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Conceptual Metaphor in Trading Card Games: The Case of Yu-Gi-Oh!

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The current study aims to demonstrate that trading card games (TCGs), also called collectible card games (CCGs), represent a potentially fruitful area of research in metaphor studies. A popular trading card game called *Yu-Gi-Oh!* is examined, and the argument is made that players utilize the cognitive mechanisms of conceptual metaphor to conceptualize its core game mechanics. Based on the results of a survey (n=186) it was concluded that players conceptualize such game mechanics in line with the logics inherent in the Location Event Structure Metaphor, in conjunction with the metaphors BIRTH IS ARRIVAL, LIFE IS BEING PRESENT HERE, and DEATH IS DEPARTURE. This implies that it is precisely the embodied cognitive mechanisms of conceptual metaphor which allow for a shared, intersubjective understanding between players to exist regarding the meanings of various gameplay scenarios in *Yu-Gi-Oh!*, and possibly in many other trading card games as well.

Keywords: conceptual metaphor, event structure metaphor, image schema, trading card game, Yu-Gi-Oh!

1. Introduction

The *Yu-Gi-Oh! Trading Card Game* is one of the most successful and well-known collectible card games in the world. It managed to set the Guinness World Record for best-selling card game in the world in 2011 with over 25.1 billion cards sold, breaking its previously held world record set in 2009 with over 22.5 billion cards sold. Not only that, but the video game adaptations of the card game also managed to set a world record in 2010 for best-selling console turn-based strategy series with worldwide sales of over 14 million units. Further testimonies of the card game's massive popularity are the numerous national-level tournaments organized all across the globe as part of the *Yu-Gi-Oh! Championship Series* (abbreviated as YCS), the 100th of which, held from 23-25 March 2012 at the Long Beach California Convention Center in Long Beach, California, USA, holds the world record for the largest trading card game tournament in the world with 4,364 participants.

What these achievements clearly demonstrate is that the *Yu-Gi-Oh! Trading Card Game* has become a global cultural phenomenon in its own right, and therefore, just like with works of literature, music, movies, cartoons, comics, video games, and other forms of media, a cognitive scientific inquiry into this cultural phenomenon might have something to reveal not only about the phenomenon itself, but also about an aspect of human culture and the way we think. As such, the current paper argues that trading card games in general, being one of the most popular genres of gaming, could be of special interest to the cognitive sciences, as their game mechanics represent, in essence, specialized symbolic systems that allow players to establish an intersubjective understanding of imaginary game-

internal events. The argument is made that these seemingly arbitrary game mechanics of trading card games do, in fact, follow some sort of metaphorical logic, which, if true, would mean that they are not arbitrary at all: instead, it would mean that they make use of embodied metaphorical reasoning, explaining why players across the globe are able to understand them and accept them as being meaningful in the first place.

In what follows, first, I briefly describe the phenomenon of conceptual metaphor, specifically focusing on the Event Structure Metaphor (Section 2). Second, I describe specific aspects of the game mechanics of *Yu-Gi-Oh!* which are deemed necessary for the purposes of this study (Section 3). Third, I explain the methodology and the data collection process (Section 4). Fourth, the data are analyzed in light of Conceptual Metaphor Theory (Section 5). Fifth, and finally, I summarize my conclusions (Section 6).

2. Conceptual Metaphor Theory

One of the basic tenets of cognitive linguistics is that the structure of our conceptual system has to be a result of our experiences in the world with the bodies that we have. This means that "the concepts we have access to and the nature of the 'reality' we think and talk about are a function of embodiment: we can only talk about what we can perceive and conceive, and the things that we can perceive and conceive derive from embodied experience" (Evans & Green, 2006, p. 46). Cognitive linguists hold the view that "the very structure of reason itself comes from the details of our embodiment. The same neural and cognitive mechanisms that allow us to perceive and move around also create our conceptual systems and modes of reason" (Lakoff & Johnson, 1999, p. 4). Conceptual metaphor is a result of this embodiment. Reasoning using conceptual metaphors means understanding a usually

more abstract concept, which is less accessible via sensory perception, called the target domain, in terms of another, perceptually more easily accessible concept, the source domain, and this happens primarily based on an underlying analogy, i.e., a conceptual similarity of some sort between those concepts (Lakoff, 1993, pp. 206–207). There are many concepts that are generally understood in terms of metaphor. Abstract concepts like life and death systematically fall into this category, as demonstrated by Lakoff and Turner (1989). Some metaphors relating to life would be, among many others, LIFE IS A JOURNEY, LIFE IS BEING PRESENT HERE, LIFE IS A FLUID, and LIFETIME IS A DAY, and for most such metaphors relating to life there are complementary metaphors relating to death as well, such as DEATH IS THE END OF LIFE'S JOURNEY, DEATH IS DEPARTURE, DEATH IS THE LOSS OF FLUID, and DEATH IS NIGHT. Metaphorical mappings such as these explain how intersubjective understanding is made possible when figurative language is being used.

However, conceptual metaphor is by no means expressed only in linguistic form. Research in the field of cognitive linguistics has uncovered the existence of systematic conceptual metaphors even in non-spoken forms of language like gesture (Corts & Pollio, 1999; Cienki & Müller, 2008; Chui, 2011, 2017; Lhommet & Marsella, 2014), but also in various forms of visual media like films (Urios-Aparisi, 2010; Forceville & Renckens, 2013; Winter, 2014), comics and cartoons (Potsch & Williams, 2012; Tasić & Stamenković, 2015; Forceville, 2016, 2017), and even in the seemingly non-figurative field of mathematics (Lakoff & Núñez, 2000; Núñez, 2005; Núñez & Lakoff, 2005). Findings like these give further credence to the claim that metaphor is an expression of the way we think, first and foremost. In a similar vein, the current study suggests the existence of conceptual metaphor in a previously unstudied domain, namely that of trading card games

(TCGs), also called collectible card games (CCGs), by examining a popular card game called *Yu-Gi-Oh!* There is one specific system of metaphors in particular that seems to be a likely candidate for conceptualizing trading card game mechanics, namely the Event Structure Metaphor.

2.1 Location Event Structure Metaphor

The notion of the Event Structure Metaphor (ESM) was introduced by Lakoff (1990, 1993) and later expanded upon by Lakoff & Jonson (1999, chapter 11). It pertains to a set of metaphorical mappings that generalize over a wide range of linguistic expressions, and is a reflection of how events are understood metaphorically. As is the case with conceptual metaphor in general, the mappings (submetaphors) of the ESM allow us to understand various abstract aspects of events like states, changes, causes etc. in terms of more concrete, physical concepts like location, motion, force and so on. There is an object/location duality in the ESM, as it is made up of two separate systems of metaphors: one which is based on locations, called the Location Event Structure Metaphor (location ESM), and one which is based on objects, known as the Object Event Structure Metaphor (object ESM). Out of the two, only the former is relevant for the purposes of this paper, and therefore a list of the mappings (submetaphors) encompassed by the location ESM is given below (Lakoff & Johnson 1999, p. 179; with examples from Lakoff & Johnson's work):

(1) STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE): *They **are in** love*;

(2) CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS): *He **fell into** a depression*;

(3) CAUSES ARE FORCES, and CAUSATION IS FORCED MOVEMENT (FROM ONE LOCATION TO ANOTHER): *The news **propelled** the stock market **to** record heights*;

(4) ACTIONS ARE SELF-PROPELLED MOVEMENTS: *I am **moving** at a snail's pace*;

(5) PURPOSES ARE DESTINATIONS: *He finally **reached** his goals*;

(6) MEANS ARE PATHS (TO A DESTINATION): *She did it **the other way***;

(7) DIFFICULTIES ARE IMPEDIMENTS TO MOTION: *We ran into **a brick wall***;

(8) FREEDOM OF ACTION IS THE LACK OF IMPEDIMENTS TO MOTION: ***Break out of** your daily routine*;

(9) EXTERNAL EVENTS ARE LARGE, MOVING OBJECTS: *You gotta go with the **flow***;

(10) LONG TERM, PURPOSEFUL ACTIVITIES ARE JOURNEYS: *You should **move on** with your life*.

The location ESM is a rich and complex system, and its individual mappings interact in various ways, leading to a long list of entailments which we will not go into detail here (for a more in-depth overview of these entailments, see Lakoff, 1993; Lakoff & Johnson, 1999). This system of metaphors is highly productive and accounts for a myriad of linguistic metaphors not only in English (Lakoff, 1990, 1993; Lakoff & Johnson, 1999; Radden, 1995), but in other, genetically distant languages as well, like Chinese (Yu, 1998), Arabic (Aldokhayel, 2008), and Hungarian (Kövecses, 2005). Furthermore, this system of metaphors is prevalent in language regardless of modality, as demonstrated by Roush (2016), who looked at the submetaphors of the location ESM, which are thought to be universal across spoken languages, and found that all of them can be identified even in the American Sign Language lexicon. Kövecses (2010, p. 208) argues that this system of

metaphors revolves around a central mapping, namely EVENTS ARE MOVEMENTS, and that this central mapping is built on a category-based metonymic relationship, i.e., that there is contiguity in experience between the superordinate category EVENT and its subcategory MOVEMENT. He hypothesizes that this leads to contiguity in experience between the source domains and the target domains in the individual mappings of the Event Structure Metaphor, which might explain why this metaphorical system can be found in languages across the world. (It should be noted, however, that the EVENTS ARE MOVEMENTS metaphor is productive not only in the realm of language, but also in the visual realm, as indicated by studies on the JOURNEY metaphor in animation films; see for example Forceville & Jeulink, 2011.)

Mappings between source and target domains are by no means arbitrary, and this is true for the location ESM as well. Metaphor comes into being only when there is an analogous relationship of some sort between two domains, so that inferences can be drawn about the usually more abstract target domain based on what we know about the usually more concrete source domain. To explain this phenomenon, Lakoff (1990) formulated the Invariance Hypothesis, in a subsequent publication renaming it the Invariance Principle (Lakoff, 1993), which states that "metaphorical mappings preserve the cognitive topology (that is, the image-schema structure) of the source domain, in a way consistent with the inherent structure of the target domain" (Lakoff, 1993, p. 215). It is a general principle that describes a wide range of regularities in both our conceptual system, as well as our linguistic systems. Image-schemas, which are at the core of this principle, are thought to be the mechanism by which meaning is made possible for embodied creatures like us whose cognitive operations emerge from sensorimotor interactions with the environment they

inhabit (Johnson, 2005, p. 15). They have to be understood as experiential gestalts, which are the result of ongoing interactions between the brain, the body and the world, and therefore image-schematic reasoning necessitates embodied simulations of events (Gibbs, 2005, p. 115). The following passage by Johnson (1987, p. 29) captures the essence of the notion of image-schemas:

> In order for us to have meaningful, connected experiences that we can comprehend and reason about, there must be pattern and order to our actions, perceptions, and conceptions. *A schema is a recurrent pattern, shape, and regularity in, or of, these ongoing ordering activities*. These patterns emerge as meaningful structures for us chiefly at the level of our bodily movements through space, our manipulation of objects, and our perceptual interactions. [emphasis by Johnson]

With regard to the location ESM, two image-schemas are of considerable interest to us: the CONTAINER schema, and the SOURCE-PATH-GOAL schema. The CONTAINER schema structures our common experiences of boundedness and containment (Johnson, 1987, p. 21), its structural elements being an interior and an exterior, as well as a boundary separating the two (Lakoff 1987, p. 272). The SOURCE-PATH-GOAL schema, on the other hand, structures our experiences of movement in space, having structural elements such as a point of departure (the SOURCE), a series of interconnected locations (the PATH), a point where the movement comes to a halt (the GOAL), and naturally a direction from SOURCE to GOAL (Lakoff, 1987, p. 275). Aside from these key image-schemas, the location ESM also involves a specific group of image-schemas, called FORCE schemas. The FORCE schemas at work in the various submetaphors of the location ESM include: the COMPULSION schema, representing the force of one entity moving another entity along a path, while the latter is

unable to resist this force; the BLOCKAGE schema, structuring the experience of an entity's force being blocked or resisted by some kind of impediment or restraint; as well as its opposite counterpart, the REMOVAL OF RESTRAINT schema, which structures the experience of an impediment or restraint to an entity's force being removed (Johnson, 1987, pp. 45–47).

This brief overview of the location ESM will be followed by a short introduction of a few basic game mechanics of *Yu-Gi-Oh!* which, as will be argued later on, can be seen as adhering to the logic of, and therefore being a manifestation of, the location ESM.

3. *Yu-Gi-Oh!* game mechanics and the location ESM

The following segment represents only a brief overview of a few basic rules and mechanics in *Yu-Gi-Oh!* This overview is intended to give the reader a sufficient understanding of the game's mechanics so as to lay the groundwork for a subsequent understanding of the aims and results of this research. Therefore, only those aspects of the game mechanics will be mentioned which are deemed necessary for the purposes of this study (for a more in-depth explanation of the game's rules, please refer to the newest version of the official rulebook). Expressions pertaining to card types and card locations will be capitalized, since this is in accordance with how they appear in official rulebooks and card texts.

The following excerpts from the 10th version of the official rulebook for *Yu-Gi-Oh!* summarize the overall concept and aims of the game:

> "In this game, two players Duel each other using a variety of Monster, Spell, and Trap Cards to defeat their opponent's monsters and be the first to drop the other's LP (Life Points) to 0" (Official rulebook ver. 10, p. iii). "Each player starts a Duel with

> 8000 LP (Life Points). You win a Duel if: you reduce your opponent's LP to 0; if your opponent is unable to draw a card; or if a card's special effect says you win. If you and your opponent both reach 0 LP at the same time, the Duel is declared a draw" (Official rulebook ver. 10, p. 32).

Monster Cards, Spell Cards and Trap Cards are the three main card types in the game, and they can be differentiated based on the colors of their card frames (Spell Cards are green, Trap Cards are purple, while Monster Cards come in various colors). They also have different functions. Monster Cards have 'attack' and 'defense' values, and can therefore be used to 'conduct battles' (although most Monster Cards also have special abilities called 'effects'). Spell Cards and Trap Cards cannot be used for 'attacking' and 'defending,' but instead have various 'effects' that can further the game state in all sorts of ways. Spell Cards and Trap Cards are in stark contrast to Monster Cards. This contrast can be seen, for instance, in the fact that Monster Cards have their own dedicated zones on the game mat called Monster Zones, while Spell Cards and Trap Cards are categorized together and share the zones they can be placed in, called Spell & Trap Zones.

During a game of *Yu-Gi-Oh!*, which is officially referred to as a Duel, each player uses a Main Deck constructed of 40 to 60 Monster, Spell and Trap Cards, and they take turns playing their cards. Players draw cards from the Main Deck, i.e., they take the top card of the Main Deck and add it to their Hand, after which they may place their cards onto the game mat to interact with their opponent. The game mat is essentially the gameplay area (each player has their own game mat), and it is divided into several distinct parts called zones (as can be seen in Figure 1). For the purposes of this paper, the Hand and the zones on the game mat will be collectively referred to as *card locations* (as they represent the

different places where a card can be located during a Duel). The various zones on the game mat include:

- *Monster Zones*: These are the parts of the game mat where Monster Cards may be either ‘summoned’ (placed face-up) or ‘set’ (placed face-down).
- *Spell & Trap Zones*: These are the parts of the game mat, five zones in total, where Spell Cards and Trap Cards may be either ‘activated’ (placed face-up) or ‘set’ (placed face-down). (The Field Zone in the upper left corner of the game mat is also used for Spell Cards, but only specific ones called Field Spell Cards. As this distinction is not deemed relevant for the purposes of the current study, it will not be treated as a distinct entity from other Spell & Trap Zones.)
- *Graveyard*: The upper right corner of the game mat, which functions as the discard pile. All three card types (Monster, Spell and Trap) can be placed in the Graveyard. There are several ways a card can end up in the Graveyard, for example by being ‘discarded,’ ‘destroyed,’ etc.
- *Banished Zone*: It is not a zone that is actually located on the game mat itself; hence, the term itself is only semi-official. When a card is ‘banished,’ it is placed anywhere outside of the game mat, which symbolizes that the player will not be able to use that card for the remainder of the Duel (unless a card effect returns it from the Banished Zone to another location where it can be interacted with).
- *Deck (Main Deck)*: An area in the lower right corner of the game mat. The Main Deck may contain Monster Cards, Spell Cards and Trap Cards, and per default, these cards are kept face-down.

- *Extra Deck*: An area in the lower left corner of the game mat. The Extra Deck contains special kinds of Monster Cards, which are not added to the Hand, but rather 'summoned' directly from the Extra Deck once their specific summoning requirements are met. Cards in the Extra Deck are per default kept face-down.

Figure 1. Depiction of the various zones on the game mat.

It has to be noted, as this will be relevant later on, that the Monster Zones together with the Spell & Trap Zones are collectively referred to as the Field. (It should be noted that the term Field is ambiguous in *Yu-Gi-Oh!*, since it is also used to refer to the game mat itself, and there is furthermore a specific subtype of Spell Card called Field Spell Card which is placed in the Field Zone. To avoid confusion, throughout this paper the Field will refer only to the Monster Zones and Spell & Trap Zones, while the gameplay area as a whole will be consistently called the game mat.) The Field is the part of the game mat where most of the interaction between players happens (this is where Monster Cards are 'summoned' to, where 'battles' are conducted, and where Spell Cards and Trap Cards are usually 'activated'). It is therefore in stark contrast with other card locations such as the Graveyard, the Hand, the Main Deck, the Extra Deck and the Banished Zone.

Since every card location has different implications in the sense that the current location of any given card determines in what way players can or cannot interact with that card, in a metaphorical sense these locations may represent different states a card may be in. Because of this connection between states and locations, the Location Event Structure Metaphor seems to be the best candidate for an explanation of how the game mechanics and various gameplay scenarios can be conceptualized. Two of its submetaphors in particular seem to be relevant: STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE), and CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS).

However, since *Yu-Gi-Oh!* is built around player interaction, and since through this interaction a player can also affect a change in the location of an opponent's card, two more submetaphors have to be at play here as well: CAUSES ARE FORCES, and CAUSATION IS FORCED MOVEMENT (FROM ONE LOCATION TO ANOTHER). There are several ways in which an opponent's card can be moved to another location, the most common of which are:

- *destroying by battle* (Monster Cards only): If two monsters 'battle,' the weaker monster is sent from the Field to the Graveyard, and it is considered 'destroyed.'
- *destroying by card effect*: The designated card is sent from its current location (Hand, Field, or Deck) to the Graveyard, and it is considered 'destroyed.'
- *sending to the Graveyard*: The designated card is sent from its current location (Hand, Field, or Deck) to the Graveyard, but it is not considered 'destroyed.' This distinction is relevant, as many cards have effects that only activate if they are sent to the Graveyard as a result of 'being destroyed.'

- *banishing*: The designated card is removed from its current location (Hand, Field, Deck, or Graveyard) and placed outside of the gameplay area.
- *returning to the Hand*: The designated card is moved from its current location (Field, Graveyard, or Banished Zone) to the Hand.
- *returning to the Deck*: The designated card is moved from its current location (Hand, Field, Graveyard, or Banished Zone) to the Deck.

It is crucial to note that the main difference between the above ways of removing an opponent's card lies in the specified destination the affected card is moved to (which is in most cases explicitly encapsulated by the name of the type of removal). Therefore, if analyzed in the framework of the location ESM, the initial location of a card represents the SOURCE-portion of the SOURCE-PATH-GOAL schema (which is at the core of our understanding of motion), while the type of removal a given card is affected by represents both the FORCE initiating the movement (i.e., the CAUSE of the movement) as well as the GOAL-portion of the schema.

By this point it should be clear that the terminology used in *Yu-Gi-Oh!* is for the most part figurative in nature, so much so that it is practically impossible to talk about most gameplay scenarios in a non-figurative way. Given that the game's core theme revolves around battles between monsters, the majority of these figurative expressions in one way or another, explicitly or implicitly, converge around the notions of life and death. As the notions of life and death represent different states of being, and the act of dying represents a change in an initial state of being (i.e., a change from life to death), these notions may be of great utility in uncovering whether there is a metaphorical logic akin to the location ESM

underlying the way players conceptualize the core game mechanics involving card locations and card interactions.

4. Data and methodology

The data for the analysis were collected using an anonymous survey which was posted in various Facebook groups dedicated to *Yu-Gi-Oh!* A total of 186 respondents filled out the survey (172 males, 10 females, 4 preferred not to disclose their sex). There were a total of 48 survey items, designed to test whether the respondents conceptualize the game mechanics based on the logic inherent in the Location Event Structure Metaphor. Each survey item involved a statement about a specific gameplay situation, and the respondents were asked to quantify their level of agreement with the statement on a scale ranging from 1 to 7. The meanings of the numerical values were presented to the respondents as follows: 1 - I firmly disagree with the statement, 2 - I disagree with the statement, 3 - I only slightly disagree with the statement, 4 - I am unsure, 5 - I only slightly agree with the statement, 6 - I agree with the statement, 7 - I firmly agree with the statement. The survey items were designed with three hypotheses in mind:

(1) Whether or not respondents deem a particular card to be 'alive' (representing a figurative state of being) is dependent on the card's current location. If correct, this would imply the workings of the STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE) submetaphor of the location ESM.

(2) Whether or not respondents deem a particular card to be figuratively 'dying' (representing a figurative change in an initial state of being) is dependent on where

it is moved from and where it is moved to by the opponent, as well as on the manner (the kind of removal) by which this change in card location occurs. If correct, this would imply the co-activation of three submetaphors of the location ESM, namely CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS), CAUSES ARE FORCES, and CAUSATION IS FORCED MOVEMENT (FROM ONE LOCATION TO ANOTHER).

(3) A difference is to be expected with regard to different card types, since Monster Cards are meant to represent animate entities, unlike Spell Cards and Trap Cards.

Based on which hypotheses they were designed to test, the 48 survey items fall into two distinct sets. One set of survey items, a total of 13 items (7 concerning Monster Cards, 6 concerning Spell/Trap Cards), tested the first and third hypotheses. The second set of survey items, 35 in total (18 concerning Monster Cards, 17 concerning Spell/Trap Cards), tested the second and the third hypotheses. Accordingly, the following segment, representing an analysis of the data, will be divided into three parts. Since the data in question are ordinal, the most adequate measure of central tendency for the interpretation of the data is the median. Therefore, the medians for each item will be the primary basis for the analysis. However, despite the data being ordinal in nature, the mean was also taken to be meaningful to the extent that in cases involving two or more items with identical medians, their respective means allowed for a more detailed interpretation.

5. Analysis

5.1 STATES ARE LOCATIONS in *Yu-Gi-Oh!*

This section will be concerned with the effect of card location on whether a Monster Card

is deemed by players to be an animate or inanimate entity. To test this, the respondents had to quantify their level of agreement or disagreement with the statement that a Monster Card is alive if one of the following conditions holds: a) it is in the Main Deck; b) it is in the Extra Deck; c) it is in the Hand; d) it is face-up on the Field; e) it is set (face-down) on the Field; f) it is in the Graveyard; g) it is banished. These conditions pertain to various locations where a Monster Card can be located during the course of a Duel. The responses reveal a clear pattern (see Table 1).

Table 1. A Monster Card is alive if...

Condition	1	2	3	4	5	6	7	Mean	Median
Field (face-up)	6.45%	0.00%	1.61%	4.30%	4.30%	12.37%	70.97%	6.21	**7**
Field (face-down)	10.22%	3.76%	5.91%	15.59%	9.68%	14.52%	40.32%	5.16	**6**
Hand	16.13%	2.69%	11.83%	24.19%	12.37%	9.14%	23.66%	4.36	**4**
Extra Deck	23.12%	9.14%	8.06%	17.74%	10.75%	7.53%	23.66%	4.01	**4**
Main Deck	23.12%	8.06%	9.68%	18.82%	10.22%	8.60%	21.51%	3.97	**4**
Graveyard	47.31%	10.75%	10.22%	11.83%	7.53%	3.23%	9.14%	2.68	**2**
Banished Zone	46.24%	17.74%	9.14%	9.14%	6.99%	2.15%	8.60%	2.54	**2**

It is clear that the only location where a Monster Card is seen as an animate entity is the Field (the Monster Zone). Furthermore, the placement of the card, i.e., whether it is face-up or face-down on the Field, also seems to be a factor. A Monster Card being face-up on the Field seems to be the most typical case of animacy, because once a Monster Card is 'summoned' by being placed face-up on the Field, all the information on the card becomes public knowledge (meaning that it is visible and known to both players), and the Monster Card can be used in various ways to directly further the game state (it is in a metaphorical sense able to act, since it can 'attack,' 'use its special effects,' etc.). On the other hand, if a Monster Card is 'set' onto the Field face-down, though technically also present on the Field, its identity is unknown to the opponent, and it cannot 'attack' or 'use its effects.'

Two conceptual metaphor complexes seem to be at play here. First, the correlation between the state of being present on the Field (where the majority of the interactions unfold) and the notion of life can be seen as an instance of "a general metaphorical way we have of conceiving of birth, life, and death in which BIRTH IS ARRIVAL, LIFE IS BEING PRESENT HERE, and DEATH IS DEPARTURE" (Lakoff & Turner, 1989, p. 1). In this sense, life is a bounded region in space which has an interior and an exterior, whereby birth (or coming into existence) is the equivalent of moving from outside of this region to its inside. In *Yu-Gi-Oh!*, the Field acts as exactly such a bounded region, and a monster being 'summoned' from outside of the Field (e.g., the Hand) parallels our notion of coming 'into' existence. Second, based on the factor of card placement, i.e., whether a card is face-up or face-down on the Field, a second metaphor complex seems to be active, which could be postulated as BEING ABLE TO ACT IS BEING ALIVE (since face-up monsters can act, while face-down monsters cannot). In the case of face-up Monster Cards, both metaphor complexes are co-activated, while in the case of face-down Monster Cards the latter metaphor is inactive.

The medians (along with the frequency distributions) of the subsequent three conditions, namely being in the Hand, in the Extra Deck, and the Main Deck, show that there is no consensus among the respondents on whether to associate these locations with life or not. If the metaphor LIFE IS BEING PRESENT HERE maps onto the Field, as was previously mentioned, then by inference the metaphor BIRTH IS ARRIVAL has to map onto the act of being 'summoned' from somewhere outside of the Field. The Hand is one such Field-external location. Although a Monster Card in the Hand is not yet deemed to be an animate entity because it is not yet present on the Field, the potential is there for it to be 'summoned' directly to the Field at any point, usually without any specific requirements.

That is why, out of these three conditions, the Hand is the location which ranked highest (based on the mean). The Extra Deck contains special types of Monster Cards, which can only be 'summoned' to the Field if specific requirements are met. This usually means having a certain number of monsters of a certain kind on the Field that can then be used as so-called 'materials' for 'summoning' a monster from the Extra Deck. These requirements are likely to be the reason why the Extra Deck was ranked lower than the Hand. However, both the Hand and the Extra Deck are locations that directly precede the Field with regard to the path the monster has to take in terms of the BIRTH IS ARRIVAL metaphor. In an image-schematic sense, there is no subsequent location between SOURCE and GOAL. Contrast that with the Main Deck, in which case a card (usually) first has to go to the Hand (by being drawn from the Main Deck) before being summoned to the Field, and it becomes apparent why this condition was rated slightly lower than the previous two: the PATH between the SOURCE and the GOAL is longer, hence the arrival of a monster from the Main Deck is deemed to be a usually more distant event. (There are exceptions to this, as there are certain effects that allow for a monster to be 'summoned' directly from the Main Deck to the Field. Nevertheless, this is a deviation from the standard scenario.)

The last two conditions, namely being in the Graveyard and the Banished Zone, clearly did not evoke the notion of life. From these, being in the Graveyard is perhaps the most straightforward condition to interpret. The very term Graveyard in itself evokes our general notion of the life-death cycle, where graveyards are intrinsically connected to the notion of death. If the Field is conceptualized as a CONTAINER (a bounded region on the game mat) representing life, then the Graveyard is, by the same token, to be seen as a CONTAINER representing death. Furthermore, coming back yet again to the metaphor LIFE IS

BEING PRESENT HERE, if the concept of life maps onto the Field, then by inference, the metaphor DEATH IS DEPARTURE invariably maps onto the act of a monster leaving the Field. This also applies to the state of being 'banished,' which is (at least based on the means) ranked even lower than being in the Graveyard, despite the notion of graveyards being directly associated with death. The reason this is the case has to do with an aspect of death in *Yu-Gi-Oh!*, which deviates from our everyday understanding of the concept. In nature, death is final. There is no coming back from it. In *Yu-Gi-Oh!*, however, this is not necessarily the case. If a monster is in the Graveyard, it can still be brought back to the Field with certain card effects. Thus, the metaphorical departure of the living does not necessarily have to be one of no return. Because of this, the state of being 'banished' was initially introduced to the game as a permanent way to get rid of cards by placing them outside of the game mat, for all intents and purposes permanently removing them from the game. Thematically it was implied that such monsters lose their souls or get sent to another dimension entirely. Over time, as the mechanic gained popularity, more and more cards were made which could bring back 'banished' cards to more accessible locations, such as to the Field, the Hand, or even just to the Graveyard, effectively neutralizing the permanent nature of this kind of removal. Nevertheless, the number of cards able to bring back cards from the Banished Zone is lower than the number of those that bring back cards from the Graveyard, therefore it does not surprise that being 'banished' evokes the notion of life even less than being in the Graveyard. All of this entails that when players conceptualize death with regard to the states of being in the Graveyard and being in the Banished Zone, this is done via juxtaposition with the complementary notion of rebirth, and the extent to

which these card locations invoke the notion of death is inversely proportional to the perceived possibility of rebirth from those locations.

5.2 CHANGES ARE MOVEMENTS, CAUSES ARE FORCES, and CAUSATION IS FORCED MOVEMENT in *Yu-Gi-Oh!*

This section will be concerned with the effect of changes in card location on whether a Monster Card is seen by the players as 'dying.' Accordingly, a set of survey items have been formulated in such a way as to specify where a card is moving from (the SOURCE-location) and where it is moving to (the GOAL-location), the latter of which being an inherent part of the CAUSE of the change in location (I will call this the CAUSE/GOAL-variable). It should be noted that the number of possible SOURCE-locations is dependent on the CAUSE/GOAL-variable. For example, 'destruction by battle,' which moves a Monster Card to the Graveyard, happens exclusively from the Field, while 'banishment,' which moves a card to the Banished Zone, can occur from practically every location outside of the Banished Zone itself (in the current study this amounts to four such locations). For this study, a total of five SOURCE-locations were considered: Deck, Hand, Field, Graveyard, and Banished Zone.

The respondents were asked to rate their level of agreement with a total of 18 statements beginning with "a Monster Card dies if...", where the follow-up to the statement included the CAUSE of motion (coinciding with the GOAL-location) on the one hand, and the SOURCE-location on the other as categorical variables in the following way: "...it is banished [CAUSE/GOAL] from the Field [SOURCE]". There were six variables relating to the CAUSE/GOAL-variable, and each went along with one to four variables relating to the

SOURCE-location, depending on what the rules of the game allow. The combinations can be seen here (the possible SOURCE-locations are given in brackets after every CAUSE/GOAL-variable): 1) 'destruction by battle (from the Field),' 2) 'destruction by card effect (from the Deck, Hand, or Field),' 3) 'being sent to the Graveyard (from the Deck, Hand, or Field),' 4) 'banishment (from the Deck, Hand, Field, or Graveyard),' 5) 'being returned to the Hand (from the Field, Graveyard, or Banished Zone),' and 6) 'being returned to the Deck (from the Hand, Field, Graveyard, or Banished Zone).' Table 2 outlines the responses.

Table 2. A Monster Card dies if…

Condition	1	2	3	4	5	6	7	Mean	Median
Destr. by battle (Field)	6.45%	0.54%	3.23%	10.22%	7.53%	16.13%	55.91%	5.84	**7**
Destr. by effect (Field)	5.91%	2.15%	4.30%	11.29%	9.14%	15.59%	51.61%	5.69	**7**
Sent to GY (Field)	9.14%	1.08%	8.06%	10.75%	12.90%	11.83%	46.24%	5.38	**6**
Banished (Field)	13.44%	7.53%	7.53%	11.29%	6.45%	12.37%	41.40%	4.92	**6**
Destr. by effect (Hand)	15.59%	5.91%	12.90%	19.89%	11.83%	7.53%	26.34%	4.34	**4**
Sent to GY (Hand)	16.13%	8.60%	12.37%	20.43%	12.37%	6.45%	23.66%	4.18	**4**
Destr. by effect (Deck)	17.20%	8.60%	11.83%	23.12%	12.37%	8.06%	18.82%	4.04	**4**
Banished (Hand)	20.43%	12.37%	10.75%	15.05%	10.75%	6.45%	24.19%	3.99	**4**
Banished (Deck)	19.35%	17.20%	10.75%	16.13%	9.68%	3.23%	23.66%	3.84	**4**
Sent to GY (Deck)	24.19%	12.90%	9.14%	17.20%	9.14%	9.14%	18.28%	3.75	**4**
Banished (GY)	27.42%	15.05%	10.22%	12.37%	2.69%	6.99%	25.27%	3.70	**3**
Ret. to Deck (Field)	43.01%	11.83%	10.22%	17.20%	7.53%	3.23%	6.99%	2.72	**2**
Ret. to Deck (Hand)	45.70%	9.14%	14.52%	18.28%	3.76%	4.30%	4.30%	2.55	**2**
Ret. to Deck (GY)	50.00%	11.83%	7.53%	17.74%	2.69%	4.84%	5.38%	2.47	**1.5**
Ret. to Deck (Ban)	50.00%	12.37%	11.29%	16.13%	3.23%	2.69%	4.30%	2.35	**1.5**
Ret. to Hand (Field)	52.15%	12.37%	8.60%	14.52%	5.38%	2.69%	4.30%	2.34	**1**
Ret. to Hand (GY)	53.23%	12.90%	10.75%	15.59%	2.69%	2.15%	2.69%	2.19	**1**
Ret. to Hand (Ban)	57.53%	12.37%	10.22%	12.37%	2.69%	2.15%	2.69%	2.08	**1**

To interpret these responses, the results from Section 5.1 will be made use of, which show to what degree a Monster Card is considered to be 'alive' when in a specific location. The hypothesis is that a change in a Monster Card's location affects whether (and to what extent) the respondents conceptualize that monster to be changing states (from being 'alive' to being 'dead,' or vice versa), depending on the SOURCE-location and the GOAL-location of

this change in location. Based on the results outlined in Table 1, we know to what extent the respondents associate the five SOURCE-locations in question with the notion of life. The ranking, from most to least associated with life, goes as follows:

Field → Hand → Deck → Graveyard → Banished Zone

Going by this, it is to be expected that in Table 2 these SOURCE-locations should appear in the same order, regardless of the CAUSE/GOAL-variable they appear with. And in fact, this is indeed the case for every single CAUSE/GOAL-variable that is combined with more than one SOURCE-location (this excludes 'destruction by battle,' as the only SOURCE-location in this case is the Field): in the case of 'destruction by card effect' as well as in the case of 'being sent to the Graveyard' the ranking of SOURCE-locations is Field → Hand → Deck; for 'banishment' it is Field → Hand → Deck → Graveyard; for 'being returned to the Deck' it is Field → Hand → Graveyard → Banished Zone; and for 'being returned to the Hand' it is Field → Graveyard → Banished Zone. This indicates that the less a SOURCE-location is associated with the notion of life, the lower is the degree to which a monster is seen as 'dying,' regardless of the CAUSE/GOAL-variable.

Looking at the medians, it becomes apparent that only four conditions resulted in agreement with the statement that a Monster Card 'dies' under those conditions, and common to them all is that the SOURCE-location is in each of them the Field. This is, again, in line with the results of Section 5.1, which demonstrated that the Field (specifically the Monster Zone) was the only location where a monster is, on average, deemed to be 'alive.' Nonetheless, there were two conditions that evoked disagreement from the respondents,

despite these conditions also involving the removal of a Monster Card from the Field. The CAUSE/GOAL-variables in these conditions were 'being returned to the Hand' and 'being returned to the Deck.' However, these should by no means be seen as deviations from the pattern. As was previously concluded, there appears to be a cognitive model in *Yu-Gi-Oh!* that is a manifestation of our pervasive BIRTH IS ARRIVAL, LIFE IS BEING PRESENT HERE, and DEATH IS DEPARTURE metaphor complex, which assigns specific game locations to one of these metaphors. When this metaphor complex is interpreted in terms of the five card locations in question, the following pattern emerges:

BIRTH IS ARRIVAL → Deck, Hand

LIFE IS BEING PRESENT HERE → Field

DEATH IS DEPARTURE → Graveyard, Banished Zone

In this sense, 'being returned from the Field to the Hand' and 'being returned from the Field to the Deck' do not evoke the notion of dying, despite the Hand and the Deck being locations that are not strictly associated with life. Nevertheless, the Monster Card is placed in a location where it regains its default potential to eventually arrive on the Field once more, evoking the BIRTH IS ARRIVAL metaphor, which is in opposition to the DEATH IS DEPARTURE metaphor. Even the name of the mechanic, namely being 'returned' somewhere, emphasizes a state that temporally came before the current state, negating the typical sequence of life and death. The above reasons explain why every single condition involving the CAUSE/GOAL-variables 'being returned to the Hand' and 'being returned to the Deck' evoked clear overall rejection of the notion that a monster 'dies' when removed this way, regardless of the SOURCE-location of the caused motion, and why these were the only conditions to do so. By contrast, 'being destroyed by battle or card effect,' 'being sent to

the Graveyard,' as well as 'banishment' all evoke the DEATH IS DEPARTURE metaphor (when the SOURCE-location is the Field), as they move cards to the Graveyard or the Banished Zone.

Given that in Section 5.1 the Banished Zone turned out to be the location least associated with the notion of life, and since the Field is most associated with life, one could have expected that the CAUSE/GOAL-variable 'banishment' in combination with the Field as the SOURCE-location would evoke the notion of dying the most. Nevertheless, this combination only resulted in the fourth highest rank, being preceded by all other kinds of removal that move a card from the Field to the Graveyard. Instead, the condition which evoked the notion of dying the most was 'destruction by battle,' and it is likely that this is the result of several factors. There is more than likely a frequency effect at play, since 'destruction by battle' represents the most common way to remove a monster from the Field. Furthermore, from a frame semantic point of view, it satisfies the general frame of BATTLE the most, as 'destruction by battle' represents a collision of physical forces (i.e., ATK values of monsters), whereby the entity (the monster) with the weaker force (the lower ATK value) is moved to the Graveyard. Graveyards are, in turn, an inseparable element of our frame of DEATH, while the term 'destruction' also implies the defeated monster having been damaged to the point of the cessation of its existence. For these reasons, 'destruction by battle' seems to act as a sort of prototype for Monster Card removal in *Yu-Gi-Oh!*, unlike 'banishment,' which is overall a less frequent mechanic and also deviates from the frame of BATTLE in that it is supposed to represent imprisonment in another dimension, which does not evoke the notion of a collision of physical forces. 'Being destroyed by card effect' and 'being sent to the Graveyard' are both somewhat

removed from this prototype. In the former, the term ‘destruction’ (along with the conceptual content it evokes) is retained, but the represented transmission of force is not explicitly physical in nature. The latter, on the other hand, is missing both the explicit physical nature of the force as well as the term ‘destruction.’

All the other conditions, which neither involved the Field as a SOURCE-location (and thus did not evoke the LIFE IS BEING PRESENT HERE metaphor), nor included ‘returning a card to the Hand or Deck’ as a CAUSE/GOAL-variable (and thus did not evoke the BIRTH IS ARRIVAL metaphor), resulted in a median value of 4. This indicates overall uncertainty regarding whether or not a monster should be seen to be ‘dying’ under those conditions. (Although ‘banishment from the Graveyard’ has a median value of 3, based on the frequency distribution of the responses it is clear that this condition is also akin to the ones ranking above it, rather than the ones below.)

5.3 Is there a difference with regard to Spell and Trap Cards?

The following section concerns the third hypothesis, namely that there would be a difference with regard to Spell/Trap Cards when compared to Monster Cards. This meant repeating most of the same survey items, only with Spell/Trap Cards in mind. Firstly, the respondents were asked to quantify their level of agreement or disagreement with the statement that a Spell/Trap Card is alive in different locations (the number of presented conditions was lower by one than in the case of Monster Cards, as Spell/Trap Cards cannot be in the Extra Deck). The results can be seen in Table 3.

Table 3. A Spell/Trap Card is alive if...

Condition	1	2	3	4	5	6	7	Mean	Median
Field (face-up)	27.96%	3.23%	4.30%	8.60%	5.91%	9.14%	40.86%	4.52	**5.5**
Field (face-down)	35.48%	4.84%	7.53%	10.22%	8.06%	12.37%	21.51%	3.74	**4**
Hand	38.17%	8.60%	4.84%	13.98%	14.52%	4.84%	15.05%	3.33	**3**
Main Deck	46.24%	9.14%	9.68%	13.98%	5.91%	3.23%	11.83%	2.81	**2**
Graveyard	51.08%	13.44%	10.75%	11.83%	7.53%	2.15%	3.23%	2.31	**1**
Banished Zone	63.98%	16.67%	5.91%	8.06%	3.23%	0.54%	1.61%	1.78	**1**

What becomes immediately apparent when examining the responses is the consistency of the results regarding the order in which these individual conditions were ranked (compare Table 3 to Table 1). The order is the same for Spell and Trap Cards as it was for Monster Cards, implying that the same underlying metaphorical conceptualizations of the game mechanics are at work here as well. The only relevant difference pertains to the consistently lower levels of agreement. When comparing the medians of the 6 conditions in Table 3 (Spell/Trap Cards) to their counterparts in Table 1 (Monster Cards) using the Wilcoxon Signed-Rank Test, the difference turns out to be statistically significant at the 0.05 level: $Z = 2.125976$, $p = 0.0335053$. The observed standardized effect size, $Z/\sqrt{n}$, is large (0.87). This means that there is a fundamental difference regarding how Spell/Trap Cards are conceptualized when compared to Monster Cards. Since Spell/Trap Cards do not represent animate entities, this significantly reduces the degree to which they may be considered as being ‘alive.’

Secondly, to determine whether and to what extent respondents would deem Spell/Trap Cards to be ‘dying’ when moved from one location to another, the same set of conditions was used as with Monster Cards, except for the condition ‘destruction by battle,’ as only Monster Cards are able to ‘battle.’ The responses are summarized in Table 4.

Table 4. A Spell/Trap Card dies if...

Condition	1	2	3	4	5	6	7	Mean	Median
Destr. by effect (Field)	25.81%	5.91%	4.30%	12.37%	4.30%	9.14%	38.17%	4.44	**5**
Sent to GY (Field)	25.81%	8.06%	6.45%	11.29%	7.53%	9.68%	31.18%	4.20	**4**
Banished (Field)	29.57%	7.53%	5.91%	11.29%	5.91%	10.22%	29.57%	4.05	**4**
Destr. by effect (Hand)	31.18%	7.53%	8.06%	13.98%	11.83%	6.45%	20.97%	3.71	**4**
Sent to GY (Hand)	31.72%	11.29%	6.99%	15.59%	10.75%	6.45%	17.20%	3.51	**3.5**
Banished (Hand)	36.02%	10.75%	6.99%	12.37%	8.06%	5.38%	20.43%	3.44	**3**
Banished (Deck)	38.17%	10.75%	6.99%	10.75%	8.60%	3.23%	21.51%	3.37	**3**
Destr. by effect (Deck)	35.48%	9.68%	9.14%	16.67%	8.60%	4.84%	15.59%	3.30	**3**
Sent to GY (Deck)	37.10%	12.37%	7.53%	14.52%	6.45%	5.38%	16.67%	3.24	**3**
Banished (GY)	39.78%	10.22%	6.45%	12.90%	3.76%	4.30%	22.58%	3.34	**2.5**
Ret. to Deck (Field)	47.31%	13.98%	9.68%	18.82%	2.69%	3.76%	3.76%	2.42	**2**
Ret. to Deck (Hand)	50.00%	11.83%	12.37%	17.20%	3.76%	1.61%	3.23%	2.31	**1.5**
Ret. to Deck (GY)	52.15%	11.83%	8.06%	19.35%	1.61%	2.69%	4.30%	2.32	**1**
Ret. to Hand (Field)	52.69%	13.98%	8.60%	12.37%	3.76%	4.84%	3.76%	2.30	**1**
Ret. to Deck (Ban)	53.23%	12.90%	8.06%	16.13%	2.69%	2.69%	4.30%	2.27	**1**
Ret. to Hand (GY)	55.91%	13.44%	5.38%	13.98%	3.76%	2.69%	4.84%	2.24	**1**
Ret. to Hand (Ban)	57.53%	14.52%	5.38%	12.37%	3.76%	3.23%	3.23%	2.13	**1**

When observing the ranking order of the individual conditions, it becomes apparent that a pattern emerges which is very similar to the ranking order in the case of Monster Cards. Again, as was the case with Monster Cards, when the SOURCE-location is the Field, the condition of 'banishment' is outranked by 'destruction by card effect' and 'being sent to the Graveyard,' and conditions involving 'being returned to the Hand or the Deck' are ranked lowest overall, regardless of SOURCE-location. Although the ranking pattern is for the most part similar, the level of agreement is consistently lower for every condition when compared to Table 2. When comparing the medians of the 17 conditions in Table 4 (Spell/Trap Cards) to their counterparts in Table 2 (Monster Cards) using the Wilcoxon Signed-Rank Test, the difference turns out to be statistically significant at the 0.05 (and even the 0.01) significance level: $Z = 3.060475$, $p = 0.00220986$. The observed standardized effect size, $Z/\sqrt{n}$, is large (0.88). This, once again, shows that there is an important difference in the way different card types are conceptualized. Given that

Spell/Trap Cards do not represent animate entities, the degree to which they may be considered to be 'dying' is significantly reduced when compared to Monster Cards.

In summary, these results taken together indicate a fundamental difference between how Spell/Trap Cards are conceptualized as opposed to Monster Cards, but no difference with regard to how the game mechanics themselves are conceptualized. This difference in the conceptualization of different card types may be due to the mechanisms of personification, an ontological metaphor that "permits us to use knowledge about ourselves to comprehend other aspects of the world, such as time, death, natural forces, inanimate objects, etc." (Kövecses 2010: 56). Given that Monster Cards are meant to represent animate entities (as implied by their names, their artworks, as well as their attack and defense values), while Spell/Trap Cards are not, the former seem far more likely to be personified. Such a conceptualization may be captured by the metaphor formula A MONSTER CARD IS A PERSON.

6. Conclusion

To date, no known studies have investigated trading card games (TCGs), also known as collectible card games (CCGs), from a cognitive point of view, despite their immense and ever-growing popularity across the globe, and despite the fact that they represent specialized symbolic systems that allow players to establish an intersubjective understanding of imaginary events during gameplay. This paper set out to fill this void by analyzing the gameplay mechanics of one particular TCG called *Yu-Gi-Oh!* It is a unanimous characteristic of TCGs in general, *Yu-Gi-Oh!* included, that during gameplay different card locations (which include designated zones on a game mat, as well as the

cards held in a player's hand) exhibit different affordances for card interactions, and that most changes in the game state are represented in form of moving cards to specific locations. Given that this is the case, it was suggested that the game mechanics of TCGs are based primarily around the logic of the Location Event Structure Metaphor, which is in turn built around the image-schematic logic inherent in the CONTAINER, the SOURCE-PATH-GOAL and various FORCE schemas, and that this embodied aspect of TCGs is what makes intersubjective understanding in TCGs possible in the first place.

To test this, a survey was conducted with 186 respondents from Facebook groups dedicated to *Yu-Gi-Oh!* to determine if there is a correlation between a particular card's location and the degree to which it is seen as 'alive' (representing a figurative state of being), as well as a correlation between specific changes in the card's location and the degree to which it is seen as 'dying' (representing a figurative change in an initial state). One set of items (7 concerning Monster Cards and 6 concerning Spell/Trap Cards; 13 in total) was designed to test the hypothesis that the STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE) submetaphor of the location ESM is what allows players to construe a particular card as being 'alive' or not, depending on its current location. Another set of items (18 concerning Monster Cards and 17 concerning Spell/Trap Cards; 35 in total) tested the hypothesis that the co-activation of three submetaphors of the location ESM, namely CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS), CAUSES ARE FORCES, and CAUSATION IS FORCED MOVEMENT (FROM ONE LOCATION TO ANOTHER), is what allows players to construe a card to be 'dying' in specific scenarios in which the card is moved from one location to another by the opponent. A third hypothesis was that there would be a difference between animate Monster Cards and inanimate Spell/Trap Cards.

Although the results confirm these hypotheses, they also paint a rather complex picture. As it turns out, the only location where a Monster Card can be deemed 'alive' is the Field. This is likely due to the fact that the Field is the location where most of the interaction between players occurs. In line with that, a Monster Card is only seen to be 'dying' if it is moved specifically from the Field to the Graveyard or the Banished Zone. However, in cases where a Monster Card would be moved from the Field (or, as a matter of fact, from any other location) to the Hand or the Deck, respondents would on average strongly disagree with the statement that this is to be seen as an instance of 'death.' This seems to be due to the fact that the Deck and the Hand represent locations which in some sense precede the Field, as usually a card has to first be added from the Deck to the Hand before it can be placed from the Hand onto the Field. All of this seems to indicate the workings of a metaphor complex generally used to conceive of life and death across cultures, namely BIRTH IS ARRIVAL, LIFE IS BEING PRESENT HERE, and DEATH IS DEPARTURE (or at least some sort of an equivalent metaphor complex specific to *Yu-Gi-Oh!*). When this metaphor complex is mapped onto the previously mentioned card locations, the following pattern emerges:

BIRTH IS ARRIVAL → Deck, Hand

LIFE IS BEING PRESENT HERE → Field

DEATH IS DEPARTURE → Graveyard, Banished Zone

As it turns out, the same metaphorical logic can be found in the case of Spell/Trap Cards as well, since the ranking order of responses pertaining to Spell/Trap Cards mirrored the ranking order of responses pertaining to Monster Cards, with only minor deviations. However, the medians of the responses pertaining to Spell/Trap Cards were consistently

and significantly lower, indicating that card type is a factor which affects how cards are conceptualized (but not how the game mechanics themselves are conceptualized).

In summary, as the results of this study have demonstrated, the way players conceptualize the game mechanics of *Yu-Gi-Oh!* reflects the logic inherent in the Location Event Structure Metaphor, specifically its submetaphors STATES ARE LOCATIONS (BOUNDED REGIONS IN SPACE), CHANGES ARE MOVEMENTS (INTO OR OUT OF BOUNDED REGIONS), CAUSES ARE FORCES, and CAUSATION IS FORCED MOVEMENT (FROM ONE LOCATION TO ANOTHER). This implies that it is precisely the cognitive mechanisms of conceptual metaphor which allow for a shared, intersubjective understanding between players to exist regarding the meanings of various gameplay scenarios in *Yu-Gi-Oh!*, and possibly in many other trading card games as well. As such, it is concluded that trading card games undoubtedly have the potential to become a new and exciting area of inquiry in their own right in the ever growing domain of Conceptual Metaphor Theory.

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References

Aldokhayel, R. (2008). *The event structure metaphor: The case of Arabic* [Unpublished doctoral dissertation]. Ball State University.

Chui, K. (2011). Conceptual metaphors in gesture. *Cognitive Linguistics, 22*(3), 437–458.

Chui, K. (2017). Entity metaphor, object gesture, and context of use. *Metaphor and Symbol, 32*(1), 30–51.

Cienki, A., & Müller, C. (2008). Metaphor, gesture, and thought. In R. W. Gibbs, Jr. (Ed.), *The Cambridge handbook of metaphor and thought* (pp. 483–501). Cambridge University Press.

Corts, D. P., & Pollio, H. R. (1999). Spontaneous production of figurative language and gesture in college lectures. *Metaphor and Symbol, 14*(2), 81–100.

Evans, V., & Green, M. (2006). *Cognitive linguistics: An introduction*. Edinburgh: Edinburgh University Press.

Forceville, C. (2016). Theories of conceptual metaphor, blending, and other cognitivist perspectives on comics. In N. Cohn (Ed.), *The visual narrative reader* (pp. 89–114). London: Bloomsbury.

Forceville, C. (2017). From image schema to metaphor in discourse: The FORCE schemas in animation films. In B. Hampe (Ed.), *Metaphor: Embodied cognition and discourse* (pp. 239–256). Cambridge: Cambridge University Press.

Forceville, C., & Jeulink, M. (2011). The flesh and blood of embodied understanding: The Source-Path-Goal schema in animation film. *Pragmatics & Cognition, 19*(1), 37–59.

Forceville, C., & Renckens, T. (2013). The GOOD IS LIGHT and BAD IS DARK metaphor in feature films. *Metaphor and the Social World, 3*(2), 160–179.

Gibbs, R. W. (2005). The psychological status of image schemas. In B. Hampe, J. E. Grady (Eds.), *From perception to meaning: Image schemas in cognitive linguistics* (pp. 113–135). Berlin, New York: Mouton de Gruyter.

Johnson, M. (1987). *The body in the mind: The bodily basis of meaning, imagination, and reason.* Chicago: University of Chicago Press.

Johnson, M. (2005). The philosophical significance of image schemas. In B. Hampe, J. E. Grady (Eds.), *From perception to meaning: Image schemas in cognitive linguistics* (pp. 15–33). Berlin, New York: Mouton de Gruyter.

Kövecses, Z. (2005). *Metaphor in culture: Universality and variation*. Cambridge: Cambridge University Press.

Kövecses, Z. (2010). *Metaphor: A practical introduction*. 2nd ed. Oxford: Oxford University Press.

Lakoff, G. (1987). *Women, fire, and dangerous things: What our categories reveal about the mind*. Chicago: University of Chicago Press.

Lakoff, G. (1990). The Invariance Hypothesis: Is abstract reason based on image-schemas? *Cognitive Linguistics, 1*(1), 39–74.

Lakoff, G. (1993). The contemporary theory of metaphor. In A. Ortony (Ed.), *Metaphor and thought* (pp. 202–251). Cambridge University Press.

Lakoff, G., & Johnson, M. (1999). *Philosophy in the flesh: The embodied mind and its challenge to Western thought*. New York: Basic Books.

Lakoff, G., & Núñez, R. E. (2000). *Where mathematics comes from: How the embodied mind brings mathematics into being*. New York: Basic Books.

Lakoff, G., & Turner, M. (1989). *More than cool reason: A Field Guide to Poetic Metaphor*. Chicago & London: University of Chicago Press.

Lhommet M., & Marsella S. (2014). Metaphoric gestures: Towards grounded mental spaces. In T. Bickmore, S. Marsella, & C. Sidner (Eds.), *Intelligent Virtual Agents. IVA 2014. Lecture Notes in Computer Science, vol. 8637* (pp. 264–274). Springer.

Núñez, R. (2005). Creating mathematical infinities: Metaphor, blending, and the beauty of transfinite cardinals. *Journal of Pragmatics*, *37*, 1717–1741.

Núñez, R., & Lakoff G. (2005). The cognitive foundations of mathematics: The role of conceptual metaphor. In J. Campbell (Ed.), *Handbook of mathematical cognition* (pp. 109–124). New York: Psychology Press.

Potsch, E., & Williams, R. F. (2012). Image schemas and conceptual metaphor in action comics. In F. Bramlett (Ed.), *Linguistics and the study of comics* (pp. 13–36). London: Palgrave Macmillan.

Radden, G. (1995). Motion metaphorized: The case of coming and going. In E. H. Casad (Ed.), *Cognitive Linguistics in the Redwoods* (pp. 423–458). Berlin: Mouton de Gruyter.

Roush, D. (2016). The expression of the location event-structure metaphor in American sign language. *Sign Lang. Stud.*, *16*, 389–432.

Tasić, M., & Stamenković, D. (2015). The interplay of words and images in expressing multimodal metaphors in comics. *Procedia - Social and Behavioral Sciences, 212*, 117–122.

Urios-Aparisi, E. (2010). The body of love in Almodóvar's cinema: Metaphor and metonymy of the body and body parts. *Metaphor and Symbol, 25*(3), 181–203.

Winter, B. (2014). Horror movies and the cognitive ecology of primary metaphors. *Metaphor and Symbol, 29*(3), 151–170.

Yu, N. (1998). *The contemporary theory of metaphor: A perspective from Chinese*. Amsterdam: Benjamins.

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