term in describing source domain. According to Steen (1999, p.68), "the interpretation must be kept on the leash" because of its 'highly interpretative' nature. Finally, the last step involves figuring the source and target domain where the analyst should be able to derive sets of conceptual metaphors. The metaphor candidates identified in the first stage were classified into different conceptual metaphors using Steen's 'From linguistic to conceptual metaphor in five steps' with the aid of Lakoff and Johnson's (1980) and Kövecses' (2010) Common Source Domain. Steen's (1999) five steps were employed in this stage to identify the source domains. The steps were demonstrated as follow:

"I do feel it is perhaps time for this university to be given due recognition for the pivotal role it has played in injecting and advocating creativity and innovation in education since its inception 20 years ago."

The first step in Steen's (1999) is identifying the metaphor focus, which is a linguistic expression that is used non-literally in the expression. The lexical item 'injecting' is used non-literally because the basic meaning and the contextual meaning are contrasted. The basic meaning of injecting is defined as inserting (a liquid, especially a drug or a vaccine) into the body with a syringe. However, the contextual meaning of injecting means introducing a new element into something. Subsequently, the second step requires the identification of the metaphorical idea which corresponds to Lakoff and Johnson's (1980) target (innovation). The third step deals with non-literal comparison identification, which is identifying the relationship between the metaphor focus (target domain) and the metaphor idea (source domain). Even though the basic meaning and the contextual meaning contrasted, innovation and injecting share a similarity, i.e., innovation can be understood as an element that can be introduced to something or someone. In the fourth step, the process of interpreting the focus of the expression and identifying the vehicle was conducted. The identification of the vehicle could be made by investigating the 'prototypical or default knowledge' of the source domain. In this case, injecting is primarily related to inserting medicine into a body; hence, innovation is metaphorically realized as a medicinal substance such as vaccine, drugs etc. Considering the highest-level categories of this grouping, the researcher decided that FLUID fits into a broader metaphor system rather than MEDICINE. Finally, the last step involves identifying the mapping that occurred in step 4. This step resulted in the conceptual metaphor underlying the linguistics metaphor, i.e., INNOVATION IS FLUID. Steen's (1999) procedure was repeated for each linguistic expression found, and they were grouped according to their source domain. The categorization of the target domain as per the source domain needs to be conducted repeatedly since the linguistic expressions can fit into many different domains.

3.4 Metaphorical Explanation

Metaphor explanation is the third stage of Charteris-Black (2004) CMA. This part of CMA is adopted in this study to answer the second research question, i.e., how the conceptual metaphors reflect Lim Kok Wing's conception of innovation in education. This stage consists of the four steps that are outlined by Charteris-Black (2004). The first step is based on the highlighting and hiding effects of metaphors. The conceptual metaphor is examined for it highlighting and hiding aspects that represent how Lim Kok Wing view innovation in education. Determining which aspects are highlighted and which are hidden will shed light on how the target was conceived by the language users. The next step is determining the conventionality of the metaphors, whether they are conventional metaphors or novel metaphors. A conventionalized metaphor is regarded as important by Charteris-Black (2004) because they contain more covert evaluation than the latter. Third, the conceptual metaphors were examined to reveal the language users' conception, which may underlie the metaphors. Lastly, the conceptual metaphors were determined whether they function as heuristic devices that aid in the understandings of the topic. Heuristic devices make phenomena or things easier by simplifying them into a concept that is more concrete and tangible.

4. Results and Discussion

The analysis of the data revealed seven conceptual metaphors in the writings of innovation. 72 metaphorical expressions in the writings are manifested as JOURNEY, WAR, OBJECT, HUMAN BEING, SPORT, BUILDING, and FORCE. The following section presents and discusses some examples of metaphorical linguistic expressions and how they reflect Lim Kok Wing's conception of innovation in education.

4.1 Journey metaphor

Journey metaphors have been commonly unravelled as those governing our thinking in structuring many abstract experiences such as life, love, activities, and diseases (Lakoff et al., 1991; Lakoff & Johnson, 2008; Kövecses, 2010; Semino et al., 2015). Such JOURNEY metaphors are manifested in everyday activities. Since human beings often move from one destination to another, namely, A to B, reaching B is said to be equivalent to achieving a purpose (Forceville, 2011). In the writings on innovation in education, the JOURNEY metaphor is used to talk about the process of accomplishing innovation. Many aspects of the journey are mapped onto innovation, namely the starting point, paths, obstacles along the path, movements, the destination of the journey, as well as the sense of directedness on the traveller's part to follow the path to the endpoint (Santa Anna, 2002).

The manifestation of the conceptual metaphor THE PROCESS OF INNOVATION IS A JOURNEY, in the selected writings, embarking on the process of innovation was conceived as starting a journey. The use of 'begin' in (1) – (4) reflects the conception of innovation as having a point of departure. As such, to embark on a journey of innovation, it is suggested by Lim Kok Wing that people should have 'what-if thinking', 'curious mind', 'creativity' and 'imagination' as manifested below. These reflect Lim Kok Wing's perspectives that innovation can only begin with the right mindset and out-of-box thinking.

1. innovation process begins with a what-if thinking and creative process
2. most relate it to product, not realizing that product is the result of the innovation process that begins, with curious mind,
3. To me, being future-ready begins with imagination.
4. Innovation is the result of a process that begins with creativity.

In the examples above, innovation is seen as a journey that must start somewhere. Generally, point of departure is a physical place; however, in the examples, innovation is said to begin in the human mind. Therefore, the most important thing required in the process of innovation is the right mind set that is creative and imaginative. In addition to this, innovation is also conceived as a destination with education as the point of departure. These can be observed in examples (5), (6) and (7) in which demonstrate that INNOVATION starts with a tangible starting point, specifically in an academic institution such as classrooms and kindergarten. This highlights the indispensable role of education as a starting point toward innovation. In this case, early education is highlighted as the crucial time to develop or nurture innovation in children's minds.

5. It (innovation) must start with our education system.
6. Re-engineering human capital begins in kindergarten.
7. it (innovation) begins in the classrooms where our children are being nurtured

Another element manifested in the JOURNEY metaphor is the route of the journey, which are the means of achieving the purpose. The manifestations of linguistic metaphors such as 'shortcut', 'highway', 'track' and 'path' reflect the physical routes in the PROCESS OF INNOVATION IS A JOURNEY metaphor as shown in (8) – (10). They are concrete structures that exist that connect places together and are the means of achieving innovation. The journey of innovation is not a straightforward one because of the challenges it has along the way. The journey toward innovation is still long, and we are still far from the destination can be realized by the following metaphorical expressions.

8. I do think that we still have a long way to go.
9. We need to innovate and get out of this muddy track and onto the highway
10. There is no shortcut to innovation, no matter how much money or government focus we put on it.

The phrase 'muddy track' in (9) reflects an obstacle that slows down the journey toward innovation, whereby, highway depicts a journey without any hindrance. In a journey, it is common to search for a shortcut to save time and to arrive at the destination faster; however, (10) indicates that there is no 'shortcut' in the journey toward innovation which describes the importance of tenacious effort and perseverance in innovation. Perhaps the function of conceptualizing innovation with a physical route is to make innovation more clear, concrete, and familiar to the audience. People might be more motivated to innovate if they are described as a destination that can be reached via road or path. In addition, the destination of the journey can be observed in (11) and (12) with the metaphorical expression 'there', which represents the destination, evoking the aspect related to the accomplishment of innovation. 'There' is conceived as a physical destination that refers to 'economic future' and 'what we want to achieve. This conception reflects Lim Kok Wing's view on innovation as a concrete and physical destination that can be reached in a journey.

11. Our economic future rests on innovation - but we won't get there if we negate
12. We have to get clear about what we want to achieve (innovation) and how we are going to get there

The journey to innovation is also conceived as full of challenges and obstacles based on the manifestations in (13) and (14). The challenges were conceived as impediments to the journey towards accomplishing innovation as manifested in 'hurdles', 'roadblocks', 'muddy track' and 'stumbling block'. This analysis also revealed that the resistance to innovation comes from the Government itself with its rigid protocol. For example, Lim Kok Wing used the word 'roadblocks' to talk about the obstacle caused by a bureaucracy that impeded the drive toward innovation (14).

13. resistant to new ideas and are, therefore, obstacles to the nation's drive to transform itself?
14. ...there is a mismatch within the Government that desires the transformation (innovation) and the bureaucracy that sets up the roadblocks.

These difficulties could be in the form of complacency, non-conformity, and resistance toward changes. Lim Kok Wing sees this as something that can be resolved with the right use of strategies, i.e., by having a 'roadmap' as manifested in (15) and (16). The roadmap is compulsory in a journey, typically in a journey that is foreign to reach the destination without getting lost. In this case, the roadmap refers to the plan or strategy that has been laid to achieve a particular goal. Therefore, it emphasizes the importance of a well-planned roadmap to lead the nation toward innovation.

15.   We realize that innovation is a big word and a big concept, so we have developed a five-step roadmap
16.   We have to have a proper roadmap tied to a measurable benchmark of any national movement or plan.

Throughout the writings, other aspects of JOURNEY that were highlighted are the elements of speed and direction. In terms of speed, (17) and (18) reflect the need for the people to 'move faster in the process of innovation as they seem to be moving slowly toward the destination. The examples in (17) and (18) demonstrate the eagerness of Lim Kok Wing to quickly move toward innovation.

17.   Now, 2012 has been named the year of the Innovation Movement. It's time to get moving - fast.
18.   To be future-ready is to push harder and move faster

Whereby, in (19), 'the fact is we don't really have a choice to go slow' evokes the sense of urgency in the journey of innovation. This portrays that 'we' in (19) are left behind in this journey; hence 'we' cannot dawdle anymore. In terms of direction, 'forward' and 'ahead' in (20) and (21) were used to show positive development and the progress of innovation. The metaphorical expressions related to speed and direction evoke the metaphor TO INNOVATE IS TO MOVE.

19.   The fact is we don't really have a choice to go slow.
20.   Innovation is the only way forward
21.   Moving ahead as a country aiming for innovation-economy....

The JOURNEY metaphors are found to pervasively structure the concept of innovation in education with various manifestations related to the journey domain. Throughout the writings, the process of innovation is depicted as a journey toward a destination with obstacles along the path. The people involved in the journey are portrayed as travellers whose mission is to reach their destination. In addition, planning and the strategy of the journey are described as a roadmap that guides the travellers. Generally, the JOURNEY metaphor provides a cognitive representation that allows the concept of innovation to be understood and expressed through the embodied experience of movement. It is found to be useful in creating the feeling of optimism and solidarity, which facilitate the accomplishment of positively evaluated goals (Charteris-Black, 2011). By conceptualizing innovation as a journey, this conceptual metaphor works as a cognitive heuristic due to its simplifying function. Through the manifestation, innovation can be understood easier as a physical journey in which the reader has the experience and at least a little knowledge of.

4.2 War metaphor
War lingos permeate various aspects of human life such as business, politics as well as social issues involving poverty, drugs, and healthcare. In addition, common everyday concepts such as arguments, ideas and love are often conceptualized in terms of WAR. The WAR metaphor is ordinarily encountered in daily life due to its long history and conventionality. Several metaphorical expressions of the concept of innovation have been found to be related to the war domain, which placed it as the second most salient conceptual metaphor.

Promoting innovation has been a long battle between the individuals who desire change and the ones who resist it. Thus, innovation is conceived as a war because of the challenges and oppositions that are experienced in the process of innovation, specifically in the context of education. Metaphorical expressions (22) and (23) manifest private sectors as the fighters in the battle of global competition, which requires a more liberalized environment to win. The metaphorical expressions suggest that innovation

is conceived as a serious public issue that requires a strategic solution. In (22), Lim Kok Wing reminded that innovation is not about making more regulations that hinder innovation. On the contrary, the public sector must remove unnecessary red tape to create an environment that encourages innovation.

22. The public sector must see very clearly that innovation does not mean increased regulation. It (innovation) must see a more liberalized environment that facilitates the private sector as it battles global competition.

23. Here is where the private sector is losing the battle (innovation) because the change has not taken place where it must

In addition to the fighting element, the war strategies were also manifested to characterize the innovation strategies that must be undertaken as insinuated by the war domain expressions' launch' and 'strategy. Using weapons in war resembles the common war strategies in most battles. The word 'launch' in (24) and (25) reflect Limkokwing Innovation Bank and Malaysia Education Blueprint 2013-2025 as weapons used to promote innovation. Conceptualizing innovation strategies using the concept of war strategies facilitates people's comprehension of the strategies used in promoting innovation. In this light, education is conceptualized as a strategy in the battle of innovation, as manifested below.

24. the university launched the Limkokwing Innovation Bank that comprises a million creative ideas.
25. The launch of the Malaysia Education Blueprint 2013-2025 to transform an education system... has been in   desperate need of a disruptive strategy.

Apart from that, the mapping of innovators and the resisting party onto the belligerents clearly delineated two opposite party which highlights their conflicts. In this regard, the innovator is conceived as a soldier who fights for the country, whereas the one who resists it as the country's adversary, who need to be eliminated or defeated to achieve the desired goal. Metaphorical expressions (26) and (27) suggest over-regulation and compliance as opponents to innovation. Nonetheless, innovation is also perceived as a threat that will destroy the one who resist it (28).

26. The focus on regulations and compliance is killing the ability of this country to originate and create (innovation).
27. Over-regulation will kill innovation because it suffocates the ability of the sector to create and originate, which are the twin building blocks of innovation.
28. innovation will be a threat that will destroy their lives because when change is upon us, they are the ones who will be the least prepared and the most resistant

Another property of war manifested in the writings on innovation in education is the defensive actions and the war casualties. Within the writings, innovation is perceived as a battle that can leave someone with a permanent effect on someone with the use of linguistic metaphor 'scar' as manifested in (29).

29. I have the 'battle' scars to prove just how much of a challenge it (innovating) has been

In this light, the process of innovating is perceived as something dangerous and challenging. The conception of innovation as a battle suggests that it has the outcome of winning or losing. In the writings, the linguistic metaphors' losing' and 'winning' manifest that innovating is winning, whereas incapability to innovate as losing as manifested in (30).

30. The bastion of this innovation mind power is education, and waiting for the Government to embed in into the system is a losing battle.

Conceptualizing innovation as WAR reflects Lim Kok Wing's awareness toward the challenges that faced those who wish to innovate, i.e., those who resist innovating and the authority who poses resistance, like a physical battle that involves real opponents, war strategies, casualties, and war outcome. The use of the WAR metaphor in Lim Kok Wing's writings evokes his sense of determination to innovate as well as emphasizing it as an arduous task that must be overcome.
Object metaphor

An object is a thing that is physical, tangible and often solid. OBJECT metaphor is one of the salient source domains used in conceptualizing complex and abstract ideas such as LAW (Urbonaitė, 2015) and EMOTION (Kövecses, 1995). Metaphorical expressions in (31), (32), (33), and (34) reflect that innovation is conceived as a physical object. The instances of expressions such as 'see', 'eyeing' and 'found' revealed Lim Kok Wing's conception of innovation as a tangible and discernible object. For instance, the metaphorical expression in (31) describes innovation as an opportunity. Even though it can be argued that opportunity is an

abstract idea, we often hear the phrase, 'Let's grab the opportunity, the opportunity is here and window of opportunity. Hence, innovation and opportunity in (31) are both perceived as physical objects. Whereas in (32), the word 'see' suggests that he saw the changes/innovation in the public and private sector governance. Like (31) and (32), the metaphorical expression in (33) implies that Lim Kok Wing perceives innovation as a physical object that can be observed carefully.

31.   There is no need to address those who see innovation as an opportunity.
32.   He sees innovation in public and private sector governance
33.   In the meantime, the western world is eyeing the whole transformation (innovation) with interest, if not trepidation

Conceiving innovation as an object enables Lim Kok Wing to discuss innovation vividly. Apart from the word 'see', innovation is also manifested as a solid and a concrete object using lexical items 'found' and 'tied'.

34.   Innovation is tied to the creative process
35.   Creativity (innovation) can be found amongst the uneducated and in the poorest parts

In (34), innovation is portrayed as a physical object that can be searched for and discovered even in the poorest part. Hence, innovation is perceived as an object that can be found anywhere. The excerpt in (35) portrayed innovation and the creative process as tangible and physical objects using the lexical item 'tied', which reflects the close relationship between innovation and creativity. Furthermore, innovation is conceived as a complex process using the general characteristics of an object, i.e., size and weight. In (36), innovation is highlighted as a big concept that needs to be broken down for people to understand and adapt in their life.

36.   We have to whittle innovation down to something that the average person from two vastly different backgrounds can adopt and adapt into his or her lifestyle?

By conceiving innovation as a big object that needs to be 'whittled down', it is reflected that Lim Kok Wing views innovation as something complex and needs to be simplified. In (37), the conceptualization of innovation as a big physical object reflects innovation as something important.

37.   While everyone is wrapping themselves around the word innovation, it is good to step back and really take   a good look at what it means

In the conceptualization of the OBJECT metaphor, the force acted on innovation is mapped onto the action needed for innovation. The need to make innovation an integral part of our life is conceived by Lim Kok Wing through the metaphorical expressions 'embed' in (38) and (39). This conceptualization reflected the need to innovate in the education system. Therefore, 'embedding' innovation suggest that innovation should be made an integral part of education by implanting it deep inside the system.
38.   We need to accelerate and embed innovative practices through every stage of education....
39.   For the last 20 years, we have worked tirelessly to embed innovation into the university's ecosystem.

Drawing on the properties of an object, innovation is seen as something with value manifested by linguistic metaphors such as 'value', 'valuable', 'high-end', 'currency', and 'gift'. As seen in the examples, the lexical items further emphasize Lim Kok Wing's conception of innovation as something valuable and important, which would enhance people's desire to attain it.

40.   Whether it is grassroots or high-end innovation,
41.   The real 'currency' of innovation is ironically embedded in the highly intangible value of 'creativity'.
42.   the best gift we can give them is the gift of 'creative literacy' - which is the most valuable human currency in the world today.

In brief, the conceptual metaphor INNOVATION IS AN OBJECT denotes the general level metaphors, with the specific-level metaphor, INNOVATION IS A PHYSICAL OBJECT, THE SIZE OF THE OBJECT IS THE COMPLEXITIES OF INNOVATION, THE FORCE EXERTED ON INNOVATION IS THE ACTION NEEDED FOR INNOVATION and INNOVATION IS A VALUABLE OBJECT.

4.3 Human being metaphor

HUMAN BEING metaphor or personifications permeates our daily discourse. In the writings of innovation in education, several metaphorical expressions that utilized the properties of human beings, namely, human action, human relationship/kinship and human attributes, are found to conceptualize the concept of innovation. A human being can do various physical movements and activities such as touching, sitting, seeing and knowing. In the writings, innovation is conceived as a human being with the sense of touch and sight manifested by the linguistic metaphors 'touch' and 'see' in (43) and (44). The metaphorical expression 'innovation

touches every human being's reflects Lim Kok Wing's conception of innovation as a human who brings physical impact in human lives. In 44, innovation is perceived as a human being that has conflicts with the public sector, where they disagree with each other in many areas. As a result, the growth of innovation is often stunted by the public sector.

43.   it (innovation) touches every human being through every action.
44.   innovation and public sector struggle to see eye to eye

In addition, the conceptualization of innovation as a human who is capable of thinking manifested in (45) using the linguistic metaphor 'know' reflects the capability of innovation in affecting everyone regardless of their origin or their geographical location.

45.   innovation and capacity know no geographical boundaries and cannot be driven.

Apart from ascribing human action to innovation, the relationship/kinship of humans is also mapped on aspects related to innovation using linguistic metaphors such as 'cousin' and 'bedfellow'. The linguistic expressions reflect Lim Kok Wing's conception of innovation as an element that is closely linked to creativity, business friendliness and education, yet again stressing the high value of innovation.

46.   but when it comes to the first cousin of business friendliness-innovation- we are not doing well.
47.   Innovation is creativity's first cousin-the outcome of a thought process that serves to improve something or solve a problem.
48.   innovation and education make strange bedfellows.

Attributes of human are also mapped to the concept of innovation as manifested by several metaphorical expressions found in the writings such as 'imprisoned', 'suffocated and 'killed'. The linguistic metaphors reflect Lim Kok Wing's conception of innovation as a weak human being who can be killed by over-regulation and conformity as manifested in (49) and (50).

49.   Over-regulation will kill innovation because it suffocates the ability of the sector to create and originate which are the twin building blocks of innovation
50.   The invisible ones that imprison ideas, competition, and innovation

Throughout the writings, innovation is repeatedly mentioned as an essential element in growing the country in various aspects, especially in education. Hence, it is vital to create an environment where innovation can thrive and celebrated instead of killed and suffocated as manifested in (49). Thus, to Lim Kok Wing, innovation is regarded as a human being that must be taken care of by giving it motivation, support, and encouragement for it to develop and grow as evoked by 'pursue', 'nurture', and 'encourage' manifested in (51), (52) and (53).

51.   the young people, who would be the easiest to get to adopt a culture of welcoming challenge and pursuing innovation
52.   its Government has encouraged the growth of industrial parks focused on nurturing innovation in technology and biotech
53.   Many initiatives have been put in place to encourage innovation in both the public and private sector

The conceptualization of innovation as a HUMAN BEING portrays Lim Kok Wing's positive attitude toward innovation as something alive and growing.

4.4 Sport metaphor
In Lim Kok Wing's writings, the sports metaphor is discerned to be one of the most frequent metaphors in the conceptualization of innovation. The metaphorical representation of innovation in terms of sports reveals different aspects highlighted by different sports. Race metaphor foregrounded the spirits of competition in people, whereas sport emphasized the aspect of teamwork and strategies. Conceptualizing innovation as a race, specifically, a marathon, suggests that innovation is conceived by Lim Kok Wing as a long and arduous undertaking. This is manifested in the metaphorical expressions such as 'run', 'left behind' ', race' and 'catch up' in (54) and (55).

54.   but now we have to push harder and move faster to catch up with those running in the frontline.
55.   It cannot be that people in rural areas are left behind in this race to innovate.

In the writings, Malaysia is conceived as a runner who is lagging in the process of innovating compared to other countries that are further ahead, as shown in the metaphorical expressions below.

56. no amount of good intentions will stop us from losing valuable time and being left behind when others are racing ahead.
57. The more we argue why the time is not right to make crucial changes to the education system, the more we lose out to the other Asian economies that are racing ahead.

In (56) and (57), Malaysia is positioned as being on the losing side in this innovation race, especially in the education system, which explains his continuous calls for Malaysian to move (run) faster to innovate. The linguistics metaphors 'left behind' and 'racing ahead' suggest that innovation is viewed as a race against other countries.

58. we are good at sprints, but when it comes to the marathon, we lose steam quickly and give up too easily

The metaphorical expression in (58) 'we are good at a sprint, but when it comes to the marathon, we lose steam quickly and give up too easily' reflect Lim Kok Wing's view that Malaysian is good at getting something off the ground but is taking a long time to accomplish it. Meanwhile, within the game metaphors, linguistic metaphors such as 'playing field', 'ball' and 'tackled' describe the innovation ecosystem as manifested in (59), (60) and (61)

59. If we are to keep with the frantic pace of change, we must keep our eye on the ball,
60. It is the only way forward, and each enterprise or conglomerate has tackled innovation in its own way
61. Technological innovation has levelled the playing field- giving the kind of access to education and opportunity

The innovation ecosystem is manifested as a sports metaphor in which the elements of players, game, competition, and goal interact with each other to achieve the common objective, that is, winning. The emphasis is placed on how the players (public and private sectors) work together to get the ball into the goal, i.e., accomplishing innovation. Such emphasis also revealed Lim Kok Wing's conception of the public and private sectors as different kinds of players but belonging to the same team as manifested in the writings. In (61), Lim Kok Wing conceived that everyone in the same playing field as technological innovation gives everyone the same advantage in education. Students and teachers worldwide have access to the internet and various application that can be used in teaching and learning.

62. It (innovation) is the brainpower that makes us want to go further, reach higher, and swing harder

The virtue of diligence is manifested in the metaphorical expressions 'go further, reach higher, and swing harder' (62), which promotes the idea of competitiveness and the need to achieve the goal, i.e., innovation. Throughout Lim Kok Wing's writings on innovation, the use of the SPORT metaphor reflects his belief in the need for the society to work together and be competitive to accomplish innovation in the country.

4.5 Building metaphor
The building is one of the most common source domains listed by Kövecses (2002:17). It captures the elements of construction, structures, and stability of complex abstract systems such as political or economic systems, human relationships, life, mind, et cetera (Kövecses, 2002). The source domain building is mapped onto innovation because it is conceived as a complex abstract system like the concepts of arguments and theories. The conceptualization of INNOVATION IS BUILDING pervades Lim Kok Wing's writings on innovation in education. The metaphorical expressions such as 'build', 'bastion' and 'foundation' reflect Lim Kok Wing's conception of innovation as a building that can be erected, constructed, and structured. In the same vein, several instances of building metaphors related to the complex abstract system of education are also discovered. Lim Kok Wing utilized the elements of building using the aspects of the foundation, the process of construction and the structure of buildings in conceiving innovation. In (63) and (64), the linguistic metaphor 'building' is used to manifest innovation as something that can be built. The construction of innovation is viewed as a process that requires careful and systematic planning. The education system is also conceived as a building that needs to be redesigned to create an ecosystem that builds innovation. This suggests that innovation and the education system are intertwined and highly reliant on each other to produce an innovative nation.

63. The process of encouraging creativity and building innovation should be systematic.
64. It is crucial that steps be taken to re-design the education system and to create an ecosystem that builds innovation.

The linguistics metaphors 'foundation' and '-based- in (65) and (66) suggested the significance of innovation in education.

65. It (innovation) must be embedded into the very foundation of our education system, from schools to universities, so that it becomes second nature.
66. We must become an innovation-based nation.

In addition, the conceptualization of innovation as a building reflects Lim Kok Wing's perspective toward the current education system

67. I feel the education system must be scrapped completely in order to re-build one that serves both people and the nation better.
68. After years of building a system that functions well enough, why go to all that trouble to dismantle and rebuild?

It is suggested that the current education system is an old structure that should be demolished and rebuilt as manifested in (67) and (68). The conceptualization of innovation as a building that needs to be rebuilt reflects his view that the current education is incapable of building an innovative nation; thus, it needs to be redesigned and rebuilt to produce innovative thinkers.

4.6 Force metaphor

Force is a substance directed at an affected party and can cause-effect. There are many kinds of forces, such as gravitational, magnetic, electric, mechanical, et cetera (Kövecses, 2002). In the physical world, the force can be in the shape of waves, fire, wind, storm, or agents pushing, pulling, driving, and sending another thing. These different kinds of forces produce different effects on the thing it acted on. In the writings on innovation, several metaphorical expressions related to force such as 'attract', 'separate' and 'collide' manifest the conceptual metaphor INNOVATION IS A PHYSICAL FORCE. Typically, a force can cause an object to change its velocity. The linguistic metaphors 'separate' and 'attract' in (69) and (70) manifest innovation as a physical force that can divide something apart as well as attract something toward it.

69. Innovation will separate the weakest and strongest economies in Asia
70. Our model of innovation has attracted global attention

Even though a force is intangible, it can produce visible outcomes and effects. Turner and Lakoff (1989) state that force is a substance directed at an affected party and can cause. This also entails that the amount of force controls the amount of change in the affected party. Therefore, conceptualizing innovation as a force evokes its ability to cause and produce effects. The manifestation of the physical force metaphor reflects Lim Kok Wing's conception of innovation as something forceful with a physical impact, as shown in (71).

71. If we have too many of these "people", then we are headed for trouble as those preparing for change collide with those resistant to change.

The force metaphor suggests that innovation is conceived as a process that can be either slowed down or sped up. In a collision, when two objects meet each other, they exert a pushing force on each other. The word 'collide' in (71) manifests the parties as a moving object that is speeding with velocity; when a collision occurs, the object will come to a halt or slow down. In contrast, if an object has a slightly higher velocity than the other object, it can overpower it in the collision by moving in the direction of the object with a higher velocity. Therefore, in the context of innovation, if the party that is preparing for change has a higher velocity, it can stop the resisting parties and take them in the opposite direction.

The linguistic metaphor 'momentum' in (72) suggests that the action to innovate is conceptualized as a moving object.

72. We need the scale and the momentum if we are to become an innovation economy.

Hence, to realize the goal of becoming an innovation economy, the momentum of innovation must either be conserved or increased. Hence, the use of source domain PHYSICAL FORCE in conceptualizing innovation depicted innovation as something that can be accelerated and decelerated as well as producing change and effect.

5. Conclusion

The word innovation is becoming more prevalent in today's world. This present study has been directed at how the concept of innovation is conceptualized in the field of education. This study unravelled seven salient conceptual metaphors in the writings on innovation in education with the source domains JOURNEY, WAR, OBJECT, HUMAN, SPORT, BUILDING and FORCE. The conceptual metaphors manifest innovation in education as a long process that requires careful planning as conceived in the INNOVATION IS A JOURNEY metaphor. The metaphors reflect an attitude towards innovation as something that can be achieved pending people innovating and moving forward and persevering to attain their goals because to innovate requires effort and time. In addition, the use of WAR and OBJECT metaphors reflect the idea of innovation as a challenging process that requires the struggle of the people involved in innovating and an object that can be attained. Using the qualities of objects, innovation is perceived as valuable and significant, increasing people's desire to get it.

Lim Kok Wing's idea of innovation as a human who has a tangible influence on people's lives is reflected in the metaphorical term "innovation affects every human being". Lim Kok Wing's analogies represent his view of innovation as a frail human person who may be murdered by over-regulation and conformity. The usage of the SPORT metaphor throughout Lim Kok Wing's works on innovation demonstrates his view of the need for society to work together and be competitive to achieve innovation in the country. The idea of innovation as a structure that must be rebuilt reflects his belief that present education is incapable of producing inventive minds and that it needs to be reformed and rebuilt to do so. Several metaphorical phrases linked to force, such as 'attract, "separate,' and 'collide,' exhibit the conceptual metaphor INNOVATION IS A PHYSICAL FORCE in the literature on innovation.

Throughout the writing, innovation is conceptualized using familiar concepts such as JOURNEY, SPORT, WAR, HUMAN, OBJECT, BUILDING and FORCE, which makes innovation easier to be discussed and comprehended. This study has provided some evidence on how metaphors can be utilized in discussing abstract concepts. This study also shed light on how innovation can be approached through metaphor analysis, which can facilitate people to understand the concept better. In this study, there are several limitations that must be addressed. Firstly, this study which focussed on the conceptualization of innovation in education, is limited to the investigation of Lim Kok Wing's writings on innovation in education within the period of 2009-2015. Specifically, the book *The Future Is Coming,* and Lim Kok Wing's blog provided the source of the data. In this regard, the sample of the current study is limited to the concept of innovation in education. In addition, the nature of the data is limited to published speeches and the blog writings of Lim Kok Wing. In regards to the analysis, this study employed a qualitative approach, which is largely influenced by the researcher's own intuitions guided by the frameworks adopted from Lakoff and Johnson's (1980) conceptual metaphor theory and Charteris-Black's (2004) critical metaphor analysis. Based on the limitations highlighted, further research should examine a larger discourse of innovation without limiting it to the context of education to generate a wider finding of the conceptual metaphors. In addition, future studies do not have to focus on a single figure to yield a more representable finding on the concept of innovation. Quantitative analysis should be implemented in further research to increase the reliability of the study in both data collection and data analysis procedures, especially in the metaphor analysis process. An interesting topic for further research would be to examine the persuasive effect of metaphor according to Charteris-Black's (2004) Critical Metaphor Analysis. The studies should explore the capabilities of metaphors to persuade people to believe or agree with ideologies. Mixed-method studies should be conducted to test the persuasive effect of metaphor on people by designing a survey that can capture the metaphor persuasive effects.

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