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**Metaphorical profiles and near-synonyms:
A corpus-based study of Indonesian words for HAPPINESS**

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Abstract

This thesis investigates metaphors of HAPPINESS in Indonesian by analysing over three thousand metaphorical expressions across ten HAPPINESS near-synonyms. The primary data is sourced from the *Indonesian Leipzig Corpora*. Supplementary data come from the *Indonesian Web as Corpus* in *Sketch Engine* and ten online newspapers retrieved via *WebCorp*. The study is framed within two desiderata in Conceptual Metaphor Theory (CMT). The first is the growing interest in analysing metaphorical expressions containing a set of specific emotion words that are near-synonyms. The second is to advance quantitative corpus-based approach to metaphors. These approaches allow addressing two themes in CMT: (i) the range of metaphors used for describing basic-level emotions (e.g., HAPPINESS, ANGER) via aggregated data across the synonyms; (ii) the *principal metaphor hypothesis* indicating the distinguishing role of metaphors between semantically similar emotions.

Overall, this study identifies 62 conceptual metaphors across the data. Their prominence for construing HAPPINESS in general is characterised through a top-10 ranked-list along three frequency profiles: (i) *token frequency*, (ii) *type frequency*, and (iii) *type-per-token ratio* (TTR). An examination of the top-10 metaphors according to their token frequency reveals the following semantic aspects of HAPPINESS to be most prominent: (i) (in)existence (e.g., HAPPINESS IS A LOCATION; HAPPINESS IS A SUBMERGED ENTITY), (ii) desirability (HAPPINESS IS A DESIRED GOAL), (iii) preciousness (HAPPINESS IS A POSSESSABLE OBJECT), (iv) intensity (e.g., HAPPINESS IS A LIQUID IN A CONTAINER), and (v) expressivity (e.g., HAPPINESS IS AN (UN)VEILED OBJECT). The top-10 type frequency ranking offers two new metaphors that are productive and conventional, namely HAPPINESS IS LIGHT, and HAPPINESS IS AN IMPERILLED ENTITY. The TTR ranking foregrounds metaphors that are less frequent in their tokens but high in their lexical creativity (i.e., instantiated by different types of linguistic expressions rather than simply by the same and highly frequent fixed expressions). These findings demonstrate the importance of corpus-based analysis to generate different frequency profiles for describing the prominent metaphorical models of an emotion concept.

The thesis also offers further evidence from Indonesian to the *principal metaphor hypothesis* that emotion near-synonyms are associated with distinctive metaphors

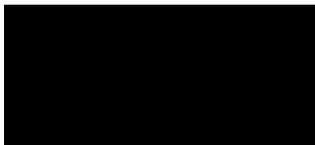
distinguishing them from each other. This indicates potential bias of the identified metaphors to a certain word when aiming to study the whole emotion domain via one word. Furthermore, this study identified similar distinctive metaphors between translation equivalents. The Indonesian *kebahagiaan* ‘happiness’ and *kegembiraan* ‘joy’ are associated with metaphors whose semantics resemble those found associated with *happiness* and *joy* in previous studies in English.

The study is couched in the *MetaNet* (MN) approach to CMT—a hybrid of Frame Semantics and the Constructional frameworks—and highlights the implications of MN for CMT’s study of metaphor from the target domain perspective. This is illustrated by the existence of *metaphorical role-mapping variation* of the target domain within the source domain. This variation is argued to pose theoretical and methodological implications for the postulation of the conceptual metaphors based on the syntactic-semantic frame-role-mappings of the target-domain words in the metaphoric constructions.

Declaration

This thesis contains no material which has been accepted for the award of any other degree or diploma at any university or equivalent institution and that, to the best of my knowledge and belief, this thesis contains no material previously published or written by another person, except where due reference is made in the text of the thesis.

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*To my father, I Made Rajeg, and my mother, Luh Putu Laksminy,
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List of abbreviation and gloss

Abbreviation

A/D	Autonomy-Dependence Alignment
AssocStr	Association Strength
CA	Collostructional Analysis
CG	Cognitive Grammar
CMT	Conceptual Metaphor Theory
CollStr	Collostruction Strength
ESM	Event Structure Metaphors
FN	FrameNet
ICSI	International Computer Science Institute
IWAC	Indonesian Web as Corpus
KBBI	<i>Kamus Besar Bahasa Indonesia</i> (The Big Dictionary of the Indonesian Language)
LCC	Leipzig Corpora Collection
LU	Lexical Units
M	Mean
MDCA	Multiple Distinctive Collexeme Analysis
MIP	Metaphor Identification Procedure
MN	MetaNet
MPA	Metaphorical Pattern Analysis
MRV	Metaphorical Role-mapping Variation
NP	Noun Phrase
NSM	Natural Semantic Metalanguage
PP	Prepositional Phrase
SD	Standard Deviation
SPG	Source-Path-Goal
TTR	Type per Token Ratio

Gloss

1	First person
2	Second person
3	Third person
ADV	Adverbial
ADVS	Adversative
APPL	Applicative
AV	Actor/active voice
BER	Intransitive verbal prefix <i>ber-</i> in Indonesian
CAUS	Causative
COP	Copular-like elements
DEM	Demonstrative
DISC.DEM	Discourse-dependent Demonstrative
DUR	Durative
EXCL	Exclusive
FOC	Focus/foregrounding particle

FUT	Future marker
INCL	Inclusive
INTENS	Intensifier
LOC	Locative
MID	Middle voice
NEG	Negation
NMLZ	Nominalizer
OV	Object voice
PASS	Passive voice
PL	Plural
POSS	Possessive
PROG	Progressive
RECP	Reciprocal
REL	Relativiser
SG	Singular
TR	Transitive marker

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Chapter 1 Introduction

The conceptualisation of emotions has attracted cross-cultural and multidisciplinary interests, ranging from psychology, cultural anthropology, sociology, history, to linguistics (Flam & Kleres, 2015; Fontaine, Scherer, & Soriano, 2013; Niemeier & Dirven, 1997). This thesis presents a linguistic study of the metaphorical conceptualisations of HAPPINESS in Indonesian from the perspective of the Conceptual Metaphor Theory (CMT) (§1.1.2 and §2.2) and quantitative corpus linguistics. This introductory chapter sets the stage for the study covering the following points. §1.1 is a brief outline of two kinds of emotion vocabularies that underlie the linguistic study of emotions. §1.2 identifies the gap that this thesis attempts to fill, from both the theoretical and methodological perspectives. §1.3 formulates the motivation for the choice of HAPPINESS as the object of the study, including the basis for selecting the studied HAPPINESS words (§1.3.1). §1.4 presents the research questions addressed in the thesis, followed by the significance of the thesis in §1.5. Eventually, §1.6 provides the overview of the thesis chapters.

1.1 The encoding of emotions through language

Kövecses (1995, pp. 3–5, 2000, p. 2) distinguishes two broad groups of emotion-related vocabularies: (i) expressive emotion words and (ii) descriptive emotion words (or terms or expressions). The *expressive* type consists of words that “can *express* emotions” (Kövecses, 2000, p. 2, italics in original). The examples include words such as *shit!* expressing anger, surprised, among others; *wow!* expressing enthusiasm or being impressed; *yuk!* showing disgust, etc. (Kövecses, 2000, p. 2). A remaining open question is whether these expressive emotion words are available for all emotions (Kövecses, 1995).

The *descriptive* emotion words, in contrast, are words that “can *describe* the emotions they signify or that ‘they are about’” (Kövecses, 2000, p. 2, italics and quotes in original). These include words such as *happy*, *joy*, *sadness*, *anger*, and *happiness*. Kövecses also mentions that, in certain usage, the descriptive words can convey expressive function, as in “*I love you*”, in which *love* is a descriptive word for LOVE, and, in the sentence, is used to express affective feeling/emotion. Kövecses (2000, p. 6) further classifies the descriptive emotion words into two sub-types discussed below: (i) literal and (ii) figurative expressions.

1.1.1 Literal emotion language

The literal subtype categorises emotion words based on whether they are basic or less basic. The basicness of these emotion words is understood along two perspectives in the hierarchical organisation of category. First, along the *vertical* perspective, one of a set of (semantically related) emotion words and the emotion concept it designates, can occupy the middle, “basic-level” position, namely between the superordinate and the subordinate categories. Kövecses (2000, p. 3) illustrates this with the word *anger*, which is considered as a basic-level emotion category. That is, *anger* is more basic than (i) its subordinates, such as *annoyance*, *wrath*, and *rage*, and (ii) its superordinate, namely *emotion* (cf. §1.3.1). Second, along the *horizontal* perspective, basicness of emotion words represents the prototypicality of emotions. That is, the emotion words that are “judged to be more ‘prototypical’ (i.e., a better example) of emotion than another at the same horizontal level” (Kövecses, 2000, p. 3). For instance, along the horizontal perspective of basic-level category, *anger*, *fear*, and *sadness*, are judged to be better examples of emotions than *hope*, *pride*, *surprise*, and *lust* (Kövecses, 2000, pp. 3–4).

1.1.2 Figurative emotion language

The figurative, descriptive expressions of emotions can be metaphoric and metonymic (Kövecses, 2000, pp. 4–5). From the perspective of the Conceptual Metaphor Theory (CMT) (Lakoff & Johnson, 1980, 1999), metaphorical linguistic expressions are assumed to manifest the so-called *conceptual metaphor*. A conceptual metaphor involves correspondences of two distinct domains. One of these domains is understood as the *source* of the metaphorical concepts to be mapped onto the other, more abstract, domain, namely the *target domain* (cf. §2.2 for further exposition of CMT and §4.3 for CMT formalisation in terms of Frame Semantics). Consider the English metaphorical expressions about the concept of ANGER below that manifest the conceptual metaphor ANGER IS FIRE (from Kövecses, 2000, p. 21; cf. Lakoff, 1987, Case Study 1; Ogarkova & Soriano, 2014, p. 100).

- (1-1) He's doing a *slow burn*.
- (1-2) His anger is *smoldering*.
- (1-3) *Blazing indignation*.

The italicised expressions evoke the concept of FIRE, which is the source domain used to construe an aspect of ANGER as the target domain, potentially the intensity. The underlined words specify that those metaphorical expressions are about ANGER rather than, say, LOVE.

Metonymic linguistic expressions manifest the so-called *conceptual metonymy* in CMT. A conceptual metonymy involves a *stand-for* relation between elements within a single domain, rather than two domains as in conceptual metaphors (Kövecses, 2010). For instance, the word *Shakespeare* in “I'm reading *Shakespeare*” is metonymic for one of Shakespeare's works, meanwhile *glove* in “We need a better *glove* at third base” metonymically refers to a baseball player, rather than the glove object (from Kövecses, 2010, pp. 172–173). As for emotions, the metonymic expressions tend to come from the emotions' assumed somatic features (e.g., physiological and/or behavioural properties of an

emotion) (Lakoff, 1987, p. 382; cf. Kövecses, 2000, p. 5). For instance, “to have *cold feet*” is a metonymic expression for FEAR, assuming that dropping body temperature is one of the somatic elements for FEAR (Kövecses, 2000, p. 5). In contrast, expressions related to an increased body heat may be metonymically used to refer to ANGER, as in “Don’t get *hot under the collar*.” (Lakoff, 1987, p. 382).

According to Kövecses (2000, p. 4), the issue at stake in analysing figurative expressions of emotions is the highlighted aspects of emotions, such as the cause of emotion, intensity, control, and passivity, among others. Kövecses (2000, p. 4) also suggests that figurative expressions “do not literally ‘name’” the emotion (as in (1-1) above, or in “get *hot under the collar*”). However, there is a kind of figurative, metaphorical expression (e.g., (1-2) and (1-3) above) that contains the descriptive words of the specific emotions. This thesis focuses on this subset of metaphorical expressions, which is called *metaphorical patterns* in the *Metaphorical Pattern Analysis* (MPA) approach (Stefanowitsch, 2004, 2006b) (cf. §2.5.2, §3.3.1, and §4.3.2). The remainder of this section briefly discusses the prevalence of metaphorical expressions in the linguistic approach to emotions.

Kövecses (2000, pp. 188–189) found that the way we conceptualise emotions is reflected in the use of figurative language, such as metaphors. This finding supports Lakoff’s (1993, p. 205) claim that “as soon as one gets away from concrete physical experience and starts talking about abstractions or emotions, metaphorical understanding is the norm”. In addition, emotional meaning is culturally rich, reflecting our wide-ranging experiences with emotions. Such varied experiences entail the use of a variety of linguistic expressions that may involve different range of embodied concepts. The metaphorical perspective on emotion semantics offers richer images of how emotions are talked about and

conceptualised in each speech community. It follows that reductive description of the meaning of the (literal) words naming emotions potentially hides the richness and vividness of emotional meanings, which are mostly revealed via metaphors (Kövecses, 2000, p. 189). Stefanowitsch's (2004, 2006b) quantitative corpus-based studies further substantiate Lakoff and Kövecses' argument that emotion nouns (e.g., *joy*) frequently occur in metaphorical expressions in natural language use (e.g., *burst with joy*; *surge of joy*; *erupt joy*) (cf. examples 5b in Stefanowitsch, 2004, p. 141). Foolen (2012, p. 359) also stresses that metaphorical expressions show expressive functions and involvement in talking about various emotional experiences. In sum, understanding the meaning of emotion terms via their usages in metaphorical expressions is one of the ways to better understand the folk models of the given emotion in a speech community (cf. Goddard & Ye, 2014, p. 134).

1.2 Problem statements

1.2.1 From the theoretical perspective

Within Conceptual Metaphor Theory (CMT), the metaphorical conceptualisation of emotions is amongst the most extensively researched fields, encompassing various emotions, languages, and methodologies (Soriano, 2013b, p. 72). A great deal of previous research has focused on identifying the conceptual metaphors structuring the conceptual content of emotions in a particular language (Kövecses, 2000; Lakoff & Kövecses, 1987 *inter alia*). There have also been studies analysing metaphorical variation of similar emotions across languages (Kövecses, 2000, 2005 *inter alia*; see also Soriano, 2013b, pp. 71–72 for recent overview of the field). The role of culture and bodily experiences in the metaphorical construal of emotions has also been among the central topic in recent studies (e.g., Maalej & Yu, 2011; Sharifian, Dirven, Yu, & Niemeier, 2008; Yu, 2002).

Most emotion metaphor research within CMT focuses on a basic-level emotion concept (e.g., ANGER) by studying metaphorical expressions that may or may not incorporate the descriptive words for the given emotion concept (Stefanowitsch, 2006b, p. 72; see Ogarkova & Soriano, 2014, for an example) (cf examples (1-1) to (1-3)). Up to now, however, little attention has been paid to the use of metaphors across near-synonymous descriptive emotion words referring to one emotion concept (Stefanowitsch, 2004, 2006b). An example of this is investigating metaphorical usages of *rage*, *indignation*, *irritation*, *anger*, and *fury* as specific emotion words that nearly similarly express the concept of ANGER (Ogarkova & Soriano, 2014, 2018).

An early CMT account on metaphors for specific emotion concepts expressed by specific words is Kövecses' (1990, Ch. 6) analysis on PRIDE in English. Kövecses (1990, p. 88) suggests that the concept of PRIDE can be nearly equally referred to by words such as *self-esteem*, *conceit* and *vanity*. Kövecses further argues that these near-synonyms¹ for PRIDE differ in terms of the “principal metaphors” characterising them (§2.5.1). Stefanowitsch (2006b, p. 70) echoes Kövecses' idea and highlights a broader issue of the interface between metaphor and lexical semantics: “if metaphorical mappings interact with individual lexical items such that there are differences, for example, between near-synonyms or antonyms, then the existence and nature of these differences must be accounted for.” Metaphor studies for a specific word from a given (EMOTION) target domain is one of the recent desiderata in CMT. This is also known as the “lexeme-specific approach” to metaphor (Ogarkova & Soriano, 2014, p. 97). This desideratum motivates this thesis to analyse metaphorical expressions that explicitly contain emotion words. This approach delimits the search terms

¹ The term “near-synonyms” will be used interchangeably with “synonyms” only for succinctness, without implying that the studied words are exact or complete synonyms.

for retrieving the metaphorical expressions from a corpus by relying on the orthographic strings denoting the emotions. It is because looking for metaphorical expressions for an emotion from a corpus cannot be fully automated since we do not know in advance every relevant expression. Using a specific emotion term as the search word minimises unambiguity for what emotion concept is referred to by the metaphorical expressions.

The metaphor-synonyms interaction for emotions has only been addressed in a few studies, which are mostly based on English. These include papers from (i) Stefanowitsch (2004, 2006b) on *joy* and *happiness* (as well as *Glück* and *Freude* in German, cf. §2.5.22.5.2 below), (ii) Ogarkova (2007) on *jealousy* and *envy*, (iii) a PhD thesis by Ding (2011) on *grief*, *sorrow*, *sadness*, and *depression*, and (iv) Turkkila (2014) on ANGER synonyms (see Stefanowitsch, 2006b, pp. 99–102; Omori, 2012, for metaphor usages between emotion antonyms). The results of these studies confirm Kövecses' assumption regarding the differences in metaphorical preferences between near-synonyms referring to an emotion concept. What distinguishes Kövecses' (1990) study on PRIDE from these studies is that the latter are based on data from a large sample of electronic text and adopts the quantitative corpus linguistic methodology as introduced by Stefanowitsch (2004, 2006b). In contrast, Kövecses' (1990, p. 43) study is based on data from conventionalised, everyday expressions of English, without mentioning the source from which they are collected, and how.

As shown in Chapter 7, this thesis provides further evidence from Indonesian for Kövecses' hypothesis regarding principal metaphors characterising emotion near-synonyms. One of the major findings is that two of the studied Indonesian HAPPINESS terms are strongly attracted to metaphors that also strongly differentiate between *happiness* and *joy* in English (Stefanowitsch, 2004, 2006b): *kebahagiaan* 'happiness' strongly attracts HAPPINESS IS A

DESIRED GOAL (§7.3.1) while *kegembiraan* ‘joy’ strongly attracts HAPPINESS IS A LIQUID IN A CONTAINER (§7.3.3). The other interesting findings include (i) strong association of one term, namely *kesenangan* ‘pleasure’, with negative framing (via HAPPINESS IS A SUBJUGATOR and HAPPINESS IS A DECEIVER, and some of its distinctive collocates, such as *nafsu* ‘lust’, *dosa* ‘sin’, *duniawi* ‘worldly’) (§7.3.2), and (ii) distinctive metaphors capturing the expressivity and vibrancy of *keceriaan* ‘cheerfulness’, also associated with collocates referring to children (§7.3.4).

In the current literature on Indonesian emotion metaphors, the metaphorical usages of emotion near-synonyms are still unaddressed. In fact, there have been only few Indonesian studies dealing with emotion metaphors in general, and they appeared just recently (e.g., G. P. W. Rajeg, 2014; I. M. Rajeg, 2013; Siahaan, 2008, 2015; Yuditha, 2012, 2013) (see §2.6 for further discussion). This thesis aims to fill this gap and becomes the first of its kind for Indonesian that investigates the metaphor-synonym interface for emotion from the perspective of CMT and quantitative corpus linguistics. The precursor of this thesis departs from my pilot corpus-based study on the metaphorical collocations of five Indonesian near-synonyms for ANGER (G. P. W. Rajeg, 2014).

One theoretical notion in CMT that is also tied to the issue of metaphors-synonyms interface is “the range of target” (Kövecses, 2005, p. 122) or “metaphorical pluralism” (Lakoff & Johnson, 1999, p. 70). This idea concerns with different ranges of metaphors used for conceptualising a target domain. The connection of the *range of target* with the present study results in a question: would there be any variations regarding the range of metaphors that are used with emotion near-synonyms? In previous works, this kind of variation is explored cross-linguistically (cf. Kövecses, 2005) or between one language of different

varieties (e.g., ANGER metaphors across second-language varieties of English as in Güldenring (2017)). The present study takes a different perspective by looking at the degree of intra-domain, metaphor variation between emotion near-synonyms.

Finally, this thesis aims to extend the application of the *MetaNet* (MN) approach to CMT as recently developed at ICSI Berkeley (Chapter 4) (cf. David, 2017; Dodge, Hong, & Stickles, 2015). This thesis adopts the MN framework and apply it manually into Indonesian data, unlike in MN that implements computational pipelines for metaphors extraction and analyses. Such manual application is tied together with the *Metaphorical Pattern Analysis* (MPA) for identifying the metaphorical expressions and eventually the evoked conceptual metaphors. I argue for the relevance of MN to MPA in §4.3.2.3. More generally, I also argue for how the Frame Semantics and Constructional frameworks instilled in MN may help one (manually) identify (i) potential conceptual metaphors (§4.3.4), and (ii) variations in the metaphorical conceptualisations of a target given a source-domain frame (§4.3.5).

1.2.2 From the methodological perspective

Despite the revolutionary contribution of the CMT to the study of the relationship between language and thought, early seminal works in the CMT have been predominantly based on intuitively-derived and eclectically-collected metaphorical expressions, mostly from thesauri or dictionaries (Deignan, 2005, p. 95; Gibbs, 2008, p. 3; Stefanowitsch, 2004, p. 138, 2006b, p. 64). Stefanowitsch (2006b, p. 64) points out that if the main aim is only to determine that a particular conceptual metaphor exists, the introspective method based on limited number of metaphorical expressions may suffice. However, it becomes problematic when it strives to provide systematic empirical analysis on conceptual metaphors. The first problem concerns the difficulty to determine the extent to which the relevant metaphors

have been identified. The second one relates to the impossibility of measuring the relative importance of particular metaphors used in a given language (Stefanowitsch, 2006b, p. 64).

A major movement towards empirical methods in metaphor research in particular, and in Cognitive Linguistics in general, has emerged in recent years (cf. Tummers, Heylen, & Geeraerts, 2005 for overview). One prevalent advance is in the use of corpus linguistic methods, which have been developed for a number of metaphor studies (e.g. Deignan, 2005; Stefanowitsch, 2004, 2005, 2006a, 2006b, 2007). The corpus-based methods aim to strengthen CMT's methodological foundation by providing a large collection of natural language data. In this way, typical patterns of metaphorical language use can be observed, which is hardly feasible should one rely on pure intuition (Deignan, 2005, pp. 87–88). In addition, valuable insights may be generated from analysing the frequency data available via corpus-based study. For instance, we can measure the degree of association of particular metaphors with a particular target domain, or near-synonyms in this case (cf. Stefanowitsch, 2004, 2006b section 4 and 5) (Chapter 7 in this thesis). In addition, the prominence of metaphors for the broader target-domain concept denoted by the near-synonyms can be determined along different frequency profiles (e.g., the *entrenchment*, given the metaphors' token frequency, *productivity*, given their type frequency, or *creativity*, given the ratio of the type frequencies over the token frequencies (cf. Chapter 5 and Chapter 6)).

Much of the corpus-based metaphor research has focused on Indo-European languages, mostly English. In Indonesian, (cognitive) corpus linguistic research in general, and corpus studies of metaphors in particular, are still in their infancy (but, see G. P. W. Rajeg, 2014, 2016a, 2016b; I. M. Rajeg, 2013; Siahaan, 2008, 2011, 2015 for few examples). This thesis aims to advance the corpus-based approach to metaphor in Indonesian. The other corpus

studies on emotion metaphors from non-Indo-European data include Nordmark & Glynn (2013 for Japanese [in comparison with Swedish]), Polley (2012) for Mandarin Chinese and Türker (2013) for Korean. Türker (2013) and Polley (2012) suggest that variation in usage frequency and productivity, in addition to the absence/presence, of emotion metaphors is important in a cross-linguistic study of metaphors as they may reflect the way speech community conceptualises emotion. Nordmark & Glynn (2013) demonstrates that multivariate statistics help reveal which metaphors and types of causes for ANXIETY are distinctive relative to four speech communities (American and British English, Japanese, and Swedish).

Analysing metaphorical usages of near-synonyms is also an attempt to advance quantitative corpus-based approaches to semantics in general (cf. the contributions in Glynn & Fischer, 2010; and in Glynn & Robinson, 2014, *inter alia*). Corpus-based approaches to semantics are rooted in, and put into practice, the usage-based perspective on meaning, which is one of the theoretical foundations of Cognitive Linguistics (Evans & Green, 2006, p. 112; Stefanowitsch, 2010, p. 368). The usage-based perspective asserts that properties of co-occurring usage contexts (e.g., morphological, lexical, syntactic, and semantic contexts) of a given linguistic unit (e.g., a word or grammatical construction) reflect the meaning of the respective linguistic unit (Stefanowitsch, 2010, pp. 368–370). Broadly speaking, any systematic variation in the use of a form (e.g., particular usages of a word or grammatical construction) reflects variation in its semantic structure (Glynn, 2014, p. 8). The essence of this idea is also known as the *distributional hypothesis* in Distributional Semantics (cf. Peirsman, Geeraerts, & Speelman, 2015, p. 58). The hypothesis can be traced back as far as J. R. Firth's famous dictum "You shall know a word by the company it keeps", as well as Wittgenstein's "the meaning of a word is its use in the language" (cited by Stefanowitsch,

2010, pp. 368–369). In what way can this usage-based assumption be operationalised for a corpus-based study of metaphors and near-synonyms?

The present study focuses on the co-occurrence of emotion near-synonyms with other words (i.e. collocates) that, when combined in certain grammatical constructions, represent metaphorical expressions. For instance, the co-occurrence of the Indonesian *kebahagiaan* ‘happiness’ and *kegembiraan* ‘joy’ with *luapan* ‘overflow’ in a nominal compounding construction forms metaphorical expressions, namely *luapan kebahagiaan/kegembiraan* ‘overflow of happiness/joy’ (cf. §3.5.1 and §4.3.2). These expressions then become the basis of metaphorical meaning construction for the near-synonyms via the evoked conceptual metaphors (cf. Radden, Köpcke, Berg, & Siemund, 2007, p. 8). Variation in the co-occurrence frequencies of the conceptual metaphors across the near-synonyms is analysed using quantitative corpus linguistic method (Chapter 7). It determines the way these near-synonyms differ in terms of their distinctive *metaphorical profiles* or metaphorical meanings (§7.2.2) (Ogarkova & Soriano, 2014, 2018; G. P. W. Rajeg, 2014, 2016a). The aggregated metaphorical citations of the near-synonyms may also inform the metaphorical profiles of the broader concept all together (see Chapter 5 and Chapter 6).

1.3 The object of the study

This study investigates metaphorical expressions containing near-synonyms referring to the HAPPINESS-like concept in Indonesian. There are two motivations why this study focuses on HAPPINESS. The first one is to expand the results from HAPPINESS studies in CMT, which are mainly based on English (Kövecses, 1991, 2008b, 2010 Chapter 8, 2015 Chapter 9; Pavpertova, 2014; Stefanowitsch, 2004, 2006b). The relevant results of these studies are discussed in relation to the findings from Indonesian, which contribute further data to the

CMT issue of universality and variation in emotion metaphors across languages. One of the interesting findings is the fact that the intensity of HAPPINESS in Indonesian can be conceptualised via expressions evoking HEATED LIQUID frame (§5.4.6 and §7.3.3), which, in many languages studied to date, tends to be associated with ANGER and PASSION. HAPPINESS can also be construed as an object that can be located at its cause (see example (5-48)).

The second reason concerns with an imbalanced focus on the emotions analysed in Indonesian. The *Metaphor and Emotion* sub-project of the *Max Plank Institute for the Science of Human History* in Jakarta Field Station² has analysed the metaphors for ANGER, LOVE, and HATE. A study that analysed HAPPINESS, FEAR and SADNESS, based on *one* word representing each emotion, appears only recently (I. M. Rajeg, 2013). In relation to Rajeg's (2013) study on HAPPINESS, this thesis constitutes the *empirical cycle* put forward by Geeraerts (2010a, p. 73): "Just like it is misguided to think that empirical, data-driven research automatically gives one all the answers, it is misguided to think that it immediately gives one the final answer". In this context, "all the answers" and "the final answer" to the metaphorical models of HAPPINESS in Indonesian may not end at analysing only *one* word for the concept (as in I. M. Rajeg, 2013, cf. sub-section 2.4.2 below). Chapter 7 demonstrates the relative asymmetry of the co-occurrence frequencies of certain metaphors towards a (set of) word(s). This asymmetry may vary the results for the study of a basic-level emotion that only focuses on one word assumed to be representative for the emotion.

1.3.1 The studied HAPPINESS words in Indonesian

The selection of Indonesian HAPPINESS words is based on Shaver, Murdaya & Fraley's (2001) psychological study on the emotion lexicon in Indonesian. Shaver et al (2001)

² See <http://jakarta.shh.mpg.de/metaphors.php> (Last access: 2 July 2018 11:48 AM)

conducted two studies: (i) typicality rating of 404 terms of emotion, and (ii) similarity sorting-task for 124 best examples of the emotion terms identified from the first study. Shaver et al (2001, pp. 211–215) performed *Hierarchical Cluster Analysis* on the similarity-based, sorting-task categorisation of 124 emotion terms. The analysis determined two broad superordinate clusters of the Indonesian emotion hierarchy: positive and negative emotions. Within these two broad clusters, five major subclusters of basic-level emotions are identified as denoted by the following words: *marah* ‘angry/anger’, *cinta* ‘love’, *senang* ‘happy/happiness’, *khawatir/takut* ‘anxiety/fear’ and *sedih* ‘sad/sadness’.

For HAPPINESS, the word *senang* ‘happy/happiness’ is identified as the basic-level category label. Within this *senang* category, the top five representative hyponyms (i.e., members of the category) are identified as: (i) *ceria* ‘cheerful’³, (ii) *gembira* ‘excited, enthusiastic’, (iii) *riang* ‘very happy, joyous’, (iv) *bahagia* ‘happy’, and (v) *senang* itself ‘happy’; their ordering reflects their measure of categorical prototypicality (Shaver et al., 2001, p. 217). Even though *senang* as the category label appears fifth among the other four terms, Shaver et al (2001, p. 217) states that, in comparison to the other terms, “*senang* is broader and is commonly used to name the category in everyday Indonesian speech”. Frequency data from the corpus used in this thesis confirms that *senang* is the most frequent form (cf. Table 3-2).

These five HAPPINESS terms in Indonesian are the root words, from which the nominalised forms of the abstract nouns are derived via circumfix *ke- -an* (Sneddon, Adelaar, Djenar, & Ewing, 2010, p. 38). For instance, the *ke- -an* derivative of *senang* ‘happy’ is *keseenangan* ‘pleasure; happiness’. This thesis focuses on the nominalised forms of these five roots as

³ The glosses for each HAPPINESS words are based on their definition in *A Comprehensive Indonesian-English Dictionary* by Stevens & Schmidgall Tellings (2004).

well as the root forms where they occur in nominal syntactic environments (§3.2) (cf. Musgrave, 2001, p. 164). They form the *nominal* lexical field for HAPPINESS in Indonesian. The term *lexical field* for a basic-level emotion concept is adopted from Gevaert (2002, p. 276), and is defined as a set of words used to refer to SENANG as the basic-level category for HAPPINESS in Indonesian. These words include the word *senang* itself and its near-synonyms in the root-nominal forms and in the *ke- -an* forms. Throughout the thesis, the lexical field for SENANG is referred to as HAPPINESS *near-synonyms*. Chapter 7 shows the extent to which the nominal derivatives and their root-nominal converge/diverge in terms of their distinctive metaphors. The focus on analysing the nouns referring to the emotion target-domain follows the corpus-based approach of *Metaphorical Pattern Analysis* (MPA) (Stefanowitsch, 2004, 2006b; Ding, 2011, p. 73; Soriano, 2015, p. 208).

1.4 Research questions

This thesis aims to address the following research questions:

1. What are the conceptual metaphors identified for the Indonesian HAPPINESS near-synonyms (both in root-nominal and nominalised forms)?
2. Which metaphors are amongst the most (i.e., top-10) prominent ones for the broader concept of HAPPINESS as aggregated from the metaphorical citations of the synonyms?
 - 2.1. Which metaphors are amongst the most entrenched according to the metaphors' token frequency?
 - 2.2. Which metaphors are amongst the most productive according to their type frequency (i.e., the number of different types of the metaphorical source-frame lexical units)?

- 2.3. Which metaphors are amongst the most varied, or diverse, in their linguistic expressions according to the type/token ratio (TTR) index?
3. Are there qualitative and quantitative variations regarding metaphorical usages of the HAPPINESS near-synonyms in Indonesian?
 - 3.1. Which metaphors are strongly attracted to certain HAPPINESS word as compared to its synonyms, and which metaphors are strongly repelled?
 - 3.2. What do the attracted metaphors of a word reveal regarding its distinctive metaphorical profiles in comparison to its synonyms?
 - 3.3. To what extent do the distinctive lexical collocates for each synonym contribute to, and further support, the insights revealed by the synonym's distinctive metaphors?

RQ 2 and its sub-questions aim to show a range of prominent metaphors in the broader field of HAPPINESS. Their prominence is operationalised via ranked-list of three frequency profiles as specified in the three sub-questions of RQ 2. Each of these measurements may reveal the relative entrenchment, productivity, and lexical-creativity of the identified metaphors. In that way, the range of conceptualisations of HAPPINESS revealed in the top-10 lists can be put into perspective. Moreover, exploiting these modest frequency profiles aims to justify the richness and potential insights offered from a corpus-based approach to metaphors. The answers to RQ 2 are presented in Chapter 5 and Chapter 6.

The quantitative aspect of RQ 3 aims to determine whether there are conceptual metaphors that occur more, or less, frequently than expected by chance with certain synonyms. The answers to this would lead to the qualitative aspect of the question (RQ 3.2). That is, the usage variation of conceptual metaphors may reveal how the synonyms differ semantically

from each other in terms of their distinctive metaphors. In addition, the distinctive lexical collocations for each synonym are presented to further discuss the distinctive semantic concepts associated with each synonym. RQ 3 is the focus of Chapter 7.

1.5 The significance of the study

This study contributes to two fields of research: The Conceptual Metaphor Theory (CMT), and Corpus Linguistics.

1.5.1 From the theoretical perspective

This study aims to narrow the gap in a less studied territory within the CMT from the Indonesian perspective, namely the interaction of metaphor and emotion near-synonyms. Adopting a corpus-based approach allows us to measure the relative importance of metaphors with the synonyms. I argue that the importance of the metaphors can be pursued from two angles: (i) from the aggregated usage data of the lexical field of an emotion concept, thus representing the broader domain of the emotion (Chapter 5 and Chapter 6); (ii) from the sub-set of the data for each near-synonyms (Chapter 7). This study can also complement previous CMT-based research on metaphors of HAPPINESS in other languages (Pavpertova, 2014 in Russian; Polley, 2012 in Mandarin Chinese; Stefanowitsch, 2004 in German; Türker, 2013 in Korean; Yu, 1995 in Chinese; Mikołajczuk, 2012 in Polish).

In a wider CMT-context, the present study is compatible to the onomasiological perspective in metaphor studies, the importance of which has been underlined by Geeraerts (2015, 2010b, p. 262). *Onomasiology* and *semasiology* are concepts in European lexicological research tradition, corresponding to *synonymy* and *polysemy* respectively (Glynn, 2010a, pp. 18–20). Semasiology begins from a word form (e.g., *head*). Then, one analyses its different senses (e.g., ‘body-part’, ‘leader’, ‘top part of sth.’, ‘to hit sth. with the head’, etc.) and the

semantic relationships between these different senses (e.g., whether they are metaphorically or metonymically related). Onomasiology in contrast starts from a concept (e.g., ANGER) and identifies which other words or expressions that can designate the concept (e.g., *rage*, *anger*, *fury*, *hothead*, *simmer down*, etc.) (cf. Geeraerts, 2010b, p. 26).

The semasiological perspective in metaphor studies focus on the metaphorically extended senses of a certain source-domain word to the target domains. For example, Deignan (2006, p. 116) studies the metaphorical meanings of the word *flame* from the FIRE source domain and determines that the target domain EMOTION, especially ‘feeling of love, romance, and desire’, is present within the semantic range of *flame*. The other senses are ‘belief/determination’, ‘lover’, ‘religion/human spirit’, and ‘other’. Geeraerts (2010b, p. 262, 2015, p. 19) notes that a semasiological perspective is dominant in CMT studies. The importance of metaphorical conceptualisation of a target domain is often established by the presence of the target domain in the semantic range of a source domain word. The missing link is to determine the prominence of the metaphorical source domain within the lexical range denoting a target domain, a perspective suggested by the onomasiological approach.

An onomasiological approach concerns “what is common or different between the various words in capturing the essence of our experiences” (Dirven & Verspoor, 2004, p. 27). An onomasiological approach to metaphors for a target domain, such as EMOTION, suggests a study on variation and similarity between the metaphorical usages of different words evoking an emotion concept. Other related questions from this perspective are: (i) what are the range of metaphors found for a target domain, and (ii) how prominent are these metaphors within the lexical field of the target domain, that is within the range of words designating the target domain (cf. Geeraerts, 2015, pp. 19–20; Gevaert, 2002, p. 276)?

Geeraerts (2010b, p. 262) suggests that the corpus-based method of *Metaphorical Pattern Analysis* (MPA) allows one to take this onomasiological perspective. MPA starts by identifying a target domain. Then, one a set of words referring to this target domain are identified. Next, the metaphorical expressions in which these words occur in a corpus underlie the postulation of the conceptual metaphors.

Another contribution of this thesis is to be the first that extends the *MetaNet* (MN) approach to Indonesian metaphors (§4.3). The thesis aims to show some theoretical and methodological implications of MN to metaphors study in general and especially from the target-domain perspective, such as MPA (cf. §8.2.2).

In sum, a corpus-based, metaphor study of a set of words that semantically roughly denote the same emotion concept may reveal a range of metaphors, and their proportion, within the lexical field denoting the given emotion concept. The result would further show a more expanded account on the emergent, broader emotion concept from the use of these words together, which is one of the overarching aims of CMT studies on emotions.

1.5.2 From the methodological perspective

In relation to HAPPINESS, Kövecses (2008b, p. 142) has called for the support from the corpus-based methods to arrive at a more detailed description of the prominent cognitive models of HAPPINESS concept. This thesis is a response to this call from an Indonesian perspective. Chapter 5 and Chapter 6 demonstrate that ranked-list of metaphors based on three modest frequency profiles offers nuances in exploring quantitative corpus-based data for studying prominent metaphorical models for a given emotion.

More broadly, this thesis demonstrates how the application of corpus-based methods in Cognitive Linguistics can contribute to the relationship between form and meaning, in this case near-synonyms. A “form” would constitute the synonyms (both in their root-nominal and nominalised forms) as used in metaphorical expressions; “meaning” would be the metaphorical conceptualisations (via conceptual metaphors) that the form evokes. The thesis adopts the insights of *Linguistic Profiles* that operationalise frequency distribution of grammatical, constructional, collocational, and semantic contexts as the usage profiles of a linguistic item (see Janda, 2013b; Janda & Solovyev, 2009; Kuznetsova, 2015). This approach is adapted to the idea of *Metaphorical Profiles* of the synonyms that capture the frequency distributions of the conceptual metaphors as evoked by the metaphorical expressions in which the synonyms occur (§7.2.2). This thesis aims to show how metaphorical profiling of near-synonyms may benefit from, and lend its way into, corpus linguistic profiling methods in general. Eventually, this thesis aspires to contribute to the limited Cognitive Linguistics studies in Indonesian adopting quantitative corpus linguistics.

1.6 The organisation of the thesis

This thesis is divided into eight chapters. In Chapter 2, I present the relevant literatures on metaphors, starting with describing the Conceptual Metaphor Theory (CMT) in more details. Then, I discuss key studies on emotion metaphors adopting CMT, including those conducted for Indonesian. I attempt to contextualise the findings and contributions of these studies into how my study advances them by filling some identified gaps.

Chapter 3 discusses the methodology the thesis employed in this study. This covers (i) the characteristics of the corpus used and (ii) the retrieval of citation samples, including the metaphor extraction procedures, namely the *Metaphorical Pattern Analysis* (MPA) and the

Pragglejaz Group's (2010) *Metaphor Identification Procedure* (MIP). Then, I present an overview of the data analysis to be taken in more details in the respective results chapters. The chapter ends with the results of my interrater agreement trial for a subset of the sample.

Chapter 4 covers further discussions concerning the *MetaNet* (MN) approach adopted in the thesis. MN is the hybrid of CMT, Frame Semantics and the Constructional approaches to language. I elaborate on several key notions in MN and propose two main arguments based on these notions. The first one is the importance of Conceptual Autonomy/Dependence (§4.3.2.1) in Cognitive Grammar (cf. Sullivan, 2007, 2009, 2013, 2016) in helping the analyst adopting MPA to identify the potential and syntactically relevant slot in relation to the use of the target-domain word in the retrieved utterances. Target-domain oriented studies from MN project itself essentially adopts the basic workflow of MPA (cf. David, Dodge, Stickles, Sweetser, & Hong, 2014, pp. 16–24; Dodge, 2016, pp. 264–265; Stickles, Dodge, & Hong, 2014, p. 15). The second argument aims to elucidate the methodological implication of viewing conceptual metaphors as unidirectional mappings between frames and frame-roles (§4.3.3) that are mediated via grammatical constructions in which the corresponding target- and source-frame evoking lexical units co-occur (§4.3.2). One implication of this view for a target-domain oriented study is the possibility for the target-domain word to exhibit what I call *metaphorical role-mapping variation*⁴. This phenomenon highlights the fact that there can be variation in how frame roles from a single source frame map to the target due to the syntactic-semantic mappings of the target-frame and source-frame lexical units in the metaphorical constructions (§4.3.5). Such variation then leads to different conceptual metaphors based on a single source frame.

⁴ The original term proposed by the author is *metaphorical role-mapping alternation*. However, one of the examiners points out that “alternation” implies variation between two possibilities and suggests the use of the word *variations* since the phenomenon itself is not limited to two. I really appreciate for this suggestion.

Chapter 5 and Chapter 6 discuss the range of prominent metaphorical models for the broader HAPPINESS-like concept represented by the totality of the metaphor data for each synonym. I consider three different frequency measures to explore these metaphors: token frequency (§5.4), type frequency (§6.3), and type/token ratio (§6.4). The minimal idea these chapters aim to show is how the richness of quantitative data from corpora can be explored to highlight different usage properties of the metaphors, such as entrenchment, conventionality, productivity, and creativity. In sum, the chapters show how the three frequency measures can be used to pursue one of the CMT's aim to characterise and perspectivise the prominent metaphorical representation of a target domain.

Chapter 7 addresses the interaction of metaphor and near-synonyms. It analyses the distinctive metaphors for each HAPPINESS synonym in Indonesian by applying *Multiple Distinctive Collexeme Analysis*. I contextualise the discussion within two points. The first one is the *principal metaphor hypothesis* (Kövecses, 1990) stating the potential role of metaphors in distinguishing semantically similar emotion concepts based on the principal metaphors associated with an emotion. The second one is the universality/variation issue of how the lexical field of HAPPINESS is carved-up into metaphorical-semantic niches based on the synonyms' distinctive metaphors. I also demonstrate the use of distinctive, lexical collocates of each synonym as usage-based operationalisations for Kövecses' theoretical notion of "related concepts" (cf. §2.5.1). These data are used to further characterise the distinctive semantic contours of an emotion concept. Chapter 8 presents concluding remarks, summarises the contributions of the thesis, and generates ideas for further research.

Chapter 2 Conceptual Metaphor Theory and its application to studies on emotion metaphors

2.1 Introduction

This chapter begins with a general introduction to Conceptual Metaphor Theory (CMT) in §2.2. The remainder of the chapter reviews a selection of key CMT studies for emotions (mostly based on English data) that are relevant in positioning the thesis, and that offer theoretical (§2.3 and §2.5.1) as well as methodological insights (§2.5.2). These include studies by Lakoff and Kövecses (1987) on ANGER (§2.3), Kövecses (1991) on HAPPINESS (§2.5.1), and finally Stefanowitsch (2004) on HAPPINESS near-synonyms in English and German (§2.5.2), which is the pioneering work on quantitative corpus-based approach to metaphors. The reviews also cover a few linguistic studies on emotions in Indonesian (§2.6). Finally, some experimental studies attempting to test the cognitive reality of conceptual metaphors related to emotions are presented (§2.7).

2.2 The Conceptual Metaphor Theory

The Conceptual Metaphor Theory (CMT) has been an integral part of a broader theoretical framework now known as Cognitive Linguistics. CMT was advanced during the end of the 1970s, following Reddy's (1979) pioneering work on *conduit metaphor* for verbal communication, and Lakoff & Johnson's (1980) hallmark monograph entitled *Metaphors We Live By*. CMT sheds a light on the nature of metaphor and influenced the direction of metaphor research in particular, as well as of the language-and-thought relationship in general (Gibbs, 2008). Interdisciplinary research on metaphor in recent years has further

revealed the multifaceted nature of metaphor, as a result of complex interplay between “brains, bodies, languages, and culture” (Gibbs, 2008, p. 4; cf. Kövecses, 2005).

One of the basic tenets in CMT is that metaphor is essentially a cognitive mechanism that governs “how we perceive, how we think, and what we do” (Lakoff & Johnson, 1980, p. 4, cf. 1999, p. 118). This cognitive view of metaphor stands in contrast with the one held by the classical theories of language that see metaphor as a mere rhetorical, linguistic device belonging exclusively to the realm of literary or poetic language, but not of conceptual structure and conventional language use (Lakoff, 1993, p. 202). From the cognitive perspective, “metaphor is primarily a matter of thought and action and only derivatively a matter of language” (Lakoff & Johnson, 1980, p. 153).

More specifically, metaphor is defined as a cognitive mechanism for conceptualising one conceptual domain in terms of another conceptual domain (Gibbs, 2015, p. 168; Kövecses, 2010, p. 4; Lakoff & Johnson, 1999, p. 45). The domain that is conceptualised is called the *target domain*, and the domain in which the target domain is construed is called the *source domain*. The terms *source* and *target* domains respectively correspond to two traditional terminologies in metaphor studies, namely *vehicle* (source domain) and *tenor* (target domain) (Geeraerts, 2010b, p. 206).

The source domain typically consists of some kind of content, which is related to “physical perception or sensation” arising from the pervasive patterns of sensorimotor experience (Grady, 1997, p. 26). The attainment of these physical contents involves “direct perception of features of our bodies or our environments” (Grady, 1997, p. 26). In this sense, the source domain is considered as “concrete”. For instance, the feeling of itchiness or pain; perception of sweetness, weight; awareness of movement, etc. The target domain, on the other hand,

constitutes subjective judgements and concepts that are less clearly delineated and lack concrete image content, hence “abstract”. The term *image content* is understood as cognitive representation of experiences deriving from “any sense of modality or bodily sensation”, such as hunger, brightness, pain, and so forth (Grady, 1997, p. 26). In sum, concreteness and abstraction are distinguished based on “what can be observed from the outside”:

“Physical entities, properties, and activities are ‘concrete.’ What is not visible is called ‘abstract:’ emotions, purposes, ideas, and understandings of other non-visible things (freedom, time, social organization, systems of thought, and so on).” (Lakoff, 2014, p. 5)

To illustrate, consider how abstract concept such as IDEAS are understood metaphorically. Lakoff and Johnson (1999, p. 45) demonstrate that our experience with IDEAS can be understood and talked about in terms of MANIPULATING A PHYSICAL OBJECT, a sensorimotor experience. The specific versions of this conceptualisation include conceptualising COMPREHENSION in terms of GRASPING A PHYSICAL OBJECT and FAILING IN COMPREHENSION in terms of PHYSICAL OBJECT GOING OVER OUR HEAD. Consider the following examples.

- (2-1) “how do you manage to *grasp* the meaning of language about understanding, like this very sentence?” (Bergen, 2012, p. 196)
- (2-2) The joke *flew over* my head⁵.

Another example is when we conceptualise and talk about affective experiences, such as LOVE, in terms of GUSTATORY PERCEPTION, such as sweet or bitter (cf. Ren, Tan, Arriaga, & Chan, 2015) (e.g., “love is *sweet*”⁶).

⁵ <http://knowyourmeme.com/photos/462350-drunk-baby--2> (Last access: 2 July 2018 12:21 pm)

⁶ <https://www.livescience.com/42730-love-really-is-sweet.html> (Last access: 2 July 2018 12:22 pm)

2.2.2 Conceptual Metaphors and Metaphorical Linguistic Expressions

CMT distinguishes two kinds of metaphors: conceptual metaphors and metaphorical linguistic expressions (see below). The term *metaphor* in CMT is typically understood as a conceptual metaphor. A *conceptual metaphor* in CMT is orthographically represented in SMALL CAPITALS, and formulated into CONCEPTUAL DOMAIN A (the target domain) IS CONCEPTUAL DOMAIN B (the source domain) (Kövecses, 2010, p. 4) (cf. §2.2.3 below). Recalling the examples in (2-1) and (2-2) above, the extrapolated conceptual metaphors would be COMPREHENSIONS ARE GRASPING PHYSICAL OBJECTS (Lakoff & Johnson, 1999, p. 54) and LOVE IS SWEET (Kövecses, 2010, p. 93).

The *metaphorical linguistic expressions* manifest, and point to, the assumed conceptual metaphor. Metaphorical expressions “are words or other linguistic expressions that come from the language or terminology of the more concrete conceptual domain”, namely the source domain (Kövecses, 2010, p. 4). This linguistic unit is the essential object for the study of metaphor from the Cognitive Linguistic perspective. There are two major forms of metaphorical expressions (Stefanowitsch, 2006b, p. 65): (i) metaphorical expressions that only consist of the source-domain expressions, and (ii) those that “explicitly combine source and target-domain vocabulary” (Stefanowitsch, 2007, p. 146). The second type of the metaphorical expressions is called *metaphorical pattern* in the *Metaphorical Pattern Analysis* (MPA) (Stefanowitsch, 2004, 2006b, 2007) (cf. §2.5.2 below). These two types of expressions are exemplified below for the HAPPINESS IS LIGHT metaphor (cited from Kövecses, 2010, p. 97).

- (2-3) When she heard the news, she *lit* up.
- (2-4) Nothing to worry about, *brighten* up.
- (2-5) He *radiates joy*.
- (2-6) There was a *glow* of happiness in her face.
- (2-7) She was *shining* with joy.

(2-8) Her face was *bright* with happiness.

Except for the first two expressions, which only spell out the source domain words, the remaining expressions (i.e., (2-5) to (2-8)) represent *metaphorical patterns* in MPA sense as they explicitly combine the source- and target-domain words: *radiate NP_{joy}*, *glow of NP_{happiness}*, *shine with NP_{joy}*, *be bright with NP_{happiness}*. Moreover, these metaphorical patterns can occur with different target-domain words for HAPPINESS, namely *joy* and *happiness*. One of the advantages of focusing on expressions in the form of *metaphorical patterns* is that it “allows us to quantify the importance of any given metaphorical pattern for particular (sets of) lexical items.” (Stefanowitsch, 2006b, p. 66) The “(sets of) lexical items” here can be understood as the different forms of the target-domain words.

The present study provides a perfect context to elaborate this advantage as the focus is on different near-synonymous words for HAPPINESS in Indonesian. By analysing the evoked conceptual metaphors via the metaphorical patterns used with these words, it is possible to assess which conceptual metaphors are distinctive or important for the specific HAPPINESS concept denoted by each word. It is then possible to show the degree of interaction between metaphors with a set of target-domain words referring to similar concept (see §2.5.2 and Chapter 7).

2.2.3 Conceptual metaphors as unidirectional cross-domain mappings

As Lakoff and Johnson (1999, p. 128) suggest, the essential functions of metaphors is to project inferences and structures from the more concrete, sensorimotor source domains to the more abstract and complex target domains. Metaphors supply “partial understanding of one kind of experience in terms of another kind of experience” (Lakoff & Johnson, 1980, p. 154). This function of metaphor points to another essential tenet of the cognitive view of metaphor; that is, the projection from the source to the target.

In CMT, the way we understand one particular target domain (A) by means of knowledge projection from a source domain (B) is represented as “a set of systematic **correspondences** between the source and the target in the sense that constituent conceptual elements of B correspond to constituent elements of A” (Kövecses, 2010, p. 7). These correspondences are technically called *mapping*. Consider the conceptualisation of SOCIAL ORGANISATION in terms of PLANTS as exemplified by the following metaphorical expressions (linguistic examples are taken from Kövecses, 2010, p. 10).

- (2-9) He works for the local *branch* of the bank.
- (2-10) Our company is *growing*.
- (2-11) They had to *prune* the workforce.
- (2-12) The organization was *rooted* in the old church.
- (2-13) There is now a *flourishing* black market in software there.
- (2-14) His business *blossomed* when the railways put his establishment within reach of the big city.
- (2-15) Employers *reaped* enormous benefits from cheap foreign labour.

The semantics of the italicised words in the examples evoke the constituent mappings of SOCIAL ORGANISATIONS ARE PLANTS metaphor. Kövecses (2010, p. 10) proposes the following mappings for the metaphor:

<i>Source domain: PLANT</i>	<i>Target domain: SOCIAL ORGANISATION</i>
(a) The whole plant	=> The entire organisation
(b) A part of the plant	=> A part of the organisation
(c) Growth of the plant	=> Development of the organisation
(d) Removing a part of the plant	=> Reducing the organisation
(e) The root of the plant	=> The origin of the organisation
(f) The flowering	=> The best/most successful stage
(g) The fruits or crops	=> The beneficial consequences

In this set of mapping, there is a systematic correspondence between the elements constituting the source domain and those elements in the target domain. Despite the details of the proposed mappings, a metaphor only provides partial comprehension for aspect of the

target domain. That is, in each metaphor, not all aspects of the source domain are *utilised* in construing the target domain (Kövecses, 2017, p. 8). Conversely, the given metaphor may only partially *highlight* certain aspects of the target domain (Kövecses, 2010, pp. 91–94). In CMT, *metaphorical highlighting* and *utilisation* are viewed as two facets in the structure of metaphorical mapping (Lakoff & Johnson, 1980, pp. 52–55). The former pertains to the target domain while the latter is a property of the source domain (Kövecses, 2010, p. 91). The correspondence between the utilised aspects of the source domain and the highlighted aspects of the target is possible by the metaphorical mappings. Such mappings may then guide the “understanding” of particular aspects of the target in terms of the “utilised” aspects of the source (Kövecses, 2010, pp. 7, 95).

Staying with the SOCIAL ORGANIZATIONS ARE PLANTS metaphor, lexical items evoking the PLANTS source domain, such as *flourishing* (2-13) and *blossom* (2-14), utilise/evoke the flowering aspect of PLANTS to highlight the most successful stage aspect of the SOCIAL ORGANIZATION (see mapping [f]). *Prune* (2-11) then evokes the removing plant element of PLANTS to be mapped onto the reducing (part of the) organisation (mapping [d]). *Rooted* (2-12) maps onto the origin (mapping [e]) while *reap* (2-15) evokes the fruit part used to construe the beneficial consequences of the organisation (mapping [g]). What is missing from the utilised aspects of PLANTS may include the manner the plant is planted, its maintenance (e.g., fertilising), and so on.

2.2.4 Metaphorical pluralism

One of the consequences of partial metaphorical highlighting of aspects of a target domain is that “several metaphors jointly produce an understanding for a given target domain” (Kövecses, 2010, p. 96). The phenomenon by which multiple metaphors are used to

conceptualise a given target domain is also known as “the range of target” (Kövecses, 2005, p. 122) or “metaphorical pluralism” (Lakoff & Johnson, 1999, p. 70). A single metaphor does not suffice in providing comprehensive inferences to talk and reason about aspects of a target domain, which is the norm rather than the exception in CMT (Lakoff & Johnson, 1999, p. 70). More than one metaphor may be used and converge on the metaphorical model of a target domain (Kövecses, 2010; Lakoff & Johnson, 1999, p. 71). Metaphorical pluralism is relevant in this thesis since the converged metaphorical conceptualisations of HAPPINESS can emerge from the aggregated metaphorical usages across more than one word referring to HAPPINESS in Indonesian. The prominence of the identified metaphors can then be perspectivised in terms of a set of frequency profiles (Chapter 5 and Chapter 6), given the quantitative corpus-based approach adopted in the thesis.

2.2.5 Metaphoric mapping as inferential transfer

In addition to partial highlighting and utilisation, another salient feature of metaphoric mapping is “preservation of inference” of the metaphor’s source domain in the target domain (Lakoff & Johnson, 1999, p. 58). The metaphorical inference patterns may enrich our understanding about the target domain by means of our reasoning about the source domain. One of the classic examples in CMT is the LOVE IS A JOURNEY metaphor. Lakoff and Johnson (1999, p. 65) provide the following mappings for LOVE IS A JOURNEY:

<i>Source domain:</i> JOURNEY		<i>Target domain:</i> LOVE
(a) Travellers	=>	lovers
(b) Destinations	=>	common life goals
(c) Vehicle	=>	love relationship
(d) Impediments to motion	=>	difficulties

Our knowledge about motion on a path towards a destination, such as travelling, includes several aspects. There are *travellers* assumed to have common *destination*. They could travel with certain *vehicle* along a path leading to the destination. If at a point along the way the vehicle is *broken*, the travellers *cannot make progress* closer to the destination unless they fix the vehicle or abandon it. At another point, the travellers may come to a *dead-end street* that impedes their progress and leads nowhere.

Those inferences in the domain of TRAVEL are projected onto the domain of LOVE. We have lovers that may have common life goals that they try to achieve in their relationship. The situation in which their love relationship is not advancing, as if the vehicle is broken, can be expressed with an English idiom, such as *spinning someone's wheels*. Additional inference conveyed by *spinning one's wheels* is that the vehicle gets stuck and the driver tries to make the vehicle move with some effort (Feldman, 2006, pp. 10–11). This logic is transferred to reason about an aspect of romantic relationship when it cannot progress to the same goals even though the lovers have put efforts into it. In the case of the LOVE-vehicle reaching a dead-end, one may say that their love *hit a dead-end street*. This discussion implies that metaphorical mapping also involves transferring inference patterns and the language to talk about them (e.g., *spinning one's wheels*, *dead-end street*) (Lakoff & Johnson, 1999, p. 66). In relation to this idea, an influential study by Thibodeau and Boroditsky (2011) reveals that different metaphorical mappings⁷ can differently shape our reasoning about how we might resolve one particular complex concept of social importance, such as CRIME (cf. §2.7 for similar kind of experimental study in the domain of EMOTION).

⁷ Thibodeau and Boroditsky (2011) focus on the role of two metaphors in shaping reasoning about CRIME, namely CRIME AS A VIRUS and CRIME AS A BEAST.

In sum, to know a metaphor means “to know the systematic mappings between a source and a target”, which happens largely unconsciously, but the awareness of this mapping is emphasised for the analytical purpose of the phenomenon (cf. Kövecses, 2010, p. 10). Chapter 4 further discusses the Frame Semantic approach to conceptual metaphors, as in the *MetaNet* (MN) project. MN more explicitly considers the formalised link between the internal structures of the domains involved in the metaphoric mapping and the grammatical constructions framing the metaphorical expressions. In the following sections, I present previous studies on emotion metaphors and attempt to contextualise the thesis in terms of insights learnt from these works and the way the thesis expands them.

2.3 Lakoff and Kövecses’ (1987) study on ANGER in American English

Lakoff and Kövecses’s (1987) study of ANGER is amongst the foundational works on emotion metaphors from the perspective of the Conceptual Metaphor Theory (CMT). Based on conventionalised American English expressions obtained from *Roget’s University Thesaurus*, they found that ANGER is largely talked about and conceptualised in terms of expressions related to more concrete experiences (Lakoff & Kövecses, 1987, p. 196) (cf. (2-16) to (2-23) below). The use of concrete concepts in the linguistic expressions of ANGER is assumed to be rooted in “the common folk theory of physiological effects of anger”, such as increase in body heat, internal pressure, redness in face and neck area, physical agitation, and interference with accurate perception (Lakoff & Kövecses, 1987, p. 197). These physiological effects represent the underlying cognitive model that prompts the presence of emotion, such as ANGER. This underlying model then leads to the proposed metonymic system for emotion in general, namely THE PHYSIOLOGICAL EFFECTS OF AN EMOTION STANDS FOR THE EMOTION (Lakoff & Kövecses, 1987, pp. 196–197).

Lakoff and Kövecses suggest that “increased body heat” underlies the general metaphor ANGER IS HEAT. This metaphor has two elaborations, namely ANGER IS THE HEAT OF FLUID IN A CONTAINER and ANGER IS FIRE (Lakoff & Kövecses, 1987, p. 197). It is then argued that the CONTAINER version is more elaborate and productive than the FIRE metaphor, hence becoming the central metaphor for ANGER in English (Kövecses, 2000, p. 142; Lakoff & Kövecses, 1987, p. 198) (cf. Chapter 6 for HAPPINESS metaphors that are central in Indonesian according to their productivity and lexical creativity measures). Metaphorical expressions evoking ANGER IS THE HEAT OF FLUID IN A CONTAINER below highlight different aspects of ANGER based on the experiential knowledge about the behaviour of contained hot fluid (Examples are all from Lakoff & Kövecses, 1987, pp. 198–200). For instance, examples (2-16) and (2-17) evoke the increased intensity of ANGER as the rising fluid due to intense heat.

- (2-16) I had reached the *boiling point*.
 (2-17) His pent-up anger *welled up* inside him.

The expressions in (2-18), (2-19), and (2-20) imply that the high degree of heat can produce steam and exert pressure on the container, so can ANGER itself, and because of which the person attempts to hold it back (Lakoff & Kövecses, 1987, p. 199).

- (2-18) Billy’s just *blowing off steam*.
 (2-19) I could barely *contain my rage*.
 (2-20) He managed to keep his anger *bottled up* inside him.

The remaining three expressions below indicate that the inability to control the extremely high-pressure brings about explosion of the container. This inference is mapped to the situation in which the person becomes so angry that he cannot manage it.

- (2-21) When I told him, he just *exploded*.
 (2-22) I *blew my top*.
 (2-23) Smoke was *pouring out of his ears*.

In sum, the CONTAINER metaphor conveys the potentially intense nature of ANGER, which may lead to loss-control to the intensity and thus becoming dangerous (Lakoff & Kövecses, 1987, p. 200). Below is a set of the proposed mappings for ANGER IS THE HEAT OF FLUID IN THE CONTAINER (Lakoff & Kövecses, 1987, p. 201):

<i>Source domain:</i> HEAT OF FLUID IN CONTAINER		<i>Target domain:</i> ANGER
(a) The container	⇒	The body
(b) The heat of fluid	⇒	The anger
(c) The heat scale	⇒	The anger scale
(d) Container heat	⇒	Body heat
(e) Pressure in container	⇒	Internal pressure in the body
(f) Agitation of fluid and container	⇒	Physical agitation
(g) The limit of the container's capacity to withstand pressure caused by heat	⇒	The limit on the anger scale
(h) Explosion	⇒	Loss of control
(i) Danger of explosion	⇒	Danger of loss control
(j) Coolness in the fluid	⇒	Lack of anger
(k) Calmness of the fluid	⇒	Lack of agitation

The other metaphors of ANGER identified in English are shown below (Kövecses, 1998, pp. 128–129, 2000, p. 21).

ANGER IS FIRE	He is doing a <i>slow burn</i> .
ANGER IS INSANITY	The man was <i>insane with rage</i> .
ANGER IS AN OPPONENT IN A STRUGGLE	I was <i>struggling with my anger</i> .
ANGER IS A CAPTIVE ANIMAL	He <i>unleashed his anger</i> .
ANGER IS A BURDEN	He <i>carries his anger around</i> with him.
ANGRY BEHAVIOUR IS AGGRESSIVE ANIMAL BEHAVIOUR	Don't <i>snarl at me!</i>
THE CAUSE OF ANGER IS TRESPASSING	Here <i>I draw the line</i> .
THE CAUSE OF ANGER IS PHYSICAL ANNOYANCE	He's <i>a pain in the neck</i> .
ANGER IS A NATURAL FORCE	It was a <i>stormy</i> meeting.
ANGRY PERSON IS A FUNCTIONING MACHINE	That really <i>got him going</i> .
ANGER IS A SOCIAL SUPERIOR	His actions were completely <i>governed by anger</i> .

In combination, these metaphorical concepts demonstrate the cognitive model for construing ANGER in English in terms of the metaphorical linguistic expressions used to talk about ANGER. Thus, ANGER exhibits metaphorical pluralism in its conceptualisations. In sum, Lakoff and Kövecses (1987) have demonstrated how CMT can shed light on the conceptualisation of an abstract concept such as emotion.

2.4 Cross-linguistic studies on emotion metaphors

Since Lakoff and Kövecses' (1987) study, there has been a wave of cross-linguistic research attempting to test the explanatory power of their findings and adopt their analytical approach onto the same emotion and/or other emotions (cf. Kövecses, 2005; Soriano, 2013b, p. 72). They include (alphabetically) studies of Balinese (I. M. Rajeg, 2010a), Chinese (Yu, 1995), Hungarian (Kövecses, 2000, p. 140), Indonesian (I. M. Rajeg, 2010b; Siahaan, 2008; 2012, 2013), Japanese (Matsuki, 1995), Polish (Mikołajczuk, 1998), Spanish (Soriano, 2005), and Zulu (Taylor & Mbense, 1998), *inter alia*. Among the central goals of these studies are to discover (i) whether emotion metaphors, such as those Lakoff and Kövecses (1987) propose for ANGER, are also found in other languages, demonstrating their potential universality, or (ii) whether there are metaphors that are culturally-specific, indicating the variation of the metaphors, and how these metaphors vary (Kövecses, 2005).

The cross-linguistic data points to both (universal) commonalities and underlying themes, but also some language-specific variation. As an example, ANGER in Balinese, Chinese, Hungarian, and Japanese can also be conceptualised via the ANGER IS THE HEAT OF FLUID IN THE CONTAINER metaphor. However, in the case of Chinese, the cultural concept *qi*, which is the energy conceptualised as gas flowing through the body (Kövecses, 2000, p. 150; Yu, 1995), plays an important role in the metaphor and stands in contrast to the use of a generic

fluid as in English (Kövecses, 2000, p. 150; Yu, 1995, p. 70). Yu (1995, pp. 81–82) suggests that the *yin-yang* philosophy, opposing fire and gas in one hand, with water and other fluids on the other hand, may underlie the importance of *qi* ‘gas’ for the HEAT metaphor in Chinese. In addition, while English does not specify the kind of container for ANGER, but largely uses the whole body, Chinese uses specific body-parts, such as the heart, liver, thoracic cavity, belly, and the seven apertures in the head (Yu, 1995, pp. 63, 77).

This elaboration of the container is also present in Balinese, Hungarian, Indonesian, Japanese, Kuuk Thaayorre (an Australian indigenous language), and Zulu. In Balinese, the expression *kebus basangé* (lit. ‘the stomach/bowel/belly is hot’) is amongst the common idiomatic ways uttered when a person is angry (I. M. Rajeg, 2010a). A similar case is also found in Japanese *hara* (‘bowel/stomach’) for ANGER (Matsuki, 1995), or in the Kuuk Thaayorre *ngeengk* ‘belly’, as the locus of EMOTION and CHARACTER (Gaby, 2008, p. 34, *et passim*). Hungarian uses head in addition to the whole body for the metaphorical container (Kövecses, 2010, p. 198) while Zulu exclusively uses the heart (Taylor & Mbense, 1998). In Indonesian, in addition to *dada* ‘chest/bosom’, it is *hati* ‘liver’ that becomes the conventional container for emotion (I. M. Rajeg, 2013, p. 325; Siahaan, 2008, 2015; cf. Sharifian et al., 2008 for more similar studies); Figure 5-1 in §5.5 shows the most frequent body-part terms to occur in metaphorical expressions for HAPPINESS in Indonesian.

Collectively, these studies suggest that the cross-linguistic presence of conceptual metaphors for a particular emotion would need to be complemented by description of their metaphorical linguistic realisations, one of the dimensions along which metaphors may vary (Kövecses, 2005, p. 151; Soriano, 2015, p. 210; cf. Stefanowitsch, 2006b, p. 99). In relation to the embodiment hypothesis in Cognitive Linguistics and CMT (Lakoff & Johnson, 1999),

the aforementioned studies also demonstrate that expressions related to bodily organs contribute to the metaphorical conceptualisation of abstract concept like emotions (Evans & Green, 2006, p. 44); it is a linguistic-based hypothesis on the influence of our sensorimotor experiences in human conceptual systems (see Lakoff & Johnson, 1999, pp. 43–44, 77).

2.5 Previous works on HAPPINESS metaphors

2.5.1 Kövecses's (1991, 2015) study on HAPPINESS in English

Kövecses (1991) was the first dedicated study on the concept of HAPPINESS carried out from the perspective of CMT. It aims to identify the way HAPPINESS concept in English is defined and characterised, and what mechanisms are involved. Based on a selected set of conventionalised linguistic expressions related to HAPPINESS, Kövecses proposes three prototypical cognitive models of HAPPINESS in English, resulting from the joint convergence between, predominantly, a set of conceptual metaphors, in addition to metonymies and related concepts (Kövecses, 1991, p. 39, 2008b, 2010, pp. 103, 110). The three prototypical cognitive models are (i) HAPPINESS-AS-A-VALUE, (ii) HAPPINESS-AS-AN-EMOTION, and (iii) HAPPINESS-AS-BEING-GLAD. As to the third model, Kövecses does not provide explicit and equally thorough description as to what metaphors, metonymies, or related concepts, if any, that contributes to the conceptual content of this model. Kövecses (2008b, p. 140) only suggested that the GLAD model “occurs as a mild positive emotional response to a state of affairs that is either not very important to someone or whose positive outcome can be taken to be a matter of course”.

Kövecses (2008b, p. 139) characterises HAPPINESS-AS-A-VALUE as “a quiet state with hardly any noticeable responses or even clearly identifiable specific causes”. The following conceptual metaphors are proposed to capture the HAPPINESS-AS-A-VALUE model (linguistic examples are from Kövecses, 1991, pp. 37–38, 2008b, p. 140, 2010, pp. 114–115)

HAPPINESS IS LIGHT	There was a <i>glow</i> of <u>happiness</u> in her face.
HAPPINESS IS FEELING LIGHT (NOT HEAVY)	I was <i>floating</i> .
HAPPINESS IS UP	I'm feeling <i>up</i> today.
HAPPINESS IS BEING IN HEAVEN	I was in <i>seventh heaven</i> .
HAPPINESS IS (DESIRED) HIDDEN OBJECT	I have <i>found</i> <u>happiness</u> .
HAPPINESS IS VALUABLE COMMODITY	You can't <i>buy</i> <u>happiness</u> .

In contrast, the HAPPINESS-AS-AN-EMOTION model is captured by conceptual metaphors evoking intensity and control, eventually ending up losing control (Kövecses, 2010, p. 114). In Kövecses' updated studies, this model is referred to as HAPPINESS-AS-AN-IMMEDIATE-RESPONSE (Kövecses, 1991, p. 37, 2010, pp. 113, 115, 2015, pp. 155, 162). The HAPPINESS-AS-AN-EMOTION model suggests a more intense form of HAPPINESS than the HAPPINESS-AS-A-VALUE, and is seen as an immediate response to a situation, which is not long-lasting as compared to HAPPINESS-AS-A-VALUE model (Kövecses, 1991, p. 41). Kövecses (1991, 2008b, *et passim*) proposes the following metaphors that characterise the HAPPINESS-AS-AN-EMOTION model.

HAPPINESS IS RAPTURE	I was <i>drunk</i> with <u>joy</u> .
HAPPINESS IS INSANITY	They were <i>crazy</i> with <u>happiness</u> .
HAPPINESS IS AN OPPONENT	<u>Happiness</u> <i>took complete control</i> over him.
HAPPINESS IS LIGHT	He was <i>beaming</i> with <u>joy</u> .
HAPPINESS IS AN ANIMAL (THAT LIVES WELL)	I was <i>purring</i> with <u>delight</u> .
HAPPINESS IS A CAPTIVE ANIMAL	His <u>feelings of happiness</u> <i>broke loose</i> .
HAPPINESS IS A FLUID IN A CONTAINER	He was <i>overflowing</i> with <u>joy</u> .
HAPPINESS IS VITALITY	He was <i>alive</i> with <u>joy</u> .
HAPPINESS IS NATURAL FORCE	I felt a <i>surge</i> of <u>happiness</u> .

Kövecses (1991, pp. 39–40) offers two assumptions regarding the usages of the words *happiness* and *joy* in terms of the two HAPPINESS models. First, *joy* tends to be used with the EMOTION model while *happiness* with the VALUE model. Secondly, despite this tendency, the two words appear possibly and necessarily substitutable, especially for their usage with metaphors capturing the HAPPINESS-AS-AN-EMOTION model. Kövecses (1991, p. 40) argues

that this interchangeability is due to the inclusivity of *happiness* as word denoting both VALUE and EMOTION, while “*joy* seems to be primarily reserved for denoting the emotion”. In fact, Kövecses (1990, pp. 88, 208) more generally argues for the differentiation of semantically similar emotion words based on what he calls as “the principal metaphors” that describe these words. Kövecses illustrates this idea in a study on *pride*, *self-esteem*, *conceit*, and *vanity*. For instance, *conceit* is mainly conceptualised in terms of the UP/HIGH and BIG metaphors, while *self-esteem* is primarily described in terms of (ECONOMIC) VALUE metaphor (Kövecses, 1990, p. 208). The cross-linguistic generalisation of the principal metaphors for emotion near-synonyms is further tested in this thesis for a set of HAPPINESS near-synonyms in Indonesian. Chapter 7 shows that the distinctive association of particular emotion words to certain metaphors can be more rigorously determined via quantification (cf. §2.5.2 and 2.6.2 below for the first corpus-based study by Stefanowitsch (2004) for the distinctive metaphors between *joy* and *happiness* in English).

Besides conceptual metaphors, Kövecses (1991, 2008b, 2010, p. 112, 2015, p. 161) also proposes several types of conceptual metonymies for HAPPINESS. Lakoff & Johnson (1980, p. 35) define conceptual metonymy as “using one entity to refer to another that is related to it.”. A Cognitive Linguistic view of conceptual metonymy defines it as “a cognitive process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target” (Kövecses, 2010, p. 173). These two entities, the *vehicle* and *target*, should belong to the same domain. While metaphor concerns with similarity relationship between two distinct domains, metonymy concerns with contiguity relationship between two entities (thing, event, property) within the same domain (Kövecses, 2010, pp. 174–177). An example is the use of body part terms (the vehicle) from the BODY domain to stand for the whole person (the target), as in “She’s just a pretty *face*”, “We need some new *faces*

around here” (Lakoff & Johnson, 1980, p. 37). Here we have the PART FOR WHOLE metonymy, specifically THE FACE STANDS FOR THE PERSON (cf. §1.1.2).

For EMOTION, Kövecses (2015, pp. 157–158) proposes two general metonymies, namely CAUSE OF EMOTION FOR EMOTIONS and EFFECT OF EMOTION FOR THE EMOTIONS; the latter is more common than the former. These metonymies reflect the *behavioural*, *physiological*, and *expressive* responses accompanying emotions. The following metonymies for HAPPINESS are tallied from Kövecses (1991, pp. 32–33, and 2015, p. 161).

Types of Responses and Conceptual Metonymies	Linguistic Expressions
<i>Behavioural Responses</i>	
JUMPING UP AND DOWN FOR HAPPINESS	<i>Jump up and down with <u>joy</u></i>
DANCING/SINGING FOR HAPPINESS	<i>We were <i>dancing</i> with/<i>singing</i> for <u>joy</u></i>
<i>Physiological Responses</i>	
FLUSHING FOR HAPPINESS	<i>She <i>flushed/blushed</i> with <u>joy</u></i>
INCREASED HEART RATE FOR HAPPINESS	<i>Heart <i>beats</i> with <u>joy</u></i>
BODY WARMTH FOR HAPPINESS	<i>Be <i>warm</i> with <u>joy</u></i>
AGITATION/EXCITEMENT FOR HAPPINESS	<i>Be <i>excited</i> with <u>joy</u></i>
<i>Expressive Responses</i>	
BRIGHT EYES FOR HAPPINESS	<i>Shine with <u>happiness/joy</u></i>
SMILING FOR HAPPINESS	<i>They were all <i>smiles</i></i>

As to the term “inherent or related concepts” for HAPPINESS, there are three prototypical concepts according to Kövecses, namely (FEELING OF) SATISFACTION, PLEASURE, and HARMONY (2008b, p. 137, 2010, p. 113, 2015, p. 162). The first of these tends to appear after a desired outcome, that entails the presence of pleasure and that makes us seem to be in harmony with the world (Kövecses, 2008b, p. 137). What is not clear from the idea of “related concepts” is on what basis can we infer what concepts are related to an emotion,

such as HAPPINESS? In other words, when do we know that concepts X, Y, and Z are associated with HAPPINESS? Inspired by a corpus-based study by Oster (2010), Chapter 7 demonstrates the use of distinctive collocational data for each of the HAPPINESS synonyms to identify their strongly associated concepts, which, I argue, should not necessarily be words referring to the other emotions.

Overall, Kövecses' studies on HAPPINESS in English mainly assumes two prototypical cognitive models derived largely from the system of conceptual metaphors. The models are argued to be the characteristics of different lexical forms of HAPPINESS, particularly *happiness* (for the VALUE model) and *joy* (for the EMOTION model). In this thesis, I present a different approach in characterising the prominent metaphorical model for the whole HAPPINESS domain in Indonesian by exploiting different usage-frequency profiles for the metaphors retrieved from corpus-based analysis (see Chapter 5 and Chapter 6). Moreover, the following section reviews how Kövecses' initial assumption on the metaphor-based distinction between *happiness* and *joy* can be confirmed using corpus linguistic method.

2.5.2 Stefanowitsch's (2004, 2006b) studies on HAPPINESS in English and German

One of the main aims of Stefanowitsch's study (2004) is to introduce a corpus-based method, namely *Metaphorical Pattern Analysis* (MPA), for the study of metaphorical target domains. MPA is a data-driven approach complementing the predominant top-down, intuitive methods in the early CMT research. MPA begins with choosing a (set of) word(s) denoting a target domain (e.g., *happiness*, *joy*, *pleasure*) and retrieving (a sample of) its occurrences in the corpora. Then, one manually identifies the *metaphorical patterns* of the target-domain word (cf. §1.1.2 and §2.2.2). Next, these metaphorical patterns are categorised into “coherent groups representing general mappings” (Stefanowitsch, 2006b, p. 64); the “general mappings” refer to the conceptual metaphors. For instance, given the

usages of *joy* and *happiness* in a corpus, one may identify their collocation with lexical items evoking the source domain of LIQUID (italicised below), hence the metaphor HAPPINESS IS A LIQUID IN A CONTAINER (All examples are from Stefanowitsch, 2004, p. 138).

(2-24) She *bubbled with joy* (metaphorical pattern => *bubble with NP_{joy}*)

(2-25) There was an *outpouring of joy* (metaphorical pattern => *outpouring of NP_{joy}*)

(2-26) What is your *source of happiness* (metaphorical pattern => *source of NP_{happiness}*)

In this thesis, the source-domain words in the metaphorical patterns evoking a particular metaphor are the lexical units counted to measure the type frequency of the metaphor (see §5.2.1) (cf. Dodge, 2016, p. 276; Oster, 2010, p. 742; Petruck & Dodge, 2016, p. 128).

MPA is firstly demonstrated to contrast metaphors associated with two near-synonyms for HAPPINESS in English, namely *happiness* and *joy*, and their German translation equivalents, namely *Glück* and *Freude*. Stefanowitsch relates his discussion to Goddard's (1998) proposal that the English noun *happiness* denotes an emotion of lesser intensity than its translation equivalents in other European languages, such as German *glücklich* and *Glück*, and French *heureux* and *Bonheur*. These equivalents are argued to behave more like English *joy*, namely they are intuitively more intense emotions (Stefanowitsch, 2004, pp. 139–140). To test this assumption, Stefanowitsch compares the co-occurrence frequencies of *happiness* and *joy* with variants of the INTENSITY-related conceptual metaphors, namely EMOTION-AS-LIQUID and EXPERIENCER-AS-CONTAINER metaphors. The statistical test is conducted with the *Fisher-Yates Exact* test. The corpus comes from ten American and German online newspapers accessed via *WebCorp*⁸.

⁸ <http://www.webcorp.org.uk/live/> (Last access: 9 September 2018).

The results support Goddard's hypothesis that, compared to *happiness*, *joy* is significantly more frequent in metaphorical patterns evoking EMOTION-AS-LIQUID metaphor. This usage bias of *joy* with the metaphor highlights the intense profile of *joy* (Stefanowitsch, 2004, p. 140). This result also supports Kövecses' (1991) assumption of the greater intensity of *joy* than *happiness* (cf. §2.5.1). In German, *Glück* is significantly more frequent than *Freude* in its co-occurrence with the LIQUID metaphor (Stefanowitsch, 2004, p. 140). Comparing *happiness* with *Glück*, and *joy* with *Freude*, there is an initial evidence supporting Goddard's claim that *Glück* is more intense. Its intensity is implied from its more frequent occurrence in metaphorical patterns evoking LIQUID metaphor than *happiness*, even though this is not statistically significant.

Stefanowitsch's study also provides further evidence for Kövecses' (1991) assumption that *happiness* tend to be associated with the VALUE model. Stefanowitsch found that, in comparison to *joy*, *happiness* is strongly associated with the so-called "QUEST metaphor" family (2004, p. 143). This metaphor conceptualises emotion as either LOCATION or OBJECT to which the person aiming at attaining the emotion moves. The QUEST metaphor has two submetaphors/submappings, namely the SEARCHING and PURSUIT metaphors; they both are significantly associated with *happiness* (Stefanowitsch, 2004, pp. 143–145). These two submappings might be compatible with HAPPINESS IS A DESIRED (HIDDEN) OBJECT, which is suggested by Kövecses (1991, p. 38) to imbue positive valence of *happiness*.

The central insight from Stefanowitsch's (2004) study is on the potentials of MPA as a usage-based methodology for a metaphor study. An important advantage of MPA is that the obtained quantitative data can be analysed using distributional statistics to determine the metaphors strongly distinctive for a set of emotion near-synonyms. Metaphors that show

higher co-occurrence frequency than expected by chance with an emotion word as compared to its near-synonyms accentuate the distinctive metaphorical profiles of the concept that the word refers to (§7.2.3 presents the quantitative technique used for such analysis, namely *Multiple Distinctive Collexeme Analysis* [MDCA]).

In addition to its methodological relevance, Stefanowitsch's work has a theoretical relevance for the issue of universality and variation of metaphor, especially for HAPPINESS. My study aims to contribute to this issue via two points. First, it examines whether the metaphors that strongly distinguish a set of HAPPINESS synonyms with each other in Indonesian resemble those found in Stefanowitsch's study for *happiness* and *joy* in English. Secondly, it explores what other distinctive metaphors are found to be distinctive for the HAPPINESS synonyms in Indonesian that may not be captured in previous works on HAPPINESS metaphors. Moreover, §4.3.2 further discusses the underlying constructional semantics of a *metaphorical pattern* in MPA based on the *MetaNet* framework. The discussion aims to shed further lights on how one may determine the relevant grammatical slot potentially filled by words evoking the source-domain concepts in relation to the usage citations of the target-domain words.

2.6 Linguistic studies on emotion concepts in Indonesian

There are only few linguistic studies for the domain of emotion in Indonesian. They form two main groups. They are studies focusing on the metaphorical expressions (§2.6.2) and those investigating the literal expressions (§2.6.1). The following section presents their findings that are directly relevant in contextualising the contribution of the thesis.

2.6.1 Non-metaphor studies on emotion concepts

Mulyadi's (2012) dissertation is a cross-linguistic study of the emotion verbs semantics in Indonesian and Asahan Malay. The latter is a language spoken in the city of Tanjungbalai (Asahan) on the east coast of North Sumatra (Mulyadi, 2012, p. 58). The thesis discusses (i) the formal-semantics parameter of the emotion verbs (including the constructional patterns, transitivity, and semantic roles of the arguments of the verbs), (ii) their categorisation (into stative and active emotion verbs), and (iii) their meaning. Mulyadi adopts Wierzbicka's *Natural Semantic Metalanguage* (NSM) approach to explicate the differences in the meanings of semantically related emotion verbs in the two languages. Particularly relevant to my study is Mulyadi's characterisation for the differences between synonymous HAPPINESS words in Indonesian; at some points, nevertheless, his arguments are exemplified by means of metaphorical language to support the NSM-style explication of the words.

For instance, Mulyadi (2012, pp. 236–237) proposes that *senang* 'happy' is assumed to be "less passionate" (*kurang bergairah*) compared to *bahagia* 'happy' and *riang* 'very happy; joyous', which may be assumed to reflect its lesser degree of emotional intensity. *Bahagia* is experienced as "culmination of 'good event'" and is "personal" emotion. Mulyadi made this claim via one (metaphorical) expression, namely *mencari kebahagiaan* 'look/search for happiness', leading to a state of not wanting anything due to "the achievement of the destination/goal or fulfilled needs" (Mulyadi, 2012, p. 237). *Riang* 'very happy' in contrast is impersonal and has present/actual orientation; *riang* "can be shared with other persons and is open to everyone ('something very good is happening')" and "no implication of the achievement of the goal/destination" (Mulyadi, 2012, pp. 237, 238).

Musgrave (2001) is another dissertation with a chapter-length discussion on emotion as well as cognition predicates couched in the *Lexical Functional Grammar* theory. The discussion

of the emotion predicates focuses on syntactic topics. The first one concerns with the syntactic status of the STIMULUS arguments in a clause headed by emotion/cognition predicates. The second one looks at the range of syntactic constructions in which the emotion/cognition words can appear. The third one is about the syntactic category to which these emotion/cognition words could be assigned based on the findings of the second topic.

One relevant insight is that emotion/cognition words can appear in nominal syntax as nouns without any morphological derivation from the root forms (Musgrave, 2001, pp. 164, 171). Feature showing this usage can be used as a reference to identify the (non-)nominal usage of the root forms of the HAPPINESS words in my study. The overall view, particularly on the syntactic category of the emotion and cognition words, is that these words lay in a verb-adjective continuum “with some emotion and cognition words closer to one end of the continuum and some closer to the other” (Musgrave, 2001, p. 179). This view constitutes an intriguing hypothesis for a further investigation that is beyond the scope of this thesis. What this thesis aims to show is the extent to which root-nominal of an emotion concept, and its nominalised form, diverge and/or converge semantically in terms of the metaphors for which they are distinctive (Chapter 7). Considering this morphological variation of the Indonesian emotion lexicons contributes further theoretical nuance to the metaphor-synonym interface, and more broadly to the form-meaning relationship in language.

2.6.2 Studies on emotion metaphors in Indonesian

2.6.2.1 From the source domain perspective

Siahaan (2008, 2015) represent metaphor studies from the source-domain perspective. She analyses expressions from the source domains BODY as well as TEMPERATURE and explores the range of the metaphorically extended senses of these expressions, including in the target domains of EMOTION and COGNITION. Recalling Geeraerts’ (2015, p. 19) argument in §1.5.1,

Siahaan takes the semasiological perspective to determine the importance of the target domain EMOTION and COGNITION within the semasiological/semantic range of BODY-PART and TEMPERATURE source-domains expressions in comparison to the other extended senses.

In her 2008 study, Siahaan discusses two main points: (i) the metaphorical conceptualisations of Indonesian *hati* ‘liver’, as the seat of both EMOTION and COGNITIVE ACTIVITIES, and (ii) the ethno-religious and cultural motivations for such conceptualisations. It is argued that the various metaphorical usages of *hati* ‘liver’ in present-day Indonesian are remnants of the pre-modern religious tradition in Indonesian, that is liver divination ritual and ancient ethnic religious belief (Siahaan, 2008).

The latest paper by Siahaan (2015) focuses on the metaphorical usages of words referring to three basic temperature concepts in Indonesian, namely HOT, WARM, and COLD. Based on five Indonesian online newspapers, Siahaan found that (LACK OF) EMOTION takes the dominant proportion to which words for HOT, WARM, and COLD are extended metaphorically. Siahaan (2015) also discusses the role of various BODY-PARTS in the metaphorical expressions with the temperature terms. HAPPINESS specifically is absent from the range of target domains for those temperature concepts in her corpus. The question now is could there be any TEMPERATURE source domain used with any HAPPINESS words if the study now starts from the target-domain? If so, how prominent would this source domain be as compared to the other source domains found, and how can this be determined?

Siahaan’s studies can be complemented via taking the target-domain perspective for a more complete picture on the relative importance of the two source domains above in the conceptualisation of HAPPINESS (cf. Geeraerts, 2015, pp. 19–20). It can be done by checking whether the two source domains above are used to conceptualise HAPPINESS and how

frequently compared to the other source domains found. The following section presents studies that take this reverse perspective.

2.6.2.2 *From the target domain perspective*

Yuditha (2013) analyses metaphorical conceptualisations of emotions in Indonesian, mainly ANGER, LOVE, and HATRED. The central theme is on the universality and culture-specificity of conceptual metaphors for those emotions with reference to the conceptual metaphors proposed in the literatures (e.g. Kövecses, 2000, 2008a). Yuditha (2013) mentions the use of corpus data and applies the *Metaphorical Pattern Analysis* (MPA) (Stefanowitsch, 2006b). The corpus data are mainly used to offer descriptive support for the existence of the conceptualisations of ANGER, LOVE, and HATE in Indonesian in terms of three emotion metaphors proposed in previous study (e.g. Kövecses, 2008a), namely (i) LIQUID, (ii) A (NON-)VALUABLE OBJECT, and (iii) PERSONIFICATION. Yuditha also uses the corpus data, but without statistical analysis, to propose metaphors assumed to be “specific” for each of the three emotions: ANGER IS A SONG AND FOOD, LOVE IS A STRING AND FREEDOM, and HATE IS A CONTROLLABLE ORGANISM AND DISEASE.

Yuditha’s corpus-illustrated study constitutes a step towards the usage-based study of emotion metaphors in Indonesian. It provides hypotheses for the occurrence of the three emotions in metaphorical expressions evoking the metaphors she focuses on. Some further questions arise. How and when can we be sure that the three emotions above indeed share the use of LIQUID, (NON-)VALUABLE OBJECT and PERSONIFICATION metaphors? What if HATE is only marginally conceptualised as LIQUID compared to ANGER or LOVE, despite the three of them *do* occur in LIQUID metaphorical expressions? What if there are alternative metaphors that are more central for (each of) the three emotions. Tummers et al (2005, p.

234) mentions that corpus-based studies rarely provide “black or white” answers to a phenomenon: “a proper analysis of corpus materials requires that alternative patterns are systematically explored and that their frequencies are statistically evaluated.” This is the perspective taken in the following two studies.

To the best of my knowledge, the doctoral thesis by Rajeg (2013) is the first quantitative corpus-based study of emotion metaphors in Indonesian. It adopts MPA and is based on just over five million-word tokens of self-compiled electronic Indonesian corpus comprising novels, short stories, monologue, folklore, and plays/drama text. Rajeg analyses five emotion concepts, namely ANGER, FEAR, HAPPINESS, SADNESS, and LOVE, based on *one* word representing each concept. *Configural Frequency Analysis* (CFA) (Gries, 2009b, p. 240) is applied to detect metaphors that are strongly (a/di)ssociated with each concept (I. M. Rajeg, 2013, Chapter 6). This is similar to Stefanowitsch’s (2006b, pp. 90–96) quantitative analysis for identifying the emotion-specific metaphors in English.

For instance, Rajeg (2013, p. 211) found that HOT LIQUID IN A CONTAINER is amongst the strongly associated metaphors for ANGER (i.e., *kemarahan*) in Indonesian, which is similar in English (Stefanowitsch, 2006b, p. 92). This confirms Yuditha’s (2013) description that ANGER in Indonesian can be conceptualised as HEATED LIQUID. At the same time, this contradicts Yuditha’s (2013, p. 127) claim that ANGER and LOVE share the LIQUID metaphor. CFA reveals that LIQUID is strongly dissociated with LOVE (i.e., *cinta*); the metaphor only occurs once in a 1000-item random citations of *cinta* that Rajeg analyses (2013, p. 222). The strongly associated metaphors for *cinta* are, among others, BECOMING LOVE IS A DOWNWARD MOTION (e.g., *jatuh cinta* ‘lit. *fall love*’) and LOVE IS A BOND (Kövecses, 2000, p. 27) (e.g., *jalinan/tali cinta* ‘*braid/rope of love*’).

Rajeg also explores the *main meaning focus* and *central mappings* (Kövecses, 2010, pp. 137–139) of the attracted metaphors for each emotion. It is determined by comparing the frequency of semantic aspects evoked from the metaphorical patterns of each of the attracted metaphors. Such comparison reveals which aspects of the metaphors are more frequently referred to by the metaphorical patterns (I. M. Rajeg, 2013, Chapter 7; cf. Ogarkova & Soriano, 2014, pp. 106-110). This analysis is directly inspired by Stefanowitsch's (2006b) model on measuring qualitative difference between *joy* and *happiness* for the FULLNESS/PRESSURE mapping.

For HAPPINESS, the specific word Rajeg analyses is *kebahagiaan* 'happiness' and he begins with the fifteen HAPPINESS metaphors proposed by Kövecses for English (2000, p. 24). Rajeg (2013, p. 141) finds that the proposed HAPPINESS metaphors by Kövecses account for only 5.65% of all the metaphor tokens found in the sample for *kebahagiaan*. The lion's share of the tokens (i.e., 65.73%) belongs to the various types of the *Event Structure Metaphors* (ESM). ESM is a set of metaphorical conceptualisations for various aspects of events as the target domains, including (CHANGE OF) STATE, CHANGE, PURPOSES, CAUSES bringing about the change, etc. These target domains are conceptualised in terms of physical LOCATION, (SELF-PROPELLED/CAUSED) MOTION, FORCE, etc. (Kövecses, 2010, p. 162; Lakoff & Johnson, 1999, pp. 178–215). The other 28.62% consists of tokens for metaphors that are not identified in previous studies (I. M. Rajeg, 2013, pp. 145–150).

The CFA results reveal nine, strongly associated metaphors for *kebahagiaan* 'happiness' in Indonesian. Most of these metaphors belong to the ESM type (I. M. Rajeg, 2013, p. 216). In particular, the two metaphors of HAPPINESS found in Stefanowitsch (2004), namely the TRANSFER and PURSUIT/QUEST metaphors, are also strongly associated with *kebahagiaan*

‘happiness’ in Indonesian (cf. I. M. Rajeg, 2013, pp. 217–218 for details; Stefanowitsch, 2004, pp. 142–147). This finding provides initial evidence for the universality of these metaphors for the HAPPINESS-like concept in English and Indonesian.

The other four metaphors associated with *kebahagiaan* ‘happiness’ are BEING HAPPY IS POSSESSING AN OBJECT; HAPPINESS IS A FRAGILE OBJECT; BEING HAPPY IS UP/OFF THE GROUND; and HAPPINESS IS NUTRIENT (FOOD/DRINK). The POSSESSION and FRAGILE OBJECT mappings are also found by Stefanowitsch (2006b, pp. 99–101) as amongst those associated with the word *happiness* as compared to *sadness*. Another similar result in Rajeg’s (2013, p. 218) study to Stefanowitsch’s (2006b, p. 93) is the importance of BEING HAPPY IS UP/OFF THE GROUND metaphor proposed by Kövecses (2000, p. 40) to be exclusive to HAPPINESS.

At this stage, the Rajeg’s findings on *kebahagiaan* ‘happiness’ will be a starting point for the present study, which expands its focus to consider the other words closely related to *kebahagiaan* in the lexical field of HAPPINESS in Indonesian (cf. §1.3.1 and Table 3-2). The extent to which the strongly associated metaphors for *kebahagiaan* persists when its semantically related words are brought into the scene remains to be seen (Chapter 7).

My pilot corpus-based study (G. P. W. Rajeg, 2014) is the first in Indonesian to address the metaphor-synonyms interface. Based on the corpus of ten online Indonesian newspapers, the study combines MPA and *Multiple Distinctive Collexeme Analysis* (MDCA) (§7.2.1) (Stefanowitsch, 2013). MDCA is used to contrast five Indonesian near-synonyms of ANGER in terms of their distinctive metaphorical patterns, as weighted via one-tailed, exact *Binomial Test* implemented in MDCA (§7.2.3). The distinctive metaphorical patterns are further analysed to reveal the metaphorical semantics of each synonym as well as the overarching concept of ANGER.

For instance, intensity is the most prominent aspect highlighted by the distinctive metaphorical patterns across the five ANGER words. That is, intensity has a relatively strong position within the range of words (i.e., the lexical field) of ANGER, showing the highest sum of distinctiveness value compared to the other aspects (The approach to sum the distinctiveness values of a given semantic aspects is adopted from Wulff, Stefanowitsch, & Gries, 2007). Between the synonyms, intensity is a more prominent profile of one word, namely *kekesalan* ‘resentment; annoyance’, with the sum distinctiveness value of 12.97, which is over five times higher than the other words (2.3 for *kemarahan* ‘fury’, 2.52 for *kejengkelan* ‘annoyance’, 2.09 for *kemurkaan* ‘anger’, and 1.68 for *kegeraman* ‘rage’).

That preliminary study is indeed based on small sample for each ANGER synonyms. Nevertheless, it shows that there is an initial evidence from Indonesian that its emotion synonyms for ANGER behave differently in their metaphorical usages, corroborating finding for the same issue for different emotions (e.g., Stefanowitsch, 2004; Ogarkova, 2007). The present thesis aims to further test this preliminary evidence over HAPPINESS in Indonesian, using a larger data set and a greater number of synonymous words.

2.7 Experimental evidence for the existence of conceptual metaphors

The initial proposal for the existence of metaphor as part of humans’ conceptual system was built upon linguistic evidence (Lakoff & Johnson, 1980). However, there are large bodies of experimental research, particularly from psycholinguistics, showing converging evidence for the way metaphors arise from embodied experiences and shape reasoning and understanding. One of the precursors of this line of research is Raymond Gibbs and colleagues (e.g. Gibbs, 1992, 1994; Boroditsky, 2000, 2001; for summary of state-of-the-art, see Bergen, 2012, Ch. 9; and Gibbs, 2015).

With regard to HAPPINESS, Tseng et al. (2005) conducted an experimental study that supports one of Stefanowitsch's (2004) corpus-based findings, namely *joy* is associated with LIQUID IN A CONTAINER metaphor, while *happiness* with SEARCHING FOR AN OBJECT metaphor. Tseng et al. (2005) tested whether subjects' choice between *joy* and *happiness* to describe a picture of a smiling person is primed by the subjects' current engagement in bodily activities of (i) filling their body with liquid (e.g., drinking) and of (ii) searching for something; the third group of subjects tested were in neutral, classroom setting. The results show that the subjects were more likely to describe the person in the stimulus to experience *happiness* when they were engaged in searching activity (54%), and more likely to choose *joy* when they were engaged in drinking (70%) (Tseng et al., 2005, p. 364). In the neutral condition, there were more *joy* responses over *happiness*, thus resembling the response in the "drinking" condition, but significantly different from the "searching" behaviour.

Several similar studies also show how "people's immediate bodily experiences can also affect their metaphorical social judgments" (Gibbs, 2015, p. 7). For instance, experiencing sweet taste has been shown to influence one's perception towards romantic relationship, reflecting the LOVE IS SWEET metaphor (e.g., *honey*, *sweetheart*) (Ren et al., 2015). Another example is a study that getting different subjects to judge the personality of an imaginary person by first having the subjects hold a cup of warm or cold coffee. The results reveal that subjects holding a warm cup of coffee judge the fictitious person as more friendly, affectionate, and generous (Williams & Bargh, 2008), supporting the representation of the primary metaphor AFFECTION IS WARMTH (Lakoff & Johnson, 1999). Other persuasive, non-linguistic evidence of conceptual metaphors come from, among other, gesture studies, sign language, and multimodal metaphors (cf. Lakoff & Johnson, 1999, pp. 81–87; Lakoff, 1993, pp. 241–244; Kövecses, 2010, Ch. 5; Gibbs, 2015).

2.8 Summary

This chapter has reviewed Conceptual Metaphor Theory and its application to the previous linguistic studies on emotion concepts. The key message from the literature review is that there is a lot to be done in the context of Indonesian emotion metaphor research to contribute to the established field of emotion metaphors in the CMT. This is also true in relation to the methodological advancement of CMT in particular, and of Cognitive Linguistics in general, to adopt cutting-edge techniques in quantitative corpus linguistics (cf. §2.5.2 and §2.6.2.2) and psycholinguistic experiments (§2.7). This thesis takes one step further for Indonesian. It enriches previous emotion metaphor studies by addressing a recent theoretical desideratum in CMT for the study of emotion metaphors, namely metaphor-synonyms interface, via adopting the corpus-based methodology. Addressing this issue aims to test the cross-linguistic generalisation of the assumption for the role of metaphors as the distinguishing features for semantically similar emotions. This thesis then contributes further data to the cross-linguistic study of (emotion) metaphors that lies at the heart of CMT in relation to the universality and variation in metaphorical construal of concepts.

Chapter 3 Data and methodology

3.1 Introduction

This chapter outlines the methodologies employed in this study and the nature of the data analysed. §3.2 focuses on the corpora used and the sample retrieval of each synonym. §3.3 covers the methods for metaphor data extraction. §3.4 highlights the aspects of data analysis that are further elaborated in the respective analytical chapters. Finally, §3.5 reports the results of interrater agreement trial for a subset of the sample.

3.2 Data source

The primary data source for this study is the *Leipzig Corpora Collection* (LCC) (Goldhahn, Eckart, & Quasthoff, 2012). LCC hosts monolingual Web-based corpora of comparable sources and sizes for more than 250 languages⁹, including Indonesian. Access to the corpora is available via online interface¹⁰. Alternatively, all corpora can be downloaded for free in UTF-8 plain-text format. One zipped file of a downloaded corpus data contains, among others, word list of all word forms of the corpus, all sentences of the corpus, words co-occurrences statistics based on log-likelihood measures, and the URLs of the used sources¹¹.

For each language, the corpora consist of randomised sentences that users can download from the size of 10,000 sentences to 1 million sentences. The scrambling of the sentences aims to avoid copyright restrictions and prevent the reconstruction of the original source.

⁹ See <http://asvdoku.informatik.uni-leipzig.de/corpora/> (Last access: 9 September 2018).

¹⁰ The following URL is directed to the online interface for searching content of an Indonesian corpus, which is automatically pre-selected by the system: http://corpora.uni-leipzig.de/en?corpusId=ind_mixed_2013

¹¹ See http://pcai056.informatik.uni-leipzig.de/downloads/corpora/Format_Download_File-eng.pdf for further information concerning the available data and format of a downloaded LCC corpus data (Last access: 9 September 2018).

This is a safe practice at least for German copyright legislation in which the corpora are assembled (Goldhahn et al., 2012, p. 763). The primary text genres of the corpus are newspaper texts, Wikipedias, and randomly collected web pages (Quasthoff & Goldhahn, 2013, p. 1).

Despite a restricted genre of the corpora, it is very practical for now to opt for the Indonesian corpora of the LCC. The most important reason is that, currently, there are no other pre-compiled corpora for Indonesian as large and freely downloadable as the one provided in LCC¹². For this thesis, the following list of the available Indonesian corpus files with the largest sentence-size were downloaded on May 28, 2015.

Table 3-1 Corpus files in the Indonesian Leipzig Corpora Collection used in the study.

	Corpus files	Size (in words)
1	ind_mixed_2012_1M-sentences.txt	15,052,159
2	ind_news_2008_300K-sentences.txt	5,875,376
3	ind_news_2009_300K-sentences.txt	5,868,276
4	ind_news_2010_300K-sentences.txt	5,874,158
5	ind_news_2011_300K-sentences.txt	5,852,211
6	ind_news_2012_300K-sentences.txt	5,873,523
7	ind_newscrawl_2011_1M-sentences.txt	16,376,426
8	ind_newscrawl_2012_1M-sentences.txt	16,916,778
9	ind_web_2011_300K-sentences.txt	4,472,885
10	ind_web_2012_1M-sentences.txt	15,844,629

¹² The other free and downloadable corpora for Indonesian are part of the *PAN Localization Project* (<http://www.pan110n.net/indonesia/>) (Last access: 9 September 2018). The Indonesian project produces (i) a 1-million word manually tagged corpus using Penn Tree-Bank tagset (<http://www.pan110n.net/english/outputs/Indonesia/UI/0802/UI-1M-tagged.zip>) (Last access: 9 September 2018), and (ii) a collection of 500K words of untagged, monolingual Indonesian corpora (<http://www.pan110n.net/english/outputs/Indonesia/UI/0802/Parallel%20Corpus.zip>) (Last access: 9 September 2018) (Adriani & Riza, 2009; BPPT, 2009). The sizes of these corpora combined are much smaller in comparison to the Leipzig Corpora for Indonesian used in this thesis.

In total, the ten corpus files in Table 3-1 contain 98,006,421 million word-tokens¹³. These are *raw corpora* in the sense that they are not annotated with any additional linguistic information, such as Part-of-Speech (POS) tagging and/or lemmatisation. The naming format for the corpus files represents the following information¹⁴ that is separated by underscore: *language*, *genre*, *year*, and *sentence size*. The *language* is a three-character language code according to ISO 639 listed at *Ethnologue*¹⁵. The *year* is year of download; but for the *news* genre, the *year* corresponds to the time of publication. The more specific information concerning the *genre* sections is as follows:

- a. *mixed* section was “a mixture of sources (like news material, Web text, etc.)”
- b. *news* section was gathered from “news websites (typically on a daily basis via RSS feeds)”
- c. *newscrawl* section represents material “crawled from news websites and may be older than the specified year”
- d. *web* section used materials from “randomly chosen Web sites”

In the last visit to the Indonesian LCC download website in December 2017, there are new additional corpora besides the ones used in this thesis. These additional corpora include (i) the 300K- and 1M-sentence corpora for the *newscrawl* section in the year of 2015 and 2016 respectively, (ii) two 1M-sentence corpora for the *web* section in the year of 2013 and 2015, and (iii) 1M-sentence corpus for the *Wikipedia* section in 2016; the *Wikipedia* material comes from the *Wikipedia dumps*. These corpora are not included in my study since data annotations and analyses have been done by the end of 2016 with the corpora in Table 3-1.

¹³ A word is defined using the following reg(ular) ex(peression): `\b(?i)([-a-z0-9]+)\b` (Gries, 2009a, p. 151). The regex defines a word as any one or more (“+”), case insensitive (“(?i)”), alphanumeric characters and a hyphen (“[-a-z0-9]”) surrounded by word boundary (“\b”). The words in each corpus file are counted in R using the `str_count()` function from the `stringr` R package (Wickham, 2017) followed by summing up the number of words found using the base R `sum()` to get the total word-count in each file; these processes are preceded by first removing the sentence number/ID from the word-count.

¹⁴ See <http://asvdoku.informatik.uni-leipzig.de/corpora/index.php?id=corpora-for-download> (Last access: 9 September 2018).

¹⁵ See <http://www.ethnologue.org> (Last access: 9 September 2018).

The HAPPINESS synonyms analysed in this study, and their token frequencies in the Indonesian LCC, are presented in Table 3-2. The glosses for each synonym were taken from *A Comprehensive Indonesian-English Dictionary* (Stevens & Schmidgall-Tellings, 2004). This dictionary is chosen because it compiles the entries from primary sources of various genres as well as secondary sources of other dictionaries, including those written by native Indonesian (Stevens & Schmidgall-Tellings, 2004, pp. xviii–xix).

Table 3-2 Token frequency of the HAPPINESS synonyms in the Indonesian LCC.

Searching pattern	Match	Gloss	Lexical forms	N
\b(?i)senang\b ¹⁶	<i>senang</i>	happy, to feel well, contented, satisfied	root	14,531
\b(?i)bahagia\b	<i>bahagia</i>	(peaceful and) happy; happiness; luck(y), good fortune	root	6,178
\b(?i)gembira\b	<i>gembira</i>	excited, enthusiastic, exuberant	root	4,387
\b(?i)ceria\b	<i>ceria</i>	cheerful; lit. pure, clean, clear	root	880
\b(?i)riang\b	<i>riang</i>	very happy, joyous, glad	root	528
\b(?i)kebahagiaan\b	<i>kebahagiaan</i>	happiness, prosperity and contentment	nom. <i>ke- -an</i>	3,228
\b(?i)kesenangan\b	<i>kesenangan</i>	pleasure, happiness, enjoyment	nom. <i>ke- -an</i>	1,293
\b(?i)kegembiraan\b	<i>kegembiraan</i>	joy, cheerfulness, high spirits	nom. <i>ke- -an</i>	1,211
\b(?i)keceriaan\b	<i>keceriaan</i>	cheerfulness; lit. purity	nom. <i>ke- -an</i>	265
\b(?i)keriangan\b	<i>keriangan</i>	cheer(fulness), happiness, joy	nom. <i>ke- -an</i>	60

As mentioned in §1.3.1, the root morphemes of the synonyms in Table 3-2 are the top five representative terms referring to the HAPPINESS-like category in Indonesian (Shaver et al., 2001, p. 217). These root morphemes are predominantly used in predicative (3-1) and attributive syntax (viz., as verbal (3-2) or nominal modifiers (3-3)).

(3-1) “*Saya selalu senang datang ke Australia*”
 1SG always happy come to Australia
 ‘I am always *happy* to come to Australia’ (*ind_news2012_300K:234399*)¹⁷

¹⁶ The \b part indicates word boundary while the (?i) indicates that the searching procedure ignore character case.

¹⁷ The sources of examples are shown in parentheses; the item before the colon is the corpus name, while the numbers after the colon is the sentence number of the citation in the corpus.

- (3-2) Mereka ikut ber-tepuk tangan dan mulai **ber-goyang** riang
 3PL join MID-clap hand and begin MID-sway joyous
 ‘They join in to clap (their) hand and start *swaying joyously*’
 (ind_news2012_300K:103044)
- (3-3) kami semua ter-inspirasi oleh **wajah** cerah dan gembira
 1PL.EXCL all PASS-inspiration by face bright and excited
 dari para pe-milik toko itu
 from DEM.PL NMLZ-possession retail that
 ‘we are all inspired by the bright and *excited face* from the shops owners’
 (ind_mixed2012_1M:175826)
- Since this study focuses on the nominal usage of the HAPPINESS words, citations of all the root forms were manually inspected to retrieve those tokens where the roots occur in nominal syntax, as exemplified below.
- (3-4) Syntactic subject (and modified by a determiner *ini* ‘this’)
 Aku harap bahagia ini terus **ber-semi** di dalam kehidupan kami
 1SG hope happy this continuous MID-sprout LOC inside life 1PL.EXCL.POSS
 ‘I hope that this *happiness* keeps *sprouting* in our life’ (ind_web2012_1M:712118)
- (3-5) Direct object
 Tidak kuasa **men-(t)ahan**¹⁸ gembira, para pendukung City ber-lari ke lapangan
 NEG authority AV-hold.back excited DEM.PL supporter NAME MID-run to field
 ‘Being unable to *hold back* (their) *excitement*, City’s supporters run to the field’
 (ind_news2012_300K:51703)
- (3-6) Complement of preposition
 Wah, makin **jauh** saja mestinya kita **dari** senang!
 EXCL increasingly far just as.it.should 1PL.INCL from happy
 ‘Waw, we should have just got increasingly *far from happiness*’
 (ind_web2012_1M:211517)
- (3-7) Nominal modifier (in a nominal compounding)
Kunci bahagia adalah hati.
 key happy COP liver
 ‘(The) *happiness key* (or *key to happiness*) is (our) heart’ (ind_news2012_300K:241401)

In contrast, when the root forms are affixed with *ke-* *-an*, whose one of the functions is deriving abstract nouns, the nominal reading is assigned. For the nominalised forms,

¹⁸ Indonesian has a verbal prefix, namely *meN-*, ending with a nasal segment that assimilates to the first-letter consonants of the root words. In the case of the verb *tahan* ‘to hold back’, the “t” is replaced with “n”, thus *menahan* ‘to hold back’. Throughout the thesis, I enclosed the consonants of the roots undergoing nasal substitution in brackets, hence *men(t)ahan*.

especially *kebahagiaan* ‘happiness’, *kesenangan* ‘pleasure; happiness; enjoyment’, and *kegembiraan* ‘joy’, I analysed a random sample of 1000 concordance hits for each form. The choice for 1000 citations follows previous corpus-based studies on emotion metaphors, adopting the *Metaphorical Pattern Analysis* (MPA) (cf. §3.3.1) (Ogarkova & Soriano, 2014, p. 99; I. M. Rajeg, 2013, p. 104; Soriano, 2015, p. 208; Stefanowitsch, 2006b, p. 71). The remaining two nominalised HAPPINESS words, namely *keceriaan* ‘cheerfulness’ and *keriangan* ‘cheerfulness’, occur less than 1000 times in the Indonesian LCC (i.e., 265 and 60 tokens respectively). Additional citations for these words were retrieved from (i) the *Indonesian Web as Corpus* (IWaC) hosted on the *Sketch Engine* (Kilgarriff et al., 2014) (<https://www.sketchengine.co.uk/indonesianwac-corpus/>) and (ii) ten online Indonesian newspapers¹⁹ that were searched through *WebCorp* (<http://www.webcorp.org.uk/live/>).

In the IWaC, I use a case-insensitive search word for the form *keceriaan* and *keriangan*. IWaC searches produced 319 unique citations for *keceriaan* after manually removing 18 duplicates. Much less citations are produced for *keriangan*, that is 118 citations in total, after discarding six duplicates. The data from IWaC were retrieved on 21 August 2015. The newspapers data from *WebCorp* were retrieved via one query for each *keriangan* and *keceriaan* in each newspaper; thus, I made twenty, case-insensitive queries in total. The searches yielded 449 citations for *keceriaan* (after duplicates removal from the total 504 tokens) and 182 citations for *keriangan* (after duplicates removal from the total 226 tokens). *WebCorp* data were retrieved on 13 August 2015.

¹⁹ The URLs of the ten newspapers are as follows: <https://koran.tempo.co>; www.kompas.com; www.mediaindonesia.com; www.koran-jakarta.com; www.antaranews.com; www.republika.co.id; www.suaramerdeka.com; www.suarapembaruan.com; www.koran-sindo.com; www.indopos.co.id.

In addition to the default nominal reading of the *ke-* *-an* forms, there are few cases where this form function as adverbial (e.g., (3-8) and (3-9)) and as predicate (3-10). The adverbial function suggests that the action is done/performed ‘in a way showing some pleasure or joy’. Consider few examples below.

(3-8) *para wanita men-jerit kesenangan men-(t)eriak-kan nama Pharell dan Shay.*
 DEM.PL women AV-scream pleasure AV-scream-APPL name NAME and NAME
 ‘the women *scream happily*, screaming Pharell’s and Shay’s names.’
 (*ind_newscrawl2012_1M:500914*)

(3-9) *Flynn (drum) sudah mem-buat pen-(t)onton histeris kesenangan.*
 NAME drum already AV-make NMLZ-to.watch hysterical pleasure
 ‘Flynn (on drum) already made the spectators *happily/pleasingly hysterical*
 (*ind_newscrawl2012_1M:878070*)

(3-10) *Miko malah kesenangan bisa keluar dari rumah*
 NAME instead pleasure can go.out from house
 ‘Miko is instead *pleased* (i.e., experiencing pleasure) to be able to get out from home’
 (*ind_newscrawl2012_1M:643488*)

In this case, citations with these non-nominal readings were manually excluded from the sample. Other pre-processing of the sample includes manual removal of duplicates and exclusion of citations where the analysed HAPPINESS synonyms co-occur in one sentence or clause (Gevaert, 2007, p. 197). Gevaert (2007, p. 197) suggests that when we aim to “search for possible semantic differences between (near-)synonyms”, as one of the aims of this thesis, co-occurrence of the near-synonyms in a sentence should “better be excluded” because this phenomenon “leads to semantic levelling”, in the sense that the co-occurrence “has the effect of neutralizing the distinctive features that distinguish the lexemes among each other” (Gevaert, 2007, p. 197, cited and translated from Kleiber, 1978, p. 60).

3.3 Metaphor data extraction

3.3.1 Metaphorical Pattern Analysis (MPA)

To extract the candidate metaphorical expressions from the usage citations of the synonyms, this study adopts the *Metaphorical Pattern Analysis* (MPA) (Stefanowitsch, 2004, 2006b). MPA has been briefly introduced in §1.1.2 and §2.5.2. In MPA, a *metaphorical pattern* is defined as “a multi-word expression from a given source domain (SD) into which one or more specific lexical item from a given target domain (TD) have been inserted”. The “multi-word expression” constituting a metaphorical pattern is manually identified based on the syntactic collocates in relation to the target-domain nouns (Ding, 2011, p. 75; Evert, 2009, pp. 1222–1223) (cf. §4.3.2). Evert (2009, p. 1223) points out that multi-word expressions are mostly framed in certain syntactic patterns. It is assumed that metaphorical patterns in MPA sense would behave similarly. Consider the following examples.

- (3-11) *orang yang demikian adalah tipikal pem-buru kebahagiaan*
 person REL like.that COP typical NMLZ-hunt happiness
 ‘That kind of person is a typical *happiness hunter*’ (*ind_newscrawl2011_1M:701142*)
- (3-12) *keceriaan anak-anak Aceh korban gempa dan tsunami ini*
 cheerfulness child~PL Aceh victim earthquake and tsunami this
kini hampir selalu me-warna-i kehidupan mereka
 now almost always AV-colour-TR life 3PL.POSS
 ‘*cheerfulness* of these Acehnese children, the victims of the earthquake and tsunami, now almost always *colours* their life’ (*ind_newscrawl2011_1M:139747*)
- (3-13) *masih di-warna-i oleh kegembiraan Natal dan Tahun Baru*
 still PASS-colour-TR by joy Christmas and year new
 ‘still *being coloured by* (the) *joy* of Christmas and New Year’ (*ind_web2012_1M:847746*)

In (3-11), the relevant pattern for the target-domain word *kebahagiaan* is the nominal pattern in which *kebahagiaan* modifies the head noun *pemburu* ‘hunter’. In (3-12), the relevant syntactic collocate of *keceriaan* ‘cheerfulness’, namely the transitive verb *mewarnai* ‘to colour sth.’, comes so much later in the utterance that such pattern (i.e.,

keceriaan mewarnai X) can only be detected through manual reading of the example. The reverse pattern for (3-12) in passive voice is shown in (3-13).

Previous examples illustrate a one-citation-one-pattern phenomenon in which a single usage-citation of a target-domain word is associated with one relevant metaphorical syntactic collocation, thus one metaphorical pattern. There can also be more than one syntactic collocation of the target-domain word, thus multiple metaphorical patterns in one citation, as shown below (Sullivan, 2013, pp. 135–138).

(3-14) *manusia tenggelam dalam se-ribu satu kesenangan dunia*
 human sink; drown inside one-thousand one pleasure world
 ‘human sinks/is drown inside a thousand-and-one wordly pleasure’
 (ind_web2012_1M:765582)

(3-15) *parade keberhasilan yang mem-buat kita mabuk dalam ekstase keriangan*
 parade success REL AV-make 1PL.INCL drunk inside ecstasy cheerfulness
 ‘parade of success that made us drunk inside (the) ecstasy of cheerfulness’ (IWaC via
 SketchEngine:ID65224)

In (3-14), two patterns are relevant syntactically. First, the noun phrase (NP) *seribu satu kesenangan*, headed by the target-domain word with metaphorical modifying quantifier *seribu satu*. The second is the embedding of this target-domain evoking NP in larger clausal construction headed by the intransitive, verb+preposition pattern *tenggelam dalam NP* ‘to sink inside NP’. Similar combination of multiple metaphorical patterns in one citation is present in (3-15). In these cases, I extracted two different metaphorical patterns from one citation. For instance, for (3-15), they are *mabuk dalam NP_{EMO}* and *ekstase NP_{EMO}*.

The constructional foundation for metaphorical patterns from the Constructional perspective (Sullivan, 2007, 2009, 2013, 2016), as adopted in the *MetaNet* approach (Chapter 4), is elaborated in more details in §4.3.2. The discussion focuses on the constructional semantics underlying the relevant source-domain slot in relation to a target-domain slot in a

grammatical construction. I argue that having an awareness of this semantic patterns for the combination of source-domain and target-domain words may assist one in extracting the candidate (metaphorical) pattern of the target-domain word. I also argue that such awareness contributes to MPA by highlighting its methodological underpinning within the Constructional perspective.

3.3.2 Metaphor Identification Procedure (MIP)

Extracting the syntactic collocation only provides the *candidate* metaphorical pattern of the target-domain word. The next step is to determine whether the collocation evokes metaphorical reading by adopting the *Metaphor Identification Procedure* (MIP) (Pragglejaz Group, 2007; Steen et al., 2010).

MIP is originally exemplified with linear textual analysis for metaphorical expressions. Firstly, the entire text is read to get general sense of the text's topic. Then, every lexical unit in the text is analysed, determining whether they are used metaphorically or not. However, this thesis focuses on usages of a set of specific target-domain words, rather than all words in a corpus. In that case, slight adjustment of the MIP is required.

The first step is to extract the relevant syntactic collocational pattern of the target-domain words in the sentence. Next, the key element of the MIP is adopted. Namely, given the extracted collocational pattern, I determine whether there is a contrast between (i) the collocates' contextual meaning in their usages with the target-domain words, and (ii) their more basic meaning in other contexts, whereby the contextual meaning can be understood in comparison to the basic meaning (cf. Sullivan, 2013, p. 36). To determine the basic meaning of the collocates of the target-domain words, I refer to the MIP's features of basic meanings. MIP (Pragglejaz Group, 2007, p. 3) characterises basic meanings as “more concrete [what

they evoke is easier to imagine, see, hear, feel, smell, and taste], related to bodily action, more precise (as opposed to vague), historically older, and are not necessarily the most frequent meanings”. Concreteness and bodily-related features of basic meanings correspond to the feature of *source domain* in the Conceptual Metaphor Theory (CMT) (Kövecses, 2010, p. 7). As an independent reference tool for restricting intuition when contrasting the basic and contextual meaning of the syntactic collocates of the target words, this study refers to *Kamus Besar Bahasa Indonesia* (KBBI) (‘the Big Dictionary of the Indonesian Language’) compiled by the Indonesian Language Council²⁰. Additionally, the identification process of basic meaning is guided by such a question as “what exactly each expression ‘was literally about’” (Soriano, 2005, p. 91). Consider the example below.

(3-16) *Saat sang Dewi akan meng-(k)ecap kebahagiaan yang sempurna*
 when DEM.HON goddess FUT AV-taste happiness REL perfect; flawless
 ‘When the goddess will *taste* perfect *happiness*’ (*ind_mixed2012_1M:725518*)

In (3-16), there are two relevant candidates for metaphorical patterns according to the syntactic collocates of the target-domain word. First, the verb phrase pattern where *kebahagiaan* ‘happiness’ functions as the direct object of the verb *mengecap* ‘to taste’. Second, the noun phrase pattern where *kebahagiaan* functions as the nominal head modified by the relative clause *yang sempurna* ‘that is flawless/perfect’. Only the first pattern shows clear contrasts between the basic meaning of the verb *mengecap* and its contextual meaning in the domain of EMOTION when collocating with *kebahagiaan*. The basic meaning of *mengecap* denotes an activity of ‘opening-and-closing the mouth to produce *chap-chap* sound while eating; to taste (food)’. This sense is a clearly imaginable bodily activity, according to MIP’s features of basic meaning. Thus, there is a semantic mismatch (see

²⁰ KBBI can be accessed online for free via <https://kbbi.kemdikbud.go.id/> (Last access: 9 September 2018).

§4.3.3) between the presupposed semantic role of the direct object of *mengecap* (i.e., Food) that in (3-16) is filled with an abstract entity, such as *kebahagiaan*.

The situation for adjectival collocate *sempurna* ‘flawless/perfect’ in the second pattern is fuzzier in the sense that *sempurna* is hardly identifiable with any concrete basic meaning. In this case, it is coded as non-metaphorical. Similar unclear, doubtful, cases can be exemplified below.

(3-17) *Jadi senang atau kecewa seseorang itu di-tentu-kan oleh diri-nya*
 so happy or disappointed someone that PASS-sure-CAUS by self-3SG.POSS
 ‘So, someone’s *happiness* or *disappointment* is determined by h(im/er)self’
 (ind_mixed2012_IM:875138)

(3-18) *bahagia yang di-harap malah nestapa yang di-dapat*
 happy REL PASS-hope instead sorrow REL PASS-get
 ‘while it is *happiness* that is *hoped for*, it is sorrow that is obtained instead’
 (ind_web2012_IM:2293)

The relevant collocates, namely *diharap* ‘to be hoped/wished’ (3-18) and *ditentukan* ‘to be determined/decided’ (3-17), refer to more abstract, cognition-related, processes. These cases were also coded as non-metaphorical. §4.3.3 further discusses the *MetaNet* (MN) framework of *semantic role-type mismatch* in detecting metaphorical patterns from a set of constructional patterns of a target-domain word. §4.3.3 also outlines the MN approach I adopt to postulate conceptual metaphors from a set of metaphorical patterns via *role-mapping* of the target-domain word in the source-domain frame (cf. §3.5.3 for a primer).

3.4 Aspects of data analysis

The analysis of the metaphorical data covers two broad themes: (i) analysis of the aggregated data across the synonyms for the metaphors found in the whole HAPPINESS domain, and (ii) analysis of the intra-domain variation between the HAPPINESS synonyms in

terms of their distinctive metaphors. Some specific methods associated with the analyses are introduced along with the results which depend on them.

Three aspects of the analysis relate to the first theme. The first is presenting top-ten metaphors (§5.4) according to their *token frequency*, as defined in §5.2. This may point to which metaphors are entrenched in the Indonesian corpus sample. The second is ranking the metaphors according to their *type frequency*, the definition of which is given in §5.2.1. This shows the range of productive metaphors (cf. §6.2.1 and §6.3). Third, the top-ten metaphors are sorted according to their *type/token ratio* (§6.2.2). This sorting highlights which metaphors have a high degree of variability in their linguistic manifestation. The second and the third points are presented in Chapter 6.

The second analytical theme (Chapter 7) draws on new evidence from Indonesian to evaluate the finding, so far confirmed only for English, that emotion words referring to the same emotion concept differ in terms of their distinctive metaphors. I adopt the underlying design and statistical technique implemented in *Multiple Distinctive Collexeme Analysis* (MDCA) as the quantitative tools; §7.2 introduces MDCA and related methods in more details. One additional insight that this study offers is that the root-nominals (e.g. *bahagia*) and the nominalised forms (e.g. *kebahagiaan*) may exhibit diverging as well as converging association with certain metaphors. This finding highlights that words of different morphological forms, which are based on the same root and are intuitively similar in meaning (such as *bahagia* and *kebahagiaan*), differ in their metaphorical usage patterns.

The required metaphor dataset and R codes to perform these quantitative analyses, including the interrater agreement trial (§3.5 below), are bundled into an open-source R package called *happyr* (G. P. W. Rajeg, 2018). The source codes for *happyr* are hosted on GitHub

(<https://github.com/gederajeg/happyr>). The package also has its own dedicated website (<https://gederajeg.github.io/happyr/>), allowing easier access to the documentations.

3.5 Interrater agreement trial

Following Glynn (2010b), Zeschel (2010), and Shutova et al (2013), I conducted interrater agreement trial using 10% random subset of the total 1000 random sample of the three most frequent HAPPINESS words in the nominalised forms, namely *kebahagiaan* ‘happiness’, *kegembiraan* ‘joy’, *kesenangan* ‘pleasure’. The second coder is a recent bachelor graduate in English Language & Literature program at Udayana University, Bali-Indonesia, and a casual Indonesian language tutor for the *Bali International Program on Asian Studies* at the same university. The first (i.e., the author of the thesis) and the second coder are both Balinese native speakers of Indonesian.

The annotated features include (i) the grammatically relevant constructional patterns in which the target-domain synonyms occur (i.e., the candidate metaphorical patterns), (ii) the (non-)metaphorical status of the constructional patterns, and (iii) the conceptual metaphors evoked by the metaphorical patterns. The second coder and the researcher did the data coding independently. Preparation session, the coding itself, and the discussion were conducted between mid-August and November 2016. The preparation session includes introducing the coder to the theoretical pre-requisites, namely the Conceptual Metaphor Theory and its recent integration with Frame Semantics as in the *MetaNet* (MN) project, the MN and *FrameNet* (FN) webpages, and to the Pragglejaz Group’s *Metaphor Identification Procedure*; all these are not taught in the Linguistics Program at Udayana University at both undergraduate and graduate levels. The author prepared a list of pre-determined metaphor categories that have been identified during the preliminary annotation of the main sample, in

addition to the concepts identified based on the preliminary studies for the thesis (G. P. W. Rajeg, 2016a, 2016b). Nevertheless, following Shutova & Teufel (2010, p. 3258), the second coder was also allowed to propose his own category as he saw fit.

The coding and statistical evaluation for the reliability was done in sequence such that the coding for the last feature (i.e., conceptual metaphors) was conducted on the agreed metaphorical, constructional pattern types. Discussion was conducted after the first statistical evaluation for each task. I used the `kappa2()` function from the `irr` R package (Gamer, Lemon, & Singh, 2012) to compute the Cohen's Kappa (κ) of agreement. Løenneker-Rodman (2008, p. 307) notices that Cohen's Kappa score "should be considered as a more or less strong *tendency* towards either perfect agreement (1), agreement equal to chance (0), or entire disagreement (-1)" (italics in original). In this sense, the extent to which the agreement is regarded as "good", and the annotation task as "objective", are not absolute. This study follows the scales adopted by Shutova et al (2013, pp. 1274–1275) to interpret the Kappa: "slight agreement" ($\kappa = 0-0.20$), "fair agreement" ($\kappa = 0.21-0.40$), "moderate agreement" ($\kappa = 0.41-0.60$), "substantial agreement" ($\kappa = 0.61-0.80$), and "agreement is almost perfect" ($\kappa = 0.81-1$).

While the interrater agreement test in the context of a semantics study does not offer objectivity, it is hoped to enhance the accuracy for the data annotation of the whole sample (Glynn, 2010b, pp. 262–263). It is because discrepancy in analysing the data between the coders can afford a means to the refinement and accuracy of the annotation (Glynn, 2010b, p. 242). Moreover, the accompanying discussion between coders after each task is not merely for increasing the reliability scale, but, more importantly, for gaining feedback from the second coder, match our semantic judgement, and point out recognised errors, if any.

3.5.1 Results for *constructional patterns*

The Kappa scores in Table 3-3 for the constructional pattern annotation show high level of agreements for the first round (i.e., the pre-disc[ussion stage]) (M = 0.87, SD = 0.03).

Table 3-3 Cohen's Kappa on the Constructional Patterns identification

words	gloss	rater	cases	kappa	round
<i>kebahagiaan</i>	happiness	2	100	0.85	pre_disc
<i>kegembiraan</i>	joy	2	100	0.86	pre_disc
<i>kesenangan</i>	pleasure	2	100	0.91	pre_disc

Figure 3-1 summarises the distribution of the most frequent constructional patterns for the agreed cases, occurring at least five tokens²¹. The commonality of these patterns has also been found in Sullivan's (2013) corpus-based study on English metaphorical constructions.

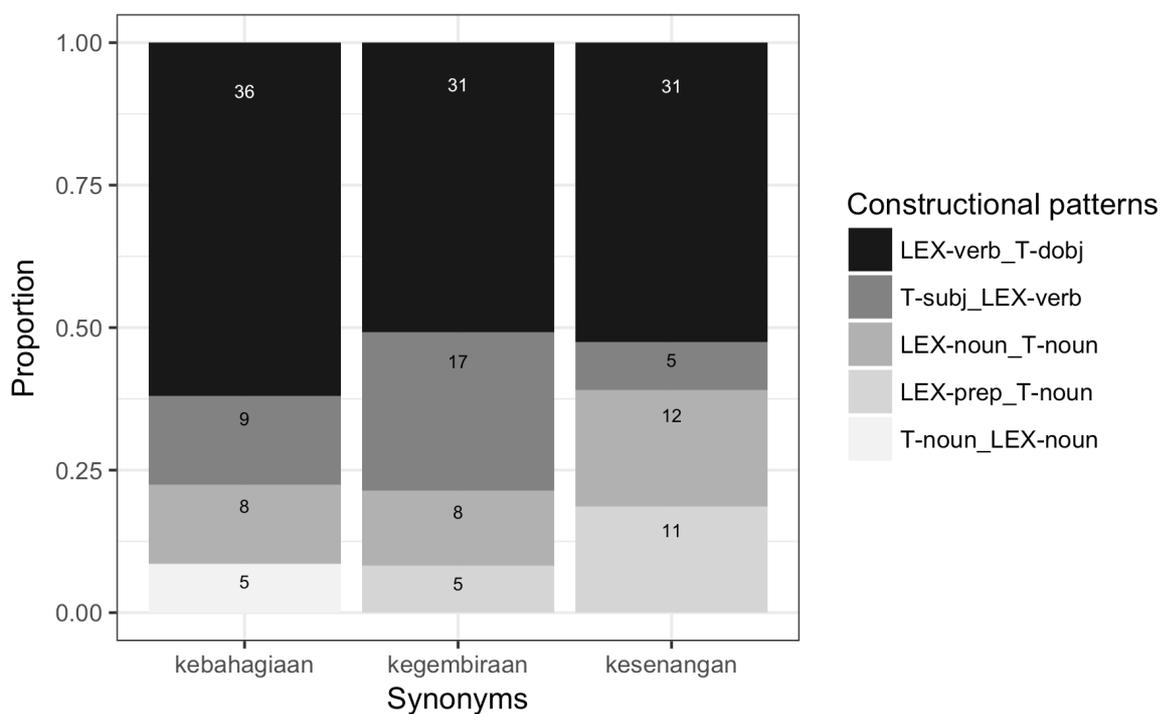


Figure 3-1 Distribution of the constructional patterns for the agreed cases ($N_{patterns} \geq 5$)

²¹ Figure 3-1 and Figure 5-1 are produced using the ggplot2 R package (Wickham, 2016).

The values inside the bars represents the token frequency of the patterns. The ‘LEX-...’ part in the legend indicates the syntactic, constructional collocates of the target domain words (the ‘T-...’ part) that potentially evoke the metaphorical source frames. The constructional patterns in the legend are in descending order from the most to the least frequent types among these top constructions. These types are exemplified in order below.

- (3-19) LEX-verb_T-dobj
Bagi konsumen yang mem-buru kesenangan sesaat
 for consumer REL AV-hunt pleasure momentary
 ‘For consumers who *hunts for* momentary *pleasure*’ (*ind_newscrawl2011_1M:621419*)
- (3-20) T-subj_LEX-verb
kebahagiaan mem-(p)uncak
 happiness AV-peak
 ‘*happiness peaked/culminated*’ (*ind_newscrawl2012_1M:910372*)
- (3-21) LEX-noun_T-noun
men-jadi-kan manusia sebagai budak kesenangan
 AV-become-CAUS human as slave pleasure
 ‘to turn human into the *slave of pleasure*’ (*ind_newscrawl2012_1M:7767*)
- (3-22) LEX-prep_T-noun
dalam kesenangan tentu ada kesusahan-nya
 inside pleasure surely exist difficulty-DEM
 ‘*inside pleasure, there surely exists the difficulty*’ (*ind_web2012_1M:302089*)
- (3-23) T-noun_LEX-noun
persiapan untuk kebahagiaan akhirat
 preparation for happiness afterlife; hereafter
 ‘preparation for the *afterlife happiness*’ (*ind_mixed2012_1M:406885*)

The transitive construction (*LEX-verb_T-dobj*) (3-19) with the target domain noun occurring as the direct object is the most frequent pattern. This is followed by the *T-subj_LEX-verb* as the second most frequent pattern (3-20). It could be that the predominant co-occurrence of the HAPPINESS nouns with verbs in these two grammatical constructions may factor in, among other things, for the straightforwardness of the coding and the sufficiently high reliability for the classification. This could also be the case for the third, noun-phrase pattern (i.e., (3-21)) where the target domain nouns function as nominal modifier of the head-noun

collocates (or *vice versa* as in the last type *T-noun_LEX-noun* in (3-23)). Lastly, the collocation where the target-domain nouns function as complement of prepositions is also typically agreed (3-22).

Given that, on average, we reached a nearly perfect agreement for the constructional patterns, we did not conduct post-discussion interrater reliability and moved on to the next task with the agreed cases of the patterns.

3.5.2 Results for *metaphoricity* of the patterns

The next task is to identify whether the extracted and *agreed* constructional patterns of the synonyms evoke metaphorical readings or not. For this task, we expected the agreement would be lower than in the previous task as determining metaphorical usages is more subjective. The results are shown in Table 3-4.

Table 3-4 Cohen's Kappas on the Metaphor Identification (pre- and post-discussion stages)

words	gloss	rater	cases	kappa	round
<i>kebahagiaan</i>	happiness	2	85	0.73	post_disc
<i>kegembiraan</i>	joy	2	86	0.63	post_disc
<i>kesenangan</i>	pleasure	2	91	0.75	post_disc
<i>kebahagiaan</i>	happiness	2	85	0.56	pre_disc
<i>kegembiraan</i>	joy	2	86	0.35	pre_disc
<i>kesenangan</i>	pleasure	2	91	0.61	pre_disc

In the first round, the average agreement across the three synonyms is moderate ($M = 0.51$, $SD = 0.14$). Differences were resolved in the discussion round.

One of the prominent differences is that the second coder annotated patterns referring to TEMPORAL aspect of the synonyms as metaphorical, while TIME itself is often understood in metaphorical concepts (e.g., Boroditsky & Ramscar, 2002). These TIME-related patterns include NP_{emo} *abadi* 'eternal NP_{emo} ', NP_{emo} *ditunda* ' NP_{emo} be delayed/postponed,

menunda NP_{emo} 'to delay/postpone NP_{emo} ', NP_{emo} *bertahan/berlangsung lama* ' NP_{emo} lasts long', NP_{emo} *berlangsung sesaat* ' NP_{emo} lasts for a while', and NP_{emo} *hanya sementara* ' NP_{emo} is just for a while'.

Another disparity occurs in the metaphorical coding by the second coder for verbal collocates that have basic, verbal meaning denoting abstract process. This coding contradicts the criteria for basic sense in MIP, namely more concrete and precise, rather than vague/abstract. The patterns include *memikirkan* NP_{emo} 'to think about NP_{emo} ', *menyebabkan* NP_{emo} 'to cause NP_{emo} ', *merayakan* NP_{emo} 'to celebrate NP_{emo} ', and NP_{emo} *dilakukan* ' NP_{emo} be done'. In the Conceptual Metaphor Theory, the concepts of ACTION (evoked by *dilakukan* 'be done') and CAUSATION (*menyebabkan* 'to cause') are identified as metaphorical target domains that are often conceptualised in terms of (SELF-PROPELLED) MOTIONS and FORCES respectively (Lakoff, 1993, p. 220; Lakoff & Johnson, 1999, pp. 184–191). Similarly, the concept of COGNITION (as evoked by *memikirkan* 'to think about') and the MIND have been shown to be conceptualised metaphorically, particularly in terms of the workings of the body (Lakoff & Johnson, 1999). With the remaining unresolved differences, the second Kappa was calculated, and the mean Kappa increases to substantial agreement ($M = 0.7$, $SD = 0.06$).

3.5.3 Results for *conceptual metaphors*

Coding for the conceptual metaphors is based on the agreed constructional patterns that have also been agreed to be metaphorical (Shutova et al., 2013, p. 1275). Table 3-5 presents the results for this classification.

Table 3-5 Cohen's Kappas on the Conceptual Metaphor coding (pre- and post-discussion stages)

words	gloss	rater	cases	kappa	round
<i>kebahagiaan</i>	happiness	2	54	0.83	post_disc
<i>kegembiraan</i>	joy	2	58	0.83	post_disc
<i>kesenangan</i>	pleasure	2	58	0.92	post_disc
<i>kebahagiaan</i>	happiness	2	54	0.47	pre_disc
<i>kegembiraan</i>	joy	2	58	0.56	pre_disc
<i>kesenangan</i>	pleasure	2	58	0.52	pre_disc

In the first round, the average Kappa is moderate ($M = 0.52$, $SD = 0.04$) because there are several differences in the classification of the conceptual metaphors. Discrepancies mostly occur with regards to determining the level of granularity for the mnemonic labels of the metaphors, the decision of which requires subjective interpretation.

Consider the different coding for the metaphorical pattern *X penuh (dengan) NP_{emo}* 'X be full of (/with) NP_{emo}'. The second coder proposed a more generic label, namely SUBSTANCE IN A CONTAINER/FULLNESS, instead of the one from the suggested list, that is LIQUID IN A CONTAINER. The argument for the more generic category was that there is no specific inference for Fluid or Liquid type of content from the pattern *penuh* 'be full', which can be any Physical Entity or Substance. This suggestion is semantically plausible, and I adjust the coding of *X penuh (dengan) NP_{emo}* 'X be full of (/with) NP_{emo}' into a more generic frame that is inherited in LIQUID IN A CONTAINER²², namely the CONTAINED ENTITY²³. Another example of disagreement in label-granularity is illustrated in (3-24) and (3-25).

²² The HAPPINESS IS A LIQUID IN A CONTAINER metaphor is based on MN's FLUID CONTAINMENT frame in which the HAPPINESS nouns fill a syntactic slot in the metaphorical patterns that is mapped/linked to the Fluid role of the FLUID CONTAINMENT frame. See https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Fluid_containment (Last access: 9 September 2018) and Chapter 4 for further discussion on the role-mapping for conceptual metaphor.

²³ HAPPINESS IS A CONTAINED ENTITY metaphor is based on the mapping of the HAPPINESS nouns onto the Content role of the CONTAINING frame. This frame in MN is described as "A container object holds some sort of content object(s) or substance within its boundaries", which is semantically close to the proposed label from the second coder; see <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Containing> (Last access: 9 September 2018).

- (3-24) *juga kegembiraan pada pe-menang yang akhirnya ikut ke Depok*
 also joy at NMLZ-win REL eventually join to Depok
 ‘also joy at the winner who eventually came along to go to Depok’
 (*ind_mixed2012_1M:905852*)
- (3-25) *kenikmatan, kegembiraan, kesenangan, yang ada di dunia*
 enjoyment joy pleasure REL exist LOC world
 ‘enjoyment, joy, pleasure, that exist at the world’ (*ind_web2012_1M:154164*)

The second coder chose to label these examples with EXISTENCE/SUBSTANCE IN A CONTAINER. Meanwhile, I used LOCATED OBJECT metaphor, which is based on MN’s BEING AT A LOCATION frame²⁴. In the metaphorical patterns (i.e., NP_{emo} *pada* X ‘ NP_{emo} at X’ (3-24) and NP_{emo} *yang ada di* X ‘ NP_{emo} that exists in/at/on X’ (3-25)), the HAPPINESS nouns fill a slot that is mapped onto the Located_thing role in the frame, as evoked by the preposition and locative verb; the objects of the preposition (i.e., X) are then mapped onto the Current_location role. During the discussion of these examples, we conceptually agreed that they invite inference that HAPPINESS is understood as an entity located at a location. However, orthographically, we coded this metaphorical inference differently.

In practical terms, such discrepancies in the source-frame labels can be discussed before submitting the coding into R for Kappa calculation. Such discussion would ensure that disagreement because of different orthographical labelling could be minimised, despite our conceptual agreement on the inference conveyed by the metaphorical patterns. The reason is that the computer (i.e. the R package for the Kappa) can only recognise orthographical differences as indicator of overt disagreement, but not the intended semantic contents of the chosen label. In the trial, we postponed such discussion until retrieving the first agreement scores of independent coding to see how reliable our semantic intuition before discussion.

²⁴ See https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Being_at_a_location (Last access: 9 September 2018).

During the discussion, we focused on whether our chosen labels match our intuitive inference as well as the basic description conveyed by the frames in the metaphoric mapping. Another point of discussion attempted to resolve cases of disagreement where the researcher, the coder, or both is unsure about the appropriate source frames evoked and the resulting conceptual metaphors. We discuss such case while also looking up the MN webpage (or the FN, where needed). The available information for the given frames was checked. This may include the frame description, elements/roles, related frames, binding between frame elements with its related frames, and the listed frame-evoking lexical units, if any. Obviously, as briefly noted above, there is still subjectivity on the choice of the metaphor labels for certain cases, as well as on our semantic inference for such labels, such that in some cases we remain in disagreement.

With the remaining unresolved disagreement after discussion, the second round Kappas were computed. On average, the agreement level has increased to “nearly perfect” agreement ($M = 0.86$, $SD = 0.05$). Despite this increased agreement level after discussion, any metaphor studies always show certain degree of subjectivity. In practice, it means that CMT analysts/practicioners can have disagreement over certain analyses, be it when determining whether an expression is metaphorical or not, or when grouping a set of metaphorical expressions into certain conceptual metaphor categories.

3.6 Summary

This chapter presented the nature of the corpus and discussed the methodological aspects of the study that are detailed in the subsequent chapters. Given the corpus is mostly web-based materials, especially newspapers, the findings may not generalise to the language. It is because the corpus mostly represents written, Standard Indonesian, which is different from

the spoken, Colloquial Indonesian used in daily conversation. Nevertheless, there is an increasing trend in corpus linguistics to use the web as linguistic corpora (Hundt, Nesselhauf, & Biewer, 2007). It is partly motivated by the issue of the size of the corpus for certain linguistic inquiries, such a lexical semantic study as this thesis. This issue is even more relevant and true to Indonesian, which is still lacking reference corpora compared to English, for instance. The *Indonesian Leipzig Corpora* offers solutions in terms of its open-access and its sheer size, the largest that I know of for Indonesian to date. Even with these large corpora, I still had to look for additional citations (from *WebCorp* and *Sketch Engine*) of two of the studied words (i.e. *keceriaan* ‘cheerfulness’ and *keriangan* ‘cheerfulness’) (§3.2). Furthermore, this study can be a testbed for observing how similar the results of this study for HAPPINESS compared to the corpus-based study by Rajeg (2013), which uses exclusively literary corpus texts.

The interrater agreement trials show that identifying constructional pattern is more reliable than metaphors identifications, including the conceptual metaphors. The low agreement for the conceptual metaphor classification before discussion appears to be expected for independent coding. One possible explanation is that “it is not clear *how many* categories there should be in the first place” (Zeschel, 2010, p. 218, endnote 6). Given the available categories, there are times when it is challenging to determine the appropriate (English) labels for the metaphors evoked by the Indonesian metaphorical patterns. It is because there could be some overlaps or subtle distinctions between the categories. Selection issue also relates to determining the degree of specificity of the categories (recall the FULLNESS/SUBSTANCE IN A CONTAINER (based on the CONTAINING frame) and LIQUID IN A CONTAINER (based on the FLUID CONTAINMENT frame)). These issues are even more challenging should we classify the data based on categories developed entirely from scratch.

Imposing pre-determined categories also appears to be problematic since, by adopting corpus-based approach, we need to consider a wider range of fact (empirical sentences) retrieved from a corpus (Gries & Divjak, 2010, p. 336). In sum, despite the inherent degree of subjectivity and difficulty in any (conceptual) metaphor analysis, as reflected in the interrater agreement trial, this thesis is based on non-invented linguistic data and adopts robust procedures of interrater agreement trials.

Chapter 4 Frame Semantics and *MetaNet* approach to conceptual metaphors

4.1 Introduction

This chapter focuses on the formalism of Conceptual Metaphor Theory (CMT) (§2.2) in terms of Frame Semantics (Fillmore & Baker, 2015) and Cognitive Grammar (Langacker, 2013), as demonstrated in Sullivan’s (2006, 2007, 2013) works, and recently implemented in the *MetaNet* (MN) project (e.g. Dodge, 2016; Stickles, David, Dodge, & Hong, 2016) (§4.3 below). The frame-based, MN view on conceptual metaphor also provides heuristics for what constitutes the source and target domains of conceptual metaphors. Syntax-semantics frame-role-mapping can also be useful for identifying conceptual metaphors for a given target domain (§4.3.4). Finally, the MN formalism can be adapted to infer the semantic aspects of a metaphor that are mapped onto the aspects in the target domain (§5.3).

As discussed in §2.2.3, a conceptual metaphor involves systematic conceptual mapping from one domain of sensorimotor experience (viz. the *source domain*) onto an abstract domain of subjective experience (viz. the *target domain*) (Lakoff & Johnson, 1999, p. 58). However, what constitutes the representations of these two domains has not been clearly formalised and defined. Following Sullivan (2007, pp. 32–33), the term *domain* is restricted to a conceptual structure that is evidently present in metaphorical mapping, without speculating about the existence of this domain external to its use in a given metaphor (see below). Sullivan (2007, p. 33) calls this type of domain “a metaphor input domain”, that is “the cognitive structure comprising all schematic information potentially available for mapping via a given metaphor”.

The definition of metaphor-input domain above entails that structures that are not found to be mapped metaphorically would not be part of the structures in the source and target domain (cf. Sullivan, 2007, p. 33). Moreover, since conceptual metaphor analyses are based on *linguistic expressions*, metaphor input domain should only encompass structures for which linguistic evidence, which evoke such structures, can actually be found in corpus data (cf. Sullivan, 2013, p. 23). According to this criterion, a metaphor input domain involves the relationship between (i) linguistic forms and (ii) cognitive structures that the forms evoke. The question is how can this relationship be captured in a unified manner?

Sullivan proposes a solution by integrating Frame Semantics (Fillmore & Baker, 2015) and Cognitive Grammar (Langacker, 2013, *inter alia*) into the study of conceptual metaphor and metaphorical language (cf. also Croft, 2009; Dancygier & Sweetser, 2014; Lakoff, 2008, pp. 24, 28, 34–35; López, 2011; Moore, 2014, *inter alia*). Sullivan (2006, p. 388) mainly argues that structures within a metaphor-input domain come from the structures of *semantic frames* (cf. §4.2). Sullivan (2013) shows that these semantic frames can be used to model the metaphor-input domains in relation to the grammatical constructions via which the metaphorical linguistic expressions evoke these input-domains (§4.3.2). Therefore, we have a unified ecology for capturing the relationship between (i) metaphor input domains as conceptual structures and (ii) the linguistic expressions that evoke and later communicate them in utterances (§4.3.2.2). My study applies Sullivan's proposal to the study of metaphors of emotion in Indonesian. Before coming to the frame-based approach to metaphor (§4.3), overview of Frame Semantics and semantic frames is in order.

4.2 Frame Semantics and semantic frames

A semantic analysis in Frame Semantics is regarded as “the process or activity of showing how features of meaning are anchored in features of linguistic form” (Fillmore & Baker, 2015, p. 794). Linguistic forms can be words, fixed phrases, or grammatical patterns. The meaning pole of these forms is represented in terms of cognitive structures, which are called *semantic frames*. These cognitive structures motivate speakers’ process and results of understanding a linguistic form.

4.2.1 What is a semantic frame?

Fillmore (2006, p. 373) defines a *frame* as “any system of concepts related in such a way that to understand any one of them you have to understand the whole structure in which it fits; when one of the things in such a structure is introduced into a text, or into a conversation, all of the others are automatically made available”. Consider a classic example of the English word *Tuesday* (Lakoff, 1987, pp. 68–69).

The word *Tuesday* conveys what it means only because of background knowledge, or *frame*, about seven-day calendric cycle, called a *week*. *Tuesday* fits into this frame and profiles a Nth member, called *day*, within this week cycle. However, saying *Tuesday* as ‘the Nth *day* of the week’ also presupposes a frame to understand what a *day* is. A *day* only makes sense against our knowledge about the natural movement of the sun, marking the alteration of light and darkness. Thus, *Tuesday* is understood against two frames: SEVEN-DAY CALENDRIC CYCLE (i.e., WEEK) and NATURAL MOVEMENT OF THE SUN (i.e., DAY). These frames are not inherent features of the word *Tuesday* but are necessarily evoked to understand and characterise its meaning.

Similarly, understanding the expression *Thank God it's Friday!* requires an appeal (i) to the distinction between WEEKDAY and WEEKEND frames, and (ii) to the typical preference of the latter than the former (Fillmore & Baker, 2015, p. 796). Indeed, initially we need to understand the concept of WEEKEND and WEEKDAY against the background knowledge about which members of the seven-day calendric cycle are designated for work (WEEKDAY) and non-work (WEEKEND). In the example, *Friday* is typically understood as a part of the WEEKDAY frame, profiling the last working day, and thus signalling the coming of the typically desirable WEEKEND. This example further demonstrates that a frame (e.g., WEEKEND or WEEKDAY), against which we understand a particular linguistic expression (i.e., *Thank God it's Friday!*), is also a part of a concept that we need to understand against another background knowledge or frame (i.e., WORKING-DAYS and NON-WORKING-DAYS frames within the SEVEN-DAY CYCLE frame) (cf. Croft & Cruse, 2004, p. 15; Langacker, 2013, p. 46, footnote 18). The two examples above elucidate an idea that “the conceptual frames that inhabit our cognitive unconscious *contribute semantically* to the meanings of words and sentences” (Lakoff & Johnson, 1999, p. 116, italics in original).

4.2.2 Semantic frames and the Profile-Base relation in Cognitive Grammar

The idea that word meanings are defined relative to semantic frame(s) is conceptually similar to the organisation of meaning in Cognitive Grammar (CG) (Langacker, 2013; Taylor, 2002). The semantics of a linguistic expression in CG is organised in terms of *profile-base* relation (Taylor, 2002, pp. 192–194). In CG, the conceptual content for an expression's meaning is called the *base*; the *profile* of an expression is “what the expression is conceived as designating or referring to within its base (its conceptual referent)” (Langacker, 2013, p. 66).

Consider the word *hypotenuse*, which refers to “the longest side of right-angled triangle, the side that is opposite the right angle” (Taylor, 2002, p. 192). The words *hypotenuse* and, say, *straight lines* designate the same entity, namely straight line. However, these words are not synonymous since the concepts they designate should be characterised by the appropriate base. In this case, *Hypotenuse* is a straight line that is part of “one side of a right-angled triangle” (Taylor, 2002, p. 193). Thus, *hypotenuse* can only be understood against the right-angled triangle as the basis; otherwise, it simply designates a straight line, which is clearly *not a hypotenuse*. In other words, RIGHT-ANGLED TRIANGLE acts as the background *frame* or *base* for the meaning of the word *hypotenuse*. In turn, *hypotenuse* itself *profiles* or *singles out* a substructure, namely ‘the longest side’, within this RIGHT-ANGLED TRIANGLE frame.

Similarly, *radius* designates a line segment connecting the centre of a circle with its circumference. In short, *radius* is a line segment. However, *radius* is not just a random line segment, but that which is defined by the concept of CIRCLE. Hence, RADIUS presupposes CIRCLE as the basis or frame against which the meaning of the word *radius* can be understood. Technically, RADIUS represents the ‘profile’ of the word *radius*, and CIRCLE acts as the ‘conceptual basis’ or ‘frame’ for the profiled concept (cf. Croft & Cruse, 2004, p. 15). In sum, CG’s *base* is identical to *frames* in Frame Semantics (Petrucci, 2015, p. 8).

It is also quite common that two or more expressions differ in meaning, despite evoking the same conceptual content or base. The reason is that, within this common base, the expressions profile different substructures (Langacker, 2013, p. 67). *Weekend* and *weekdays* may exemplify this idea. The two concepts evoke a seven-day cycle week as their common base or frame. However, within this common frame, *weekend*, and *weekday* profile different segments of the cycle. That is, within the seven-day week, *weekdays* profile the five-day

parts dedicated to work, while *weekend* profile the other two-day parts for non-working days. To illustrate this idea further, imagine a scene of a glass containing water occupying half of the glass's volume (Langacker, 2013, p. 43).

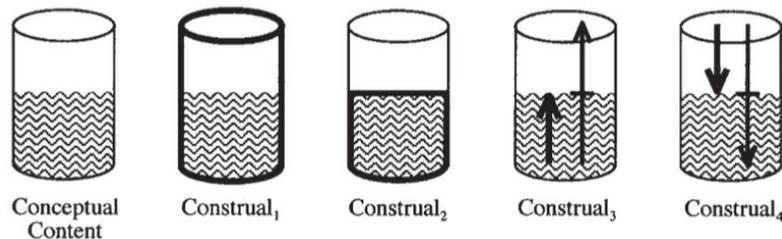


Figure 4-1. Conceptual content of a glass containing water half of the glass' capacity (cited from Fig 2.5 in Langacker (2013, p. 44))

Several linguistic expressions may be used to evoke different profiles of this very same conceptual scene. The contrast in the profile designated by the different expressions is captured in the boldfaced line in Figure 4-1. For instance, Construal 1 can be expressed as *the glass with water in it*, profiling the glass container. Construal 2 profiles the water the glass contains; it can be encoded as *the water in a glass*. The expressions for Construal 3 and 4 portray the same scene differently: (a) *the glass is half-full* (Construal 3) and (b) *the glass is half-empty* (Construal 4). Expression in (a) indicates that half of the glass's potential volume is not occupied by the water. In contrast, expression in (b) designates the water occupying only half of the glass's potential volume.

These examples suggest that “a meaning consists of both conceptual **content** and a particular way of **construing** that content. The term **construal** refers to our manifest ability to conceive and portray the same situation in alternate ways” (Langacker, 2013, p. 43, boldfaced in original). I show in §4.3.5 that this alternating construal of the same conceptual content motivates what I refer to as *metaphorical role-mapping variation* for a target in a

single source frame. This variation evokes different *conceptual metaphors* for a target domain based on a single source frame. I also demonstrate that the frame-role-mapping variation is a function of the different grammatical slot the target-domain word fills in constructions evoking the same source frame (§4.3.5).

4.2.3 Frame Semantics and the Cognitive Linguistics view on meaning

The similarity between Frame Semantics and Cognitive Grammar in the representation of meaning forms one of the central tenets in Cognitive Linguistics, namely the *encyclopaedic* nature of meaning (Evans & Green, 2006, p. 206; Fillmore, 1985, p. 233). This encyclopaedic nature entails that the meaning associated with a linguistic unit, such as a word, hints at “a large inventory of structured knowledge (the conceptual system)” (Evans & Green, 2006, p. 206). Word meaning is thus characterised in relation to the repository of encyclopaedic knowledge linked to the word. The encyclopaedic nature of meaning also entails that socio-cultural and physical experience feed into our conceptual representations of words. In this respect, the cognitive linguistic approach to semantics does not recognise “a systemic or structural level of linguistic meaning that is different from the level where world knowledge is associated with linguistic forms” (Geeraerts & Cuyckens, 2007, p. 5).

In Frame Semantics, our encyclopaedic knowledge can be represented as semantic frames. A linguistic sign (i.e., a form-meaning pairing), such as *Tuesday*, is said to evoke, or provide access to, a repository of knowledge or frames. Semantic frames contribute to the interpretation of a passage featuring this linguistic sign (as in *Thank God it's Friday!* example above). The evocation of a frame by a linguistic form indicates that understanding a linguistic form simultaneously requires evoking the relevant knowledge against which the meaning of the form is motivated and understood (Fillmore & Baker, 2015, p. 795).

4.2.4 Semantic frames and frame elements

We have seen how semantic frames serve as the background knowledge for characterising word meaning referring to static concepts, such as *Tuesday* or *hypotenuse*. Besides, semantic frames also underlie word meanings expressing dynamic concepts (e.g., events) evolving through time, such as *to purify* or *to give*. Thus, a more encompassing definition of a semantic frame follows:

“a script-like **structure of inferences**, linked by linguistic convention to the meanings of linguistic units – here, lexical items – constituting a **schematic representation** of a situation, object, event, or relation providing the background structure against which words are **understood**. Each frame identifies a set of **frame elements** – participants in the frame.” (Petrucci, 2015, p. 8, boldface in original)

This definition highlights, among others, that semantic frames consist of a set of *frame elements* that are associated with the situation, event, or entity encoded by the frames (cf. Dodge & Petrucci, 2014, p. 40). Frame elements are (i) the relevant entities “worth talking about” when the frame is activated in a communicative situation, and (ii) those that can be expressed by means of grammatical resources (Fillmore, 2014, p. 126). The words and constructions in a language function as (i) indexes for parts of the semantic frames, namely the frame elements, and as (ii) linguistic items that evoke the respective semantic frames as part of their semantic representations.

The *FrameNet*²⁵ (FN) project at ICSI Berkeley, USA, instantiates the practical advance of Frame Semantics theory. FN is an online lexical resource that provides the syntactic and semantic combinatorial possibilities of a substantial portion of the contemporary English vocabulary on the basis of the *British National Corpus* (cf. Fillmore, 2014; Fillmore &

²⁵ <https://framenet.icsi.berkeley.edu/fndrupal/> (Last access: 9 September 2018).

Baker, 2015). FN connects words and their semantic frames. In other words, a semantic frame has the *lexical units* that evoke the frame. A lexical unit (henceforth LU) is “a pairing of a lemma and a frame” (Dodge & Petruck, 2014, p. 40). In practice, LUs facilitate the detection of a semantic frame in texts. Then, given sentences of a frame-evoking LU, FN annotators mark the LU’s sentential collocates with their corresponding frame-elements labels (see Boas, 2017, for a detailed discussion on the FN workflows). The relationship between LUs and their collocates is foundational in understanding how the use of the target-domain words and their syntactically relevant collocates evoke the source and target domain for a conceptual metaphor (§4.3.3). The Indonesian example below shows a FN style of analysis for a frame-evoking LU.

- (4-1) *Terima kasih Tuhan untuk [hikmat]_{Transferred-object} yang [Kau]_{Transferor}*
 Thank you God for wisdom REL 2SG
beri-kan, *sehingga aku boleh di-pakai Tuhan untuk menjadi kawan*
 OV.give-APPL so.that 1SG may PASS-use God for become friend
 ‘Thank You God for the wisdom that You gave so that I may be used (by) God to become friend’ (*ind_mixed2012_1M:69*)

In FN, the boldfaced verb in (4-1) is the target LU with respect to which corpus sentences are annotated for the evoked semantic frames and their corresponding frame elements. The verb *berikan* ‘to give’ in (4-1) evokes the TRANSFER SCENARIO frame.

A TRANSFER SCENARIO minimally requires a set of *core* elements or participants: Transferor, Recipient, and Transferred_object. They are *core* because they are “central to the meaning” of the frame-evoking LUs, as well as to the description of the semantic frame as a whole (Fillmore, 2014, p. 132). In short, in the case of TRANSFER SCENARIO frame, these elements ensure that a transferring event can happen (e.g., there could be no transfer when there is nothing to transfer, i.e., the Transferred_object). Frame elements are also called (semantic) *roles* because they abstract away from more specific individuals. For instance, the

TRANSFER SCENARIO frame would not specify who the Transferor is; it only indicates that an entity may have this role within this frame. The specific words that express or specify frame roles in an utterance are called *fillers*. In linguistic instances, the frame roles are bound to their fillers. Typical FN analysis on an LU also indicates the syntactic constituents via which the frame roles are expressed in utterance. The syntactic constituents manifesting the frame roles bear syntactic relation to the frame-evoking LU. For instance, the Transferred_object role in (4-1) is mapped onto the head noun *hikmat* ‘wisdom’, which is the direct object of *berikan* ‘to give’ in the relative clause modifying *hikmat*.

Despite their coreness in each frame, the core frame roles may not always be realised linguistically. For instance, in (4-1) above, no Recipient is explicitly encoded, except (i) the Transferor filled with *Kau* ‘you’, which is the anaphor to the antecedent *Tuhan* ‘God’, and (ii) the Transferred_object specified by *hikmat* ‘wisdom’. In contrast, (4-2) below does not express the Transferor, but the Recipient and the Transferred_object.

- (4-2) *Namun, [uang itu]_{Transferred-object} di-beri-kan kepada [iklan tersebut!]_{Recipient}*
 however money DEM.SG PASS-give-APPL to advertisement DISC.DEM
 ‘However, that money was given to the advertisement!’ (*ind_mixed2012_IM:1600*)

Examples (4-3), (4-4), and (4-5) below express all the core roles of TRANSFER SCENARIO in various syntactic constituents.

- (4-3) *Maka mulai sekarang seharusnya [istri]_{Transferor} mulai mem-beri-kan*
 hence start now should wife start AV-give-APPL
[perhatian]_{Transferred-object} terhadap [suami]_{Recipient}
 attention towards husband
 ‘Therefore, starting from now, wife should give attention to(wards) husband.’
 (*ind_mixed2012_IM:438*)

- (4-4) *[kau]_{Transferor} meng-hadiah-i=[ku]_{Recipient} [aksesoris rancangan pertama=mu*
 2SG AV-gift-TR=1SG accessories design first=2SG.POSS
yang sangat ber-harga itu]_{Transferred-object}
 REL very BER-price DEM.SG

‘you *gift* me your priceless accessories from your first design.’
(*ind_mixed2012_1M:237447*)

- (4-5) *karena* [para *peri*]_{Transferor} *tidak* *segan-segan* ***meng-hadiah-kan***
 because DEM.PL fairy NEG reluctant~ADV AV-gift-TR
berbagai [*hadiah*]_{Transferred_object} *untuk* [*mereka*]_{Recipient}
 various gift for 3PL
 ‘because the fairies willingly *gift* various gifts for them.’ (*ind_mixed2012_1M:164324*)

Example (4-4) expresses the Recipient as an encliticised core argument of the verb, meanwhile (4-3) and (4-5) encode the Recipient in the oblique prepositional phrases. These examples have shown that core frame roles can be left unexpressed or expressed by either a *non-core syntactic constituent* (e.g., oblique PP) or as a *core constituent* (e.g., direct object of the verb). §4.3.4 further discusses the link between syntactic constituent and its associated frame role on the metaphorical mapping of a target domain in a source frame. One implication that I argue from this link is the phenomenon that I call the *metaphorical role-mapping variation* for the target-domain words (§4.3.5).

4.3 *MetaNet* and the Frame Semantics view on conceptual metaphor

MetaNet (MN) is a metaphor research project at ICSI Berkeley, USA. There are three general objectives of MN. First, MN formalises the theoretical concepts in the Conceptual Metaphor Theory (CMT) in terms of Frame Semantics and Constructional approach (e.g., Sullivan, 2013). This is achieved by (i) representing the source and target domain of the conceptual metaphors as *semantic frames*, and (ii) formalising conceptual metaphors as unidirectional mappings from the source-domain frame to the target-domain frame, including their corresponding frame roles. MN also defines a set of regular constructional patterns via which the conceptual metaphors are expressed (cf. Sullivan, 2013; Hong, 2016).

The second aim of MN is to capture the formalisms in a multilingual metaphor repository, including a repository of semantic frames comprising the metaphor’s source and target

domains. Third, MN uses the repositories as a knowledge-base for computational and automatic metaphor extraction and analysis on large corpora. The MN project has been developed to analyse metaphors across four languages, namely American English, Mexican Spanish, Iranian Persian, and Russian as spoken in Russia. The publicly available English repository currently contains 576 frames²⁶ and 685 metaphors²⁷ (For works demonstrating MN approach, see David et al., 2014; David, Lakoff, & Stickles, 2016; Dodge et al., 2015; Petruck & Dodge, 2016; Stickles, David, Dodge, et al., 2016; Stickles, David, & Sweetser, 2016; Stickles et al., 2014, *inter alia*).

The frame and metaphor repositories in MN are created manually by a team of linguists conversant with CMT (Dodge et al., 2015, pp. 42–43). They manually input the individual entries for frames and metaphors into the wiki webpage. The metaphor repository is initially built from metaphors previously identified in the past three decades of metaphor research (e.g. Lakoff, 1987; Lakoff & Johnson, 1980, 1999), including the ones represented in the *Master Metaphor List* (Lakoff, Espenson, & Schwartz, 1991). As to the frame repository, MN develops their repository not directly on the basis of the existing FN frames, but on the basis of on-going process of metaphor analysis and annotation (cf. Stickles, David, Dodge, et al., 2016). More specialised studies of particular target domains then add further metaphors, as well as frames comprising their source and target domains, into the initial repositories (Dodge et al., 2015). These studies focus on GUN DEBATE, POVERTY, and CANCER domains (David et al., 2016; Petruck & Dodge, 2016). My study in Indonesian contributes to the expansion of these studies by focusing on different target domain, namely HAPPINESS, a subcase of the EMOTION domain.

²⁶ <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Category:Frame> (Last access: 10 November 2016)

²⁷ <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Category:Metaphor> (Last access: 10 November 2016)

4.3.1 *MetaNet* frames

The semantic frames in the *MetaNet* (MN) repository “are gestalt structures” (Dodge, 2016, p. 259). They include (i) experiential image-schematic frames, such as MOTION ALONG A PATH, MOTION TO A DESTINATION, CONTAIN(ING/MENT) frames, and (ii) “culturally defined frames, such as POVERTY and TAXATION” (Dodge, 2016, p. 259). Image-schematic frames are skeletal representation of images, which come from specific embodied experiences (Croft & Cruse, 2004, p. 44). These experiences are mostly basic, imagistic domains, such as VERTICALITY, RESTRAINT, CONTAINMENT, IN-OUT, PATH, and so on (Croft & Cruse, 2004, pp. 44–45). In MN, these image-schemas represent experiential, universal primitives. Both image-schemas and culturally defined frames are treated as *frames* (Stickles, David, Dodge, et al., 2016, p. 173). In sum, MN considers frames as “coherent semantic and cognitive structures, formed from bodily interaction with the world” (Stickles, David, Dodge, et al., 2016, p. 173).

The fact that MN includes frames arising from recurring, universal embodied experiences, suits MN’s aim for cross-linguistic comparison. The cross-linguistic applicability of MN’s frames could hold regardless of the specific details of the words evoking a given frame. For instance, our schematised experience about two opposing forces that are involved in an encounter (either for specific purpose or over a disagreement) is assumed to be near-universal, regardless of the word form used to express this experience. The cross-linguistic scope of MN is one of the reasons for me to adopt the MN’s analytical concepts and its frame repository in this project.

As in *FrameNet* (FN), the MN frames can also specify a set of frame-evoking lexical units (LUs) and frame roles. The frame roles in MN may consist of (i) Entity/participant roles, (ii) Non-entity roles, (iii) relations between these roles and/or (iv) Process, which is technically

called the *executing schema* (abbreviated as *x-schema*) (Stickles, David, Dodge, et al., 2016, p. 180). An x-schema or Process is typically encoded via verbs, and specifies “the temporal structure of the state or event that the frame encodes” (Stickles, David, Dodge, et al., 2016, p. 180). Unlike FN, MN’s frame-roles are not differentiated in terms of their *core* status because different elements may involve in different metaphorical mappings (Stickles, David, Dodge, et al., 2016, p. 175) (cf. §4.3.4 and §4.3.5 for further discussion).

The contrast between Entity and Non-entity roles reflects Langacker’s (2013, p. 99) distinction between THING and NON-PROCESSUAL/ATEMPORAL RELATION (Stickles, David, Dodge, et al., 2016, p. 180). ATEMPORAL RELATION can express (i) a simple relationship, such as the spatial relation *on*, when its temporal evolution is not in focus, and (ii) a complex one, such as *into* or *onto*. While *into* and *onto* invite a configurational path of motion of an entity changing location, and thus develops through time, they are non-processual “by virtue of being viewed holistically, so that its temporal evolution is backgrounded” (Langacker, 2013, p. 99). Non-entity roles in MN are similar to THING as they are viewed holistically as a single gestalt, but “lack the dynamicity of Process; they characterize the relationship between entities or process” (Stickles, David, Dodge, et al., 2016, p. 180). MN’s x-schema/Process represents Langacker’s (2013, p. 99) PROCESSUAL RELATION as its development through time is in focus. For instance, in the MN’s MOTION ALONG A PATH frame, the Entity role(s) include Mover, Path, Source, and Goal. The Non-entity role relates these roles via the Source-Path-Goal image-schema. The Process/x-schema role denotes the motion of the Mover from the Source, along the Path, towards the Goal (Stickles, David, Dodge, et al., 2016, p. 180, Table 1).

MN frames are defined in relation to larger networks of frames and metaphors. Each frame has relations to other frames. For instance, PLANTS is defined in *a subcase of* relation to BIOLOGICAL ENTITY. The subcase/child frame (i.e. PLANTS) bind the elements as well as inferential structures of the parent frame (i.e. BIOLOGICAL ENTITY). For instance, the Plant_entity role in PLANTS binds to the Organism role in BIOLOGICAL ENTITY. There are other frame-to-frame relations defined in MN. A frame can *incorporate* an entire frame *as a role*, such as the incorporation of the PLANT LIFE CYCLE frame as one of the roles in the PLANTS frame. A frame can also be *in a causal relation with* another frame. For instance, CAUSE TO SEE is the causal variant of SEEING; the former provides causal role and inference to the latter (cf. Stickles, David, Dodge, et al., 2016, pp. 184–192 for details).

4.3.2 Metaphor evocation and grammatical constructions

This section discusses Sullivan’s (2013, 2016) contribution regarding the constructional-semantics principle (§4.3.2.1) for identifying the potential metaphorical pattern of a given target-domain word (§4.3.2.2). In §4.3.2.3, I argue how the principle can strengthen the methodological foundation of the *Metaphorical Pattern Analysis* (MPA) (Stefanowitsch, 2004, 2006b) adopted in the thesis. In fact, *MetaNet* (MN) also integrates Sullivan’s insights into its computational system for automatic metaphor retrieval (Hong, 2016, p. 298).

A *metaphorical pattern* in MPA is defined as multi-word expression that explicitly contains the target-domain and source-domain words in the relevant slots of the patterns (§3.3.1). From the usage samples of a target-domain word, MPA proceeds to extract, typically manually, the metaphorical patterns in which the target domain words occur. Apart from this characterisation, constraint on what constitutes the relevant grammatical pattern of the source-domain expression that the target-domain items are part of has not received much attention. While Stefanowitsch (2004, p. 138) does mention that metaphorical patterns

represent the “syntactic/semantic frames” of a source-domain word, this idea is not elaborated. This section aims to flesh it out with reference to Sullivan’s (2013) proposal.

Knowing the principle behind the integration of the target-domain word into the syntactic/semantic frames of the source-domain word matters, especially for identifying the relevant metaphorical pattern of a target-domain. A follow-up question is on what principle can we determine the relevant source-domain syntactic/semantic frames relative to the target domain word in a (metaphoric) utterance? I argue below (§4.3.2.2) that insights from Sullivan (2009, 2013, 2016, *inter alia*) on the role of grammatical constructions in metaphorical expressions could provide answer to the question above. My study aims to expand Sullivan’s generalisation into Indonesian metaphorical language by also emphasising its methodological relevance to researchers adopting MPA.

Sullivan (2013) reveals that there is a predictable tendency for metaphors to be expressed in regular grammatical constructions. One of Sullivan’s (2013, p. 3) key arguments is that the words representing source and target domain are important to the extent that they “must occur in a specific grammatical context in order to be interpreted metaphorically”. Consider the co-occurrence of *kegembiraan* ‘joy’ with the verb *menyambut* ‘to receive’ in (4-6).

(4-6) *ber-syukur dalam meny-(s)ambut kegembiraan tersebut*
 BER-gratitude inside AV-receive joy DISC.DEM
 ‘to be grateful in receiving/embracing the joy’ (*ind_web2011_300K:187984*)

Example (4-6) evokes the idea that HAPPINESS is understood as a possessable object that one receives. The verb *menyambut* can be said to evoke the GAIN POSSESSION frame. The noun *kegembiraan* ‘joy’ evokes the target domain HAPPINESS, and, in (4-6), elaborates the Possessable_object role of GAIN POSSESSION associated with the direct-object of *menyambut*. However, the co-occurrence of *keceriaan* ‘cheerfulness’ with *menyambut* in (4-7) below

does not necessarily convey metaphorical interpretation of HAPPINESS as a received possessable object, nor do they co-occur in an argument-structure syntax as in (4-6).

- (4-7) *Keceriaan meny-(s)ambut natal dan tahun baru*
 cheerfulness AV-receive Christmas and year new
sudah te(r)-rasa sejak awal Desember
 already PASS-feel since early December
 ‘Cheerfulness to welcome (lit. receive/embrace) Christmas and new year has already been felt since early December’ (ind_news2012_300K:60910)

Superficially, in (4-7), *keceriaan* appears to be the subject of the verb *menyambut* as it precedes the verb. This analysis evokes an inference that HAPPINESS is a Recipient of the possessable object, in this case *natal* ‘Christmas’ and *tahun baru* ‘new year’. This is not the case. In (4-7), the verb *menyambut* functions as the predicate head of *to*-infinitive-like clausal modifier in a noun phrase headed by *keceriaan*. Thus, the most natural English equivalent is to express *menyambut* as *to*-infinitive modifier. The relevant pattern for *keceriaan* in (4-7) is its function as the grammatical subject of the verb *terasa* ‘be felt’, which is the predicate head of the main clause in (4-7). Hence, *keceriaan terasa* ‘cheerfulness is felt’ is the relevant pattern to be coded for its metaphoricity in MPA and it is retrievable only *manually* by reading the full sentence for context.

A similar pattern as in (4-6) can be observed in (4-8) below, where it further shows that in a metaphorical, verbal argument-structure construction, the verb consistently evokes the source-domain and the target domain is evoked by (one of) the verb’s argument(s). The passive verb *diperbudak* ‘to be enslaved’ in (4-8) evokes the SERVITUDE frame in MN, and the PP argument evokes the target-domain. Via this source frame, HAPPINESS is mapped onto the Subjugator role and thus conceptualised as SUBJUGATOR (cf. §7.3.2).

- (4-8) *Banyak orang yang di-per-budak oleh rasa senang melulu.*²⁸
 Many person REL PASS-CAUS-slave by feeling happy always
 ‘Many people who are always *enslaved by feeling of happiness.*’

The reverse pattern, in which the verb evokes the target domain while the subject argument evokes the source domain, does not convey metaphorical interpretation of either the target domain verb or the utterance as a whole (cf. Dodge, 2016, pp. 261–262). This can be seen in (4-9):

- (4-9) *para budak senang-senang saja di perkebunan*²⁹
 DEM.PL slave happy~PROG just LOC farm/plantation
 ‘the *slaves* are just *happy* at the farm/plantation’

Senang ‘happy’ in (4-9) is used as a verbal predicate, evoking the HAPPINESS frame. The subject argument *budak* ‘slave’ evokes the SERVITUDE frame. *Budak* as the syntactic collocates of *senang* fills the Experiencer role in the HAPPINESS frame evoked by the verb. The sentence describes a continuous state of happiness experienced by the slaves in the plantation. This is different from (4-8) that describes a metaphorical situation where happiness may enslave its experiencer.

The above examples reveal that there is a predictable, grammatical pattern via which metaphorical conceptualisations of a target domain may manifest linguistically. Sullivan (2007, p. 14, 2013) attributes the predictability of metaphor evocation in language to the constructional semantics underlying constructional composition of linguistic units, namely the *conceptual autonomy* and *conceptual dependence* (Langacker, 2013, p. 199).

²⁸ <https://penyuluh-agama-katolik.blogspot.com.au/2014/01/penyuluh-agama-katolik-dipanggil-untuk.html> (Last access: 14 April 2017)

²⁹ <https://www.kaskus.co.id/thread/00000000000000001048250/blues-lovers-coming-in/16> (Last access: 14 April 2017)

4.3.2.1 *Conceptual autonomy and dependence*

Conceptual autonomy and *dependence* are two semantic constructs for grammatical composition in Langacker's Cognitive Grammar (CG) (Langacker, 2013, p. 199; Taylor, 2002, Ch. 12; cf. Croft, 2001, pp. 273–275). When a linguistic element X combines with another linguistic element Y to form a composite structure XY, they exhibit semantic asymmetry. One of the elements in the composition is *semantically dependent* on the other more *semantically autonomous* element (cf. Sullivan, 2016, p. 145). In CG, this semantic asymmetry is called the “A(utonomy)/D(ependence)-alignment” (Langacker, 2013, p. 199).

A dependent element is ‘dependent’ in the sense that it inherently presupposes “a schematic substructure which the other component serves to **elaborate**, i.e. characterize in finer-grained detail” (Langacker, 2013, p. 198, boldfaced in original; cf. Croft, 2003, p. 189). This schematic substructure of the dependent element functions as an *elaboration site* or *e-site* for the autonomous element to fill in when they are assembled into a composite structure (Langacker, 2013, p. 198). Therefore, the meaning of the dependent element is not complete without one or more autonomous elements.

Take a simple Indonesian clause *air meluap*³⁰ ‘(the) water *boils over (to overflow)*’. It is possible to conceptualise *air* ‘water’ in and of itself without invoking the events undergone by it. By contrast, a boiling process evoked by a verb, such as *meluap*, is semantically dependent since the scene encoded by *meluap* is scarcely complete without assuming, albeit schematically, the entities participating in this boiling process. Semantically, *meluap* evokes the HEATING FLUID frame that includes a substructure of something that is boiled over, namely the Fluid. In the clause above, the Fluid substructure of *meluap* is elaborated by *air*

³⁰ *ind_news2008_300K:40424*

‘water’ when they are assembled into an intransitive construction (cf. Langacker, 2013, p. 200; Sullivan, 2013, p. 9; Taylor, 2002, p. 226; Croft, 2001, p. 273). In other words, the Fluid role is an *e-site* in HEATING FLUID frame that is elaborated by the autonomous element *air* ‘water’. As Sullivan (2016, p. 145) suggests, an *e-site* is prototypically “part of the dependent element that the autonomous element modifies”. Given this example, Langacker’s concept on A/D-alignment can also be captured in Frame Semantics terms (Sullivan, 2013, p. 31). The *e-site* represents a *frame element/role* (i.e. Fluid) within a semantic frame (i.e. HEATING FLUID) evoked by the dependent element (i.e. *meluap* ‘to boil over’), meanwhile the autonomous element (i.e. *air* ‘water’) is the role-filler specifying the value of the frame element.

The asymmetry between the autonomous and dependent elements tends to be related to a broad distinction between (i) nominal concepts (termed as THING in CG), encoded by nouns, and (ii) relational concepts (termed as RELATIONSHIP in CG), encoded by prepositions, adjectives, adverbs, and verbs (Langacker, 2013, p. 200; Taylor, 2002, p. 226). THING is relatively autonomous compared to RELATIONSHIP³¹, which is conceptually dependent on its participant (cf. Langacker, 2013, p. 104). Nevertheless, as Sullivan (2016, p. 146) points out, eventually, it is the grammatical constructions into which these lexical categories participate that determine the A/D-alignment of these categories.

Sullivan (2013, p. 83) illustrates this with the noun-noun (N-N) compound in English, such as *treadmill exercise*. The N-N compound uses the lexical category ‘noun’ that encodes THING, which tends to be autonomous. However, in N-N compound, such as *treadmill exercise*, the head noun (*exercise*) is dependent to the autonomous noun modifier

³¹ Recall the discussion in §4.3.1 on the types of MN frame roles, that is Entity, Non-Entity, and Process/X-schema roles.

(*treadmill*). *Treadmill* elaborates the schematic Means invoked as part of the meaning of *exercise*. *Exercise* itself does not indicate any specific Means; the Means substructure is only invoked schematically and specified/elaborated by *treadmill* in *treadmill exercise*. Thus, *treadmill exercise* is more specific than *exercise* in that *treadmill exercise* is an instance of *exercise*, but not *vice versa*³².

4.3.2.2 Conceptual autonomy and dependence in metaphoric construction

Sullivan (2013) suggests that the A/D-alignment in a metaphoric construction will constrain the interpretation for which lexical elements in the construction communicate the source and target domain. The key claim from Sullivan (2013, p. 9) is that “in grammatical constructions that evoke metaphor in the absence of other contextual clues, a conceptually dependent element in the construction communicates the metaphoric source domain and a conceptually autonomous element indicates the target domain”. The potential of this generalisation has been noticed by Croft (2003). Croft (2003, p. 192) proposes that metaphorical interpretation (or “domain mapping” in Croft’s terminology) occurs in the dependent element of a particular grammatical construction when the autonomous element induces it. Compare the following two noun phrases:

(4-10) *Kemarahan yang me-luap.*
 anger REL AV-boils.over.(to.overflow)
 ‘Anger that boils over (to overflow)’ (*ind_web2011_300K:151160*)

(4-11) *Air yang me-luap.*
 water REL AV-boils.over.(to.overflow)
 ‘Water that boils over (to overflow)’ (*ind_web2011_300K:187222*)

The head nouns in the two NPs are modified by relative clauses headed by the same verb *meluap*, which is dependent in relation to the head nouns. The head nouns are autonomous

³² Langacker’s (2013, p. 198) example for this is the N-N compound *jar lid*.

and elaborate the schematic substructure of the relational concept evoked by *meluap* within the relative clause. In shorts, examples (4-10) and (4-11) are composed under the same A/D-alignment³³. The relative clause in (4-10) is metaphorical since the head-noun *kemarahan* ‘anger’ induces the relative-clause modifier to be interpreted in the EMOTION frame, rather than in the HEATING FLUID frame. That is, “[r]oughly, the autonomous elements identify what the metaphoric language is actually about” (Sullivan, 2016, p. 147). Thus, the NP in (4-10) is about ANGER than HEATING FLUID. In contrast, the two elements in (4-11), namely *air* ‘water’ and *meluap* ‘boils over’, are not metaphorical as they are interpreted within the HEATING FLUID frame (cf. Croft, 2003, pp. 194–195).

The example in (4-10) suggests that grammatical juxtaposition of autonomous and dependent elements representing two different semantic domains (target and source) prompts metaphorical interpretation of at least one of the elements of the construction (Sullivan, 2016, pp. 148–149). The proposed argument by Croft and Sullivan is that it is the dependent element that would receive the metaphorical interpretation:

“When a semantic incompatibility exists between the central senses of two grammatically related words and one must give way to the other, the dependent element will conform to the autonomous element. That is, the dependent element will be interpreted as conveying a sense that is compatible with the meaning of the autonomous element.” (Sullivan, 2016, p. 148)

The “two grammatically related words” that show “semantic incompatibility” between their “central senses” are shown in the grammatical co-occurrence of *kemarahan* ‘anger’ and *meluap* ‘boil over (to overflow)’ in (4-10). *Kemarahan* is something that cannot be boiled over, given the basic meaning of *meluap*. Which of the two should be interpreted

³³ The A/D-alignment in a head-noun_relative-clause-modifier construction is similar to that in an argument-structure construction between the argument(s) and the predicate (cf. the example *air meluap* ‘(the) water boils over (to overflow)’ in §4.3.2.1) (Sullivan, 2007, p. 186, 2013, p. 151).

metaphorically can be determined by their A/D-alignment. Given the above quote, it is the dependent element *meluap* that will be interpreted in, and be mapped metaphorically to, the EMOTION frame, specifically ANGER evoked by *kemarahan*.

4.3.2.3 *The relevance of conceptual autonomy and dependence to Metaphorical Pattern Analysis (MPA)*

The discussion in §4.3.2.2 lays the groundwork for my argument that the A/D-alignment in constructional composition for both metaphoric and non-metaphoric constructions forms the constructional foundation of *metaphorical pattern* in MPA. The A/D-alignment may provide insights about the principle in identifying the potential source-domain slot, given the usage sample of the target-domain word. The awareness of the A/D-alignment of the target-domain word in its usage devises methodological contribution to the typically manual process of identifying the metaphorical patterns in MPA. Retrieving the grammatically relevant *candidate* for metaphorical pattern in MPA can be carried out by determining which slot is conceptually dependent in relation to the studied target-domain word.

Another reason for the relevance of Sullivan’s claim to MPA is that Sullivan discusses grammatical constructions with slots that can be filled with, or interpreted as, evoking the source-domain *and* the target-domain words. Such constructions precisely capture the definition of *metaphorical pattern* in MPA as multiword expression the explicitly contains words from the source *and* the target domains. In practice, *MetaNet* (MN) studies on a set of target domains, such as POVERTY, are also built on top of MPA. MN defines a number of “‘target’ search terms” for extracting the metaphorical patterns, which conform to the A/D-alignment of the target-domain words (Dodge, 2016, p. 268; Hong, 2016, pp. 314–315). It is for this reason, I argue, that MPA and MN form a natural symbiosis for the corpus-based, constructional study of metaphors.

4.3.3 Frame-based model of metaphoric mappings in *MetaNet*

This section elaborates on how the integration of the A/D-alignment and Frame Semantics in MN captures metaphorical mapping between frames via metaphorical patterns. Given that MN represents the source and target domain of a conceptual metaphor as frames, a conceptual metaphor represents unidirectional mappings from the source-domain frame to the target-domain frame (Dodge, 2016, p. 260; Lakoff, 2008, p. 24). In addition to mapping between frames, the mapping occurs between the frame-roles. That is, the source-frame roles map onto the corresponding target-frame roles (Dodge, 2016, p. 271). In the context of metaphorical mapping, role-to-role mapping across frames should be (i) of compatible type (e.g., Entity maps onto Entity; Process maps onto Process), but (ii) different in the *semantic type-constraints* assigned to the roles (Stickles, David, & Sweetser, 2016, p. 330). Consider the metaphorical noun phrase *tetesan kebahagiaan* ‘drip of happiness’ in (4-12).

(4-12) *Ada se-macam tetesan kebahagiaan*
 exist one-kind drip happiness
 ‘There exists a (kind of) *drip of happiness*’ (*ind_mixed2012_IM:95177*)

The head noun *tetesan* is the conceptually dependent lexical unit that evokes the LIQUID³⁴ frame (cf. Figure 4-2). This frame has an entity role that is type-constrained as Liquid³⁵.

³⁴ <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Liquid> (Last access: 12 August 2018)

³⁵ As can be seen from Figure 4-2, MN entry for LIQUID does not specify the ‘role type’ field in the LIQUID frame. It can be assumed that the role-type of LIQUID is also liquid by nature. Note that there are other cases where not all MN frames have complete information. In this case, we need to use our semantic intuition to complement MN description of the frame.

Frame:Liquid

Description	
Closest FrameNet Frame(s)	
Other aliases	
Type	Frame

Roles:

Role Name:	liquid
Role Type:	
Definition/Comments:	

Related Frames:

Current Frame:	Liquid
Relation Type:	is subcase of
Related Frame:	Substance
Comments:	

Figure 4-2 A snapshot of the Liquid frame entry in the MetaNet frame repository.

In the noun phrase construction above, the Liquid role, as a type of physical entity, is evoked by the head noun *tetesan* ‘a drip’. This role is associated with the modifying-noun slot, which is filled with *kebahagiaaan* ‘happiness’, an abstract entity role in the HAPPINESS frame (see Figure 4-3 below).

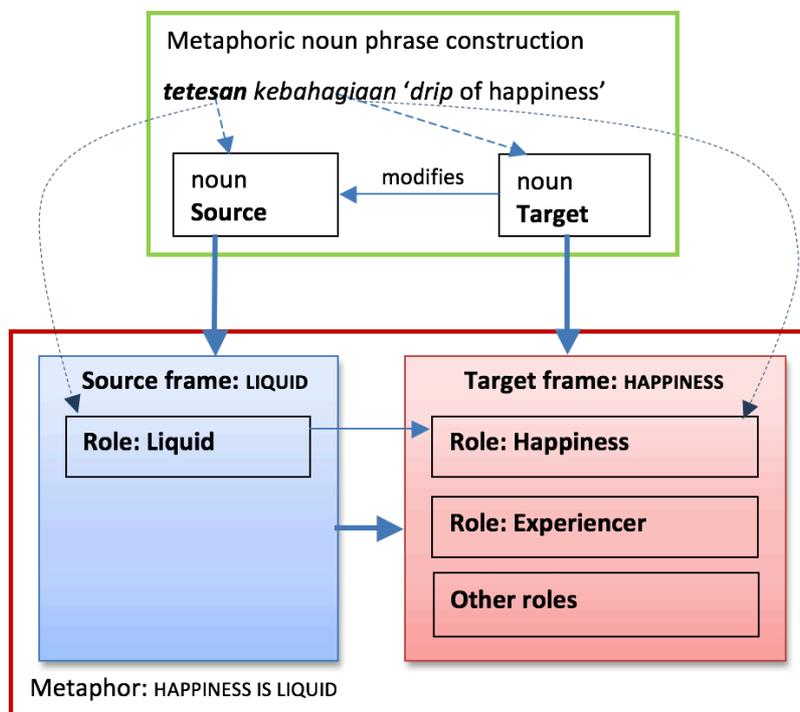


Figure 4-3 Formalised representation of HAPPINESS IS LIQUID metaphor

From the semantic perspective, there is a mismatch between the semantic type-constraint of Liquid role as a concrete entity and its filler, namely *kebahagiaan* ‘happiness’, which is an abstract entity. In the semantic ontology of frame structures, it is a self-contradictory for an entity to be simultaneously abstract (as HAPPINESS) and concrete (as LIQUID) (cf. Stickles, David, Dodge, et al., 2016). The binding of Happiness to Liquid in (4-12) shows a semantic violation that MN calls the *role-type mismatch* (Stickles, David, & Sweetser, 2016, p. 328). This mismatch corresponds to Sullivan’s (2016, p. 148) idea on the “semantic incompatibility” between two grammatically related words discussed in §4.3.2.2 concerning example (4-10). In this case, it is the *role-type mismatch* that leads to the *metaphoric* interpretation of *tetesan kebahagiaan* ‘the *drip* of happiness’. Moreover, it is the *role-type mismatch* that underlies the metaphoric mapping from the more concrete source frame to the more abstract target frame. In the case of (4-12) above, the mappings occur at two levels (cf. Figure 4-3). The first level is between the source frame LIQUID and the target frame HAPPINESS³⁶, at the level of frame-to-frame mapping. The second level is between the Liquid role in the source frame and Happiness role in the target frame, at the level of role-to-role mapping. These frame-to-frame and role-to-role mappings expressed via *tetesan kebahagiaan* evoke the HAPPINESS IS LIQUID conceptual metaphor.

Example (4-12) also reveals the partial nature of metaphoric mappings between elements in the source and the target frames (Lakoff, 1990) (cf. §2.2.3). That is, it is not likely that all elements of a frame will be involved in any metaphoric mapping. Rather, the mapping preserves elements and inferential structures of the source that are coherent in the target frame. For instance, there is no correspondence between the Experiencer in the HAPPINESS

³⁶ Other roles in the HAPPINESS frame includes Experiencer, Cause_of_emotion, Body (of the Experiencer), and Bodily_effect (cf. <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Happiness> [Last access: 12 August 2018]).

frame and the frame-role in the LIQUID frame, especially for the expression in (4-12). In addition to the construction-based, role-to-role correspondence (cf. §4.3.4 below) between the Liquid and Happiness roles, the inference from the semantics of *tetesan* ‘(a) drip’, indicating a ‘small amount’ of Liquid, could also be mapped onto the Intensity in the target.

As with the MN frames, conceptual metaphors in MN are organised in a hierarchical network. The frame relations of the source and target frames of the metaphors determine the relationship of the metaphors. For instance, MN repository defines the conceptual metaphor EMOTIONS ARE SUBSTANCES. Since SUBSTANCE is the parent frame of LIQUID, and HAPPINESS is a *subcase of* EMOTION, the HAPPINESS IS LIQUID metaphor above would be defined in MN as the *source and target subcases of* EMOTIONS ARE SUBSTANCES. LIQUID as the child frame of SUBSTANCE specifies the *semantic type* of the Substance role, namely Liquid.

4.3.4 More on the links between constructions and metaphoric mappings

Figure 4-3 has shown that the source- and target-frame words in a metaphorical pattern evoke the corresponding source and target frame. Once the source frame is evoked, the source-frame roles are made available and associated with the relevant constructional slots in the grammatical construction in which the metaphorical pattern occurs (Stickles, David, & Sweetser, 2016, p. 330). According to the A/D-alignment, the frame-role of the source frame, which is evoked by the dependent element in the construction, will be associated with the slot filled by the autonomous target-frame word (e.g., *kebahagiaan* ‘happiness’ in *tetesan kebahagiaan* in (4-12) above).

Recognising such syntax-semantics link may help identify more precisely (i) metaphoric role-mapping of the target frame element in a source frame, and (ii) role-mapping variations for the target frame in a single source frame (§4.3.5 below). Thus, depending on the

constructional slot it fills in the metaphorical patterns, the autonomous, target-frame lexical item will be mapped onto the corresponding role of the evoked source frame. This is what David et al (2014, p. 40) might call as the “role-based construction-to-schema links”: “Lexical items³⁷ should be associated with **schema**³⁸ **roles** rather than with schemas, for *more precise mappings between grammatical slots and mapped schema roles*” (David et al., 2014, p. 27, boldfaced in original; my italics). Lakoff (2008, p. 35) highlights such links between metaphorical mapping, frame roles, and constructions: “metaphorical mappings are linked to frame elements, which are then activated via words and grammatical categories”. The following examples include metaphorical mappings between the Entity and Process roles in the source and the target frames:

(4-13) *sehingga* *rasa* *bahagia* *dapat* *kita* ***kendali-kan***.
 so.that feeling happy can IPL.INCL OV.rein/bridle-CAUS
 ‘so that *happiness feeling*, we can *rein it back*.’ (*ind_newscrawl2011_1M:936550*)

(4-14) *Atau* *kita* ***batas-i*** *kesenangan* *seraya* *ber-harap*
 or IPL.INCL border-APPL pleasure while BER-hope
di *kehidupan* *yang* *akan* *datang* *kita* *akan* *men-(t)uai* *hasil-nya*
 LOC life REL FUT come IPL.INCL FUT AV-harvest product-DEM
 ‘Or we *restrict* (lit. put border to) *pleasure* while hoping that in the next life we would harvest the fruit.’ (*ind_mixed2012_1M:470861*)

The boldfaced verbs in the examples are the dependent elements and evoke the RESTRAINTS source frame³⁹. A restraining scene minimally consists of two Entity roles: The Restrained_entity, or Mover as in the MN frame repository, and the Restraining_entity. MN defines the process/x-schema role of RESTRAINTS as Affected_motion.

³⁷ The *lexical items* here refer to the source- and target-domain words in a metaphorical pattern, that is the frame-evoking lexical units.

³⁸ *schema* here also refers to the *semantic frame*

³⁹ <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Restrains> (Last access: 21 June 2018).

The verb in (4-13) occurs in what Arka and Manning (2008, p. 52) call the “objective voice” (OV) construction in Indonesian. Then, the target-frame compound *rasa bahagia* ‘happiness feeling’ fills the grammatical subject (gr-subj) slot that is associated with the Restrained_entity role. The pronominal Experiencer *kita* ‘(inclusive) we’ fills the logical-subject⁴⁰ (l-subj) slot that is linked to the Restraining_entity role. Similarly, *kesenangan* ‘pleasure’ in (4-14) is bound to the Restrained_entity role, which is now linked to a different grammatical function, namely the direct object of the active verb *batasi*⁴¹ ‘to restrict’. Such syntax-semantics interface in (4-13) and (4-14) suggest that the target-frame words are metaphorically *mapped* onto *one*, same frame-role (i.e., the Restrained_entity role) via *two* grammatical functions (i.e., gr-subj and direct object) in *two* metaphoric constructions, the dependent elements of which evoke the *same* source frame, namely RESTRAINTS.

As noted by Dodge (2016, pp. 262–263), the evoked metaphorical mapping of the target frame could also be related to the type of grammatical construction that expresses the metaphor. The Restrained_entity mappings for the target-frame nouns in (4-13) and (4-14) are expressed in transitive construction with different voice realisations of the source-frame words. One of the “event schemas” that can be expressed by a transitive construction is what Radden and Dirven (2007, pp. 284–285) call the “force-dynamic schemas”, in which the “action schema” is one of the types.

In the “action schema”, a (typically human) agent “deliberately and responsibly acts upon another entity, the theme”⁴² (Radden & Dirven, 2007, p. 284). The RESTRAINTS frame

⁴⁰ The grammatical subject of the OV construction is mapped onto the proto-macrorole “Undergoer” while the logical subject, a semantically most prominent argument, is mapped onto the “Actor” (cf. Arka & Manning, 2008).

⁴¹ Note that in formal Indonesian, *batasi* ‘to restrict’ should be prefixed with active voice prefix *meN-*, hence *membatasi*.

⁴² Radden and Dirven (2007, p. 270) chose the term “theme”, rather than “object” or “patient” as they consider it more neutral for describing the affected entity, entity undergoing change, entity that exists, etc.

encodes such force-dynamic schema between the Restraining_entity, a more Agent-like role, and the Restrained_entity, the Undergoer-related role. Since restraining scene can be expressed via the transitive construction as in (4-13) and (4-14), the roles in RESTRAINTS can map onto the Agent (Restraining_entity) or Patient/Undergoer (Restrained_entity) slots in the construction. In (4-13) and (4-14) the HAPPINESS nouns occur in transitive constructions evoking RESTRAINTS, and are mapped onto the Undergoer slots linked to the Restrained_entity role. Therefore, this frame-role mapping shows the conceptualisation of HAPPINESS as a Restrained_entity, or Mover as in MN description of this role.

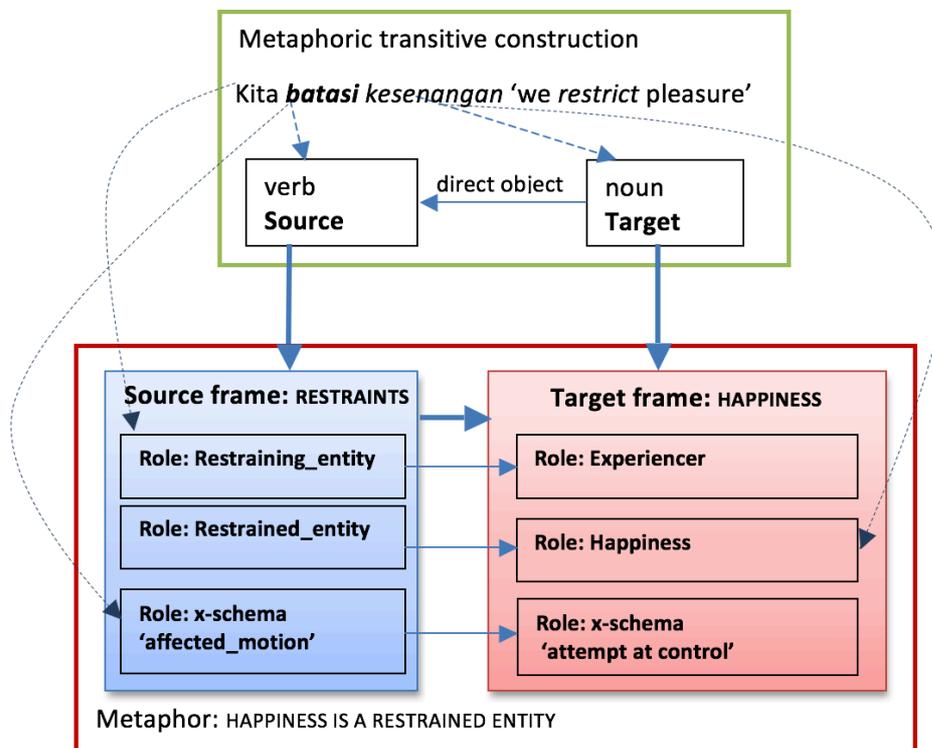


Figure 4-4 Formalised correspondences between metaphoric construction and the Restrained_entity metaphoric mapping in the RESTRAINTS frame.

Figure 4-4 above adapts the formalised representation in MN for the correspondences between the source- and target-frame evoking words to (i) their grammatical functions in the metaphorical patterns, and (ii) to the frame and frame-roles that these words evoke. It exemplifies such correspondences for citation (4-14). Figure 4-4 can be read as follows.

Batasi ‘to restrict’ functions as the predicate head of a transitive construction and evokes the source frame of RESTRAINTS. The process conveyed by *batasi* is linked to the x-schema role called Affected_motion in the source frame. Then, the Entity roles of RESTRAINTS binds to the arguments of *batasi* in the construction. *Kesenangan* ‘pleasure’ here is the target-frame word. It syntactically functions as the direct object of *batasi*. *Kesenangan* evokes the target frame of HAPPINESS and is linked to the Happiness role in the target frame. The syntactic collocation of *batasi* with *kesenangan* in the transitive construction forms a *metaphorical pattern* in MPA sense and invites a metaphoric mapping between RESTRAINTS and HAPPINESS to understand the meaning conveyed by this metaphorical pattern.

At the role-mapping level, the grammatical subject of *batasi* would correspond to the Restraining_entity and be mapped onto the Experiencer in the target frame. The direct object slot filled with *kesenangan* is associated with the Restrained_entity, or Mover, role. It is the *role-mapping* of HAPPINESS onto the Restrained_entity role that would lead one to posit, say, HAPPINESS IS A RESTRAINED ENTITY conceptual metaphor. That is, it is this role-mapping that shows the metaphoric construal HAPPINESS as something to restrict⁴³.

Next, the verb *batasi* ‘to restrict’ is also mapped to the x-schema role in the HAPPINESS frame. Our task is to provide a plausible interpretation in terms of the reasoning implied by *batasi* in the target frame⁴⁴. RESTRAINTS frame has an inference that the movement of the Mover/Restrained_entity is negatively affected when the Restraining_entity applies (its force) to the Mover. This inferential structure of the source frame is also mapped to the

⁴³ One could relate this metaphoric scene to the one proposed by Kövecses (2015, p. 160) under the label HAPPINESS IS A CAPTIVE ANIMAL.

⁴⁴ In this case, we could use the *inference* information contained in the entry of RESTRAINTS, since each frame entry in MN has sub-entry box for *inferences* exposed by the frame. If no such inference is available, of course, we need to recourse to our general knowledge associated with a frame for interpretation.

target frame, in addition to the source-frame roles (Lakoff, 1990, p. 54) (§2.2.3). In the context of the pattern in Figure 4-4, such restraining process focus on the control dimension of HAPPINESS, specifically the attempt at control (cf. §5.3 for how MN approach is applied to analyse the utilised aspect of the source frame). In sum, postulating the HAPPINESS IS A RESTRAINED ENTITY⁴⁵ conceptual metaphor based on (4-14) above is *linguistically* mediated through (i) the syntactic constituent the HAPPINESS noun fills in the construction evoking RESTRAINTS (i.e., the direct object of *batasi*), and (ii) the mapping of this constituent to the RESTRAINTS-associated frame-role (i.e., the Restrained_entity, or Mover role).

4.3.5 On the role-mapping variation of a target frame in a source frame

In this section, I argue that there are implications of viewing metaphor as mapping between frames and frame roles mediated via grammatical constructions of the metaphorical patterns. The first implication is what I call the *metaphorical role-mapping variation* of a target frame in a single source frame. The second is how this role-mapping in a frame, and the variation therein, is closely linked to the syntactic-constituent variation that a target-frame word fills in a metaphorical pattern. I argue that recognising this intra-frame, role-mapping variations is not trivial since the mapping-variations impose different conceptualisations (i.e., the postulated conceptual metaphors) for the target frame based on its mapping onto the frame roles of a single source frame.

Consider examples (4-15) and (4-16) below. The boldfaced verbs in (4-15) and (4-16) also evoke the RESTRAINTS frame, as in (4-13) and (4-14). The derived transitive verb *kendalikan* ‘to bridle’ shares the same root to the one in (4-13) (viz., the noun *kendali* ‘reins, bit,

⁴⁵ Alternatively, if one prefers to focus on the process/x-schema of the frame, the conceptual metaphor could be re-phrased as REGULATING HAPPINESS IS RESTRAINING/RESTRICTING AN ENTITY.

bridle’). The verb differs, however, in terms of their grammatical voice: *active* voice (4-15), *passive* voice (4-16), and *objective* voice (4-13). While these verbs evoke the same source frame, different role-mapping occurs for the HAPPINESS words below.

(4-15) *bagi mereka, kesenangan meng-(k)endali-kan jutaan manusia.*
 for 3PL pleasure AV-rein/bridle-CAUS millions human
 ‘and for them, *pleasure reins back* millions of people.’ (lit. *pleasure causes* millions of people *to be bridled/reined*.) (*ind_mixed2012_1M:484502*)

(4-16) *emosi yang di-kendali-kan oleh kesenangan*
 emotion REL PASS-rein/bridle-CAUS by pleasure
 ‘emotion that is *reined back by pleasure*’ (lit. emotion that is *caused to be bridled/reined by pleasure*.) (*ind_news2012_300K:208187*)

In (4-15) and (4-16), the target-frame word *kesenangan* ‘pleasure’ fills the syntactic functions now mapped onto the Restraining_entity role, instead of the Restrained_entity as in (4-13) and (4-14). In (4-16), the role is linked to the agent of the *di*-prefixed passive verb expressed as an oblique prepositional phrase with *oleh* ‘by’. Meanwhile in (4-15), the Restraining_entity role is linked to the grammatical subject of the active verb *mengendalikan* ‘to rein back/bridle something’. Formalised representation of the construction-to-frame correspondences for (4-15) is shown in Figure 4-5 below.

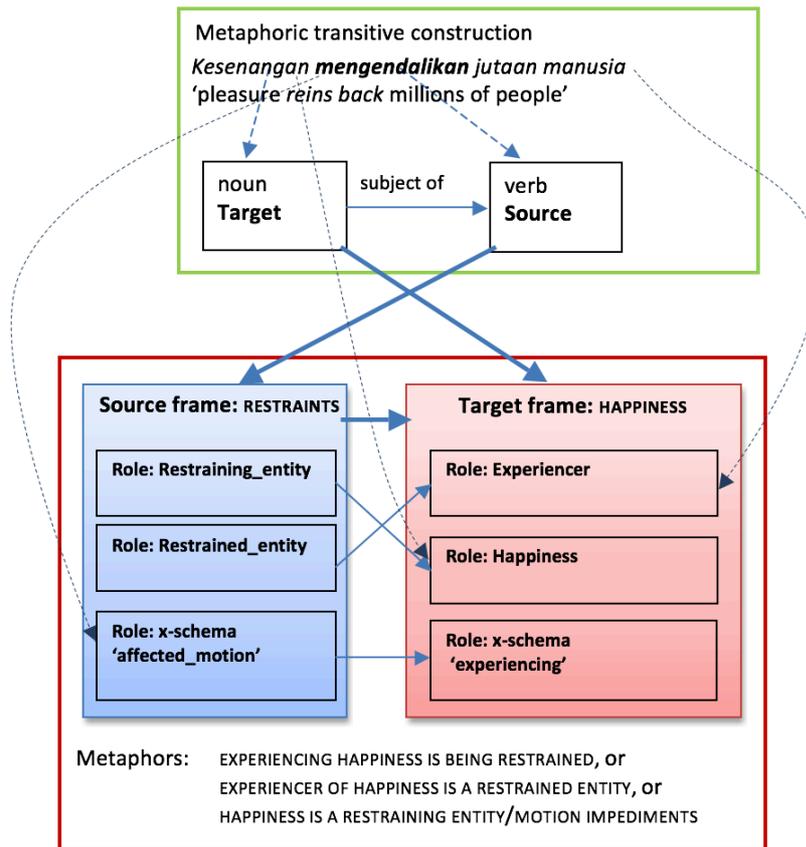


Figure 4-5 Formalised correspondences between metaphoric construction and the Restraining_entity metaphoric mapping in the RESTRAINTS frame.

As Figure 4-5 shows, *kesenangan* 'pleasure' evokes the target frame HAPPINESS and is linked to the Happiness role in this frame. In the metaphorical pattern, *kesenangan* fills the grammatical subject slot associated with the Restraining_entity role in the source frame evoked by the transitive verb *mengendalikan*. Thus, *kesenangan* fills the Restraining_entity role via metaphoric mapping of Restraining_entity role to Happiness role.

Figure 4-5 also reveals the mapping of the Restrained_entity role in the source frame to the Experiencer role in the target frame. The Experiencer role is filled with a noun phrase headed by *manusia* 'human' via its function as the direct object of *mengendalikan*. *Mengendalikan* as the source-frame lexical item in the pattern is mapped to the x-schema role in the target frame. The pattern *kesenangan mengendalikan manusia* 'happiness reins

back/takes control of human' now conceptualises HAPPINESS as the Restraining_entity that has control over the action the Experiencer could do. From the perspective of the Experiencer as the Restrained_entity, the metaphorical pattern focuses on the *existence* of HAPPINESS experienced by the Experiencer.

The examples from (4-13) to (4-16) reflect Langacker's (2013, p. 43) proposal regarding the role of *construal* in meaning, as discussed in §4.2.2. That is, meaning involves both the *conceptual content* and *the way we construe* such content. Semantic frames can be viewed as a *conceptual content* with a bundle of roles and inferential knowledge of the encoded scene, event, or object. *Construal* here is understood as portraying the same scene or frame in an alternating way. The relevant morphosyntactic feature of Indonesian for the alternating construals seen in (4-13) to (4-16) is the alternating voice construction entered into by the source-frame words in relation to the use of the target-frame words in the construction.

In our example with RESTRAINTS, we could argue that HAPPINESS is portrayed from *two* different perspectives within the same, *one* frame. Namely, HAPPINESS can elaborate two different roles of RESTRAINTS, reflecting two metaphorical conceptualisations: (i) HAPPINESS as the Restrained_entity, as in (4-13) and (4-14), and (ii) HAPPINESS as the Restraining_entity, as in (4-15) and (4-16). This is the phenomenon that I call the *metaphorical role-mapping variations* for the target frame: *variation of the metaphorical role-mapping of a target frame in a single source frame*. The two conceptualisations of HAPPINESS are linguistically manifested via different grammatical functions the HAPPINESS nouns fill in the metaphoric constructions evoking the given frame.

The conceptual metaphors discussed in the following chapters are identified based on the frame-role linked to the HAPPINESS nouns in the metaphorical patterns. This is because it is

principally the role-mapping via constructional slots in a grammatical construction that guides one to postulate that in (4-15) and (4-16) above HAPPINESS is conceptualised as a Restraining_entity, but in (4-13) and (4-14), it is a Restrained_entity. Such a definition is preferred because it is workable, replicable, and shows the conceptualisation of the target frame mediated by the usage of the target-frame words in the metaphorical pattern. The metaphorical role-mapping can be traced by analysing the syntax-semantics mapping of the use of the target-frame words in a metaphoric construction: (i) determining the syntactic constituent the target frame fills in the metaphoric construction whose dependent element evokes a given frame, and (ii) associating that constituent with the frame role of the evoked frame. Thus, the examples from (4-13) to (4-16) show that the RESTRAINTS frame hosts *two types* of role-mappings-based conceptual metaphors framing the conceptualisation of HAPPINESS. More examples of this role-mapping variation are discussed in Chapter 5 and Chapter 6. However, semantic intuition is still essential to this process, especially in grouping similar role-mapping based on different, yet semantically related frames. For instance, the LIQUID IN A CONTAINER metaphor is postulated based on the role-mapping onto the Liquid role. This role can be evoked via metaphorical patterns broadly related to FLUID CONTAINMENT frames, such as RELEASE LIQUID, HEATING FLUID, STOP FLOW OF SUBSTANCE, and FLUID MOTION frames.

4.4 Summary

This chapter has discussed the integration of Frame Semantics and Constructional approaches, such as Cognitive Grammar, into the formalised representation of the key notions in Conceptual Metaphor Theory (CMT). This integration is embodied in *MetaNet's* (MN) computational architecture for metaphor-extraction and analysis. I adopt MN's insights since it formalises the link between (i) the constructional slot filled by a target-

frame noun in each metaphorical pattern, and (ii) the frame role the target-frame noun binds in the source frame evoked by the source-frame word in the metaphorical patterns. Awareness of such relationship allow a more precise correspondence, particularly between the target-frame concept and the role it maps in the evoked source frame (cf. López, 2011). I argue that it is such frame-role mapping, as mediated by grammatical construction, that would guide one to postulate one or more sets of conceptual metaphors for a target frame given its collocation with the (exact, same) source-frame word.

The interface between semantic frames, grammatical constructions, and the use of the target-frame word in the metaphorical pattern may lead to the possible role-mapping variation of the target-frame word via the same evoked source frame. Such role-mapping variation captures *different conceptualisations* for the given target frame against the same conceptual background (i.e., the same source frame). This is the reason for the relevance of frame-role-mapping as one of the possible paths for postulating metaphorical conceptualisation of a target-frame. The relevance of role-mapping at the same time appreciates the role of grammatical constructions framing the metaphorical *linguistic* patterns, which become the key data for the metaphor analyst adopting CMT and MPA.

Another reason to adopt the view of MN is its frame-based formalism of conceptual metaphors and the constituting source and target domain of the metaphors. One of the caveats in the use of *domains* for metaphorical mappings is that the limit and content for what constitutes a domain is hard to determine unambiguously (Dancygier & Sweetser, 2014, p. 17), given that a *domain* is “simply a term for a connected piece of conceptual structure, of any kind” (Dancygier & Sweetser, 2014, p. 19). The formalised representation

of the metaphor-input domain as semantic frames allows a more workable analysis of the conceptual metaphor for the reason presented below.

Since metaphorical mapping involves mapping structures of the source onto the target, the useful element about frames for our metaphorical mapping analysis is that we know something about their properties or structures, such as the entities/roles participating in the frames, the relations among these entities, and inferential knowledge about the scene captured by a frame (e.g., when something is restrained, there is a difficulty for the restrained entity to move on, and so on). As Moore (2006, p. 218) suggests, “[i]t is this property of frames—they consist of specified sets of entities and relations—that distinguishes them from domains, which are not so precisely defined”. In this case, “the more we know about the structure of the source and the target, the more precisely we can define and motivate the mapping” (Dancygier & Sweetser, 2014, p. 19). This chapter has shown that the frame-based representations of metaphorical mappings involve mapping the relations and entities between the source and target frames. Frames, thus, provide a more specific way to identify aspects of a domain involved in metaphoric mappings.

In sum, the MN view on conceptual metaphors brings along theoretical insights that explicitly recognises the mapping between form and meaning, such as Frame Semantics and the Constructional approaches to language. The *form* would be the linguistic forms of the metaphorical patterns and grammatical relations of the frames-evoking words in the patterns. The *meaning* would be the evoked semantic (source and target) frames and the role of constructional semantics, such as A/D-alignment, in facilitating the metaphorical mappings between these frames.

Chapter 5 Entrenched metaphors for HAPPINESS in Indonesian

5.1 Introduction

This chapter and Chapter 6 discuss the range of metaphors⁴⁶ evoked in conceptualising the generic concept of HAPPINESS in Indonesian. This chapter focuses on what metaphors are prominent in terms of their *token frequency* (§5.2). Chapter 6 presents other metaphors ranked according to two other frequency measures: (i) the number of different types of linguistic expressions that manifest the metaphors, namely the *type frequency* (cf. §5.2.1), and (ii) the ratio between type and token frequency, namely the *type/token ratio* (TTR).

For this thesis, I analysed 4580⁴⁷ usage samples of sentences containing the Indonesian HAPPINESS words presented in §1.3.1 and Table 3-2. The analysis results in the total 3638 tokens of metaphorical expressions containing 62 metaphor types. This chapter discusses the top-10 most frequent metaphor types (§5.4), constituting 68.45% of the total 3638 tokens. Chapter 6 discusses 4.63% of the total 3638 tokens, consisting of 12 different metaphor types that are different from those discussed in this chapter. In total, this chapter and Chapter 6 account for 73.08% of the total 3638 tokens of the metaphorical expressions.

The top-10 most frequent metaphors are discussed in terms of the utilised metaphorical concepts for construing aspects of HAPPINESS. Before discussing the results in §5.4 onwards, §5.3 elaborates the idea of “utilised metaphorical concepts”, especially its identification in

⁴⁶ From this chapter onwards, I refer to (i) the conceptual metaphors as “metaphors”; (ii) their linguistic expressions as “metaphorical expressions/metaphorical patterns”; (iii) and the source-frame words in the metaphorical expressions as the “lexical units” (LUs), following the *MetaNet* approach.

⁴⁷ These are tokens after manual duplicates-removal.

terms of the semantic frames evoked by the source-frame lexical units (LUs) in the metaphorical expressions. §5.5 then discusses the prominent body-part terms associated with the metaphorical conceptualisations of HAPPINESS in Indonesian.

5.2 Token frequency of a metaphor

The token frequency of a metaphor refers to the number of times a metaphor occurs in the corpus sample. This frequency is tallied from the number of metaphorical expressions instantiating the metaphor. A usage property of a metaphor associated with its observed token frequency is its *entrenchment* (Hilpert, 2006b, pp. 130–131; Glynn, 2014, p. 14; Gries, 2017, p. 593). The link between entrenchment and frequency of occurrence was first introduced in Cognitive Linguistics in Langacker’s (1987, p. 59) classic passage:

“Linguistic structures are more realistically conceived as falling along a continuous scale of **entrenchment** in cognitive organization. Every use of a structure has a positive impact on its degree of entrenchment, whereas extended periods of disuse have a negative impact. With repeated use, a novel structure becomes progressively entrenched, to the point of becoming a unit; moreover, units are variably entrenched depending on the frequency of their occurrence.”
(boldfaced in original)

Langacker aims to show that our linguistic knowledge is built on the usage frequency of the relevant structures (e.g., phrase structures, grammatical constructions, idiomatic expressions). From a cognitive linguistic perspective, the number of times a cognitive structure, such as a metaphor, is activated or used is assumed to indicate the relative entrenchment, or survival, of the structure in the memory as an *established unit* (Langacker, 2013, p. 16; Schmid, 2007, p. 199). This perspective also entails that “[t]oken frequency facilitates learning via repetition” such that a more frequently encountered structure becomes easily accessed, used, and, in the long run, conserved in the memory (Divjak & Caldwell-Harris, 2015, p. 55). In other words, learning via repetition leads the learnt

structure to be “thoroughly mastered, to the point that using it is virtually *automatic* and requires *little conscious* monitoring” (Langacker, 2013, p. 16, my italics). Langacker’s quote indicates that repetition/high-frequency of activation of a structure also results in the structure’s *automatisation* since the structure has been entrenched and established as a unit. When a (linguistic or cognitive) structure is highly entrenched across many individuals in a speech community, it promotes the *conventionality* (or “collective automatization effect”) of the structure (Schmid, 2007, p. 199).

Such properties of an entrenched structure as being automatic, easy to access, and an established unit, also characterise what Lakoff and Turner (1989, p. 55) consider to be metaphors that are *conventional at the conceptual level*:

“At the conceptual level, a metaphor is conventional to the extent that it is *automatic, effortless, and generally established as a mode of thought* among members of a linguistic community. For example, DEATH IS DEPARTURE is deeply conventionalized at the conceptual level; we probably all have it.” (Lakoff & Turner, 1989, p. 55, my italics)

From the usage-based perspective, frequency could be one of the underlying motivations for the automaticity and effortlessness in activating and processing a metaphor (Handl, 2016, p. 64). Moreover, higher usage frequency of a conceptual metaphor may be assumed to reflect the extent to which the metaphor is well-established in each speech community for conceptualising a target domain (Handl, 2016, p. 64).

Conventional metaphorical linguistic expressions (i.e. those that are frequently used to evoke a metaphor) may also drive the conceptual conventionality of the evoked metaphor. The reason can be found in the connection between high usage frequency of a structure (e.g., a set of metaphorical linguistic expressions evoking a given conceptual metaphor) and the structure’s associated properties, namely automaticity, effortlessness, and being a well-

established way of conceptualising a given target domain within a given speech community; these properties are in turn assumed to be possessed by the conceptually conventional, or entrenched, metaphors (Lakoff & Turner, 1989, p. 55).

Following from the theoretical background that has been outlined here, I assume that the frequently encountered metaphors for construing HAPPINESS point to entrenched and conceptually conventional metaphorical representations of HAPPINESS in the Indonesian sample analysed. This study also measures the number of different linguistic expressions/LUs evoking a metaphorical source-frame (i.e., the type frequency) (Chapter 6), as defined in the following section.

5.2.1 Source-frame-evoking *lemmas* as the unit for the type frequency analysis

Following *MetaNet* (MN) (e.g., Petruck & Dodge, 2016, pp. 115, 128–129; Stickles, 2016, p. 69), the lexical units (LUs) counted as *types* for a metaphor correspond to the *lemmas* of the source frame of a metaphor in a metaphorical pattern; a similar approach is adopted in Oster's (2010, pp. 742, 746) corpus study on FEAR. I adopt the following definition of *lemmas* (Baker, Hardie, & McEnery, 2006, p. 104): "a set of lexical forms having the same stem and belonging to the same major word class, differing only in inflection and/or spelling". The lemmas in Frame Semantics can be monolexemic words or multi-word expressions (e.g., *give the slip* or *put into words*) (Boas, 2017, p. 551, footnote 4).

For instance, the use of the preposition *dalam* 'inside' as an adjunct in the metaphorical expression ***dalam* NP_{emo}** '*inside* NP_{emo}' are counted separately with its use in locational/motion construction with static-locational verbs, e.g. ***hidup dalam* NP_{emo}** 'to live *in(side)* NP_{emo}', and motion verbs, e.g. ***terjerumus ke dalam* NP_{emo}** 'to fall flat on one's

*face*⁴⁸ into NP_{emo}'. The boldface items in the three patterns are counted as separate LUs because they evoke different frames, but still instantiate the HAPPINESS IS A LOCATION metaphor since the HAPPINESS noun fills the slot associated with the Location role of the evoked frames (§5.4.3 provides the full sentential citations of the three patterns). The example of *dalam* with the static-locational verb evokes the so-called BEING IN A BOUNDED REGION⁴⁹ frame, while the motion-related verb evokes the MOTION TO A BOUNDED REGION⁵⁰ frame, a subcase of MOTION TO A LOCATION frame. The verbs add temporal aspects (i.e., “ongoing or changing location” (Dodge, 2016, p. 275)), to the static BOUNDED REGION frame evoked by the sole use of *dalam* ‘inside’. In general, the use of sole preposition to indicate locational information and its combination with static-locational or motion verbs are counted as different LUs (Dodge, 2016, pp. 274–275).

Additional examples for multi-word LU for a metaphor include the phrase NP_{emo} *di hati* ‘NP_{emo} in the liver’. While *di* ‘at/in/on’ evokes locational frame unspecified for its boundedness (with interior and exterior), its use in the example phrase complemented with *hati* ‘liver’ evokes a scene where *hati* is understood as the bounded region with interior and exterior. The phrase is considered to convey HAPPINESS IS A CONTAINED ENTITY (§5.4.5).

Another instance of LU count for each metaphor is lemmatising verbs that inflect for grammatical voice. For instance, the transitive verbs *kendalikan* ‘to rein back sth.; to bridle sth.’, based on the nominal root *kendali* ‘rein; bridle’, can inflect for grammatical voice with prefix *me-* for active/actor voice (cf. (5-1)), prefix *di-* for passive (5-2), or occurring in bare

⁴⁸ This English translation of *terjerumus* is from Stevens & Schmidgall-Tellings (2004, p. 422). An alternative translation is ‘to fall over’.

⁴⁹ See the list of LUs in https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Being_in_a_Bounded_Region (Last access: 9 September 2018).

⁵⁰ See the list of LUs in https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Motion_to_a_bounded_region (Last access: 9 September 2018).

form in objective voice constructions (5-3). In this sense, *kendalikan* is the lemma counted for these different voice constructions for a (set of) metaphor(s) based on a single source frame, namely the RESTRAINTS frame.

- (5-1) *(bagi mereka) kesenangan meng-(k)endali-kan jutaan manusia.*
 for 3PL pleasure AV-rein/bridle-CAUS millions human
 ‘(for them) *pleasure control* (lit. *rein back/bridle*) millions of people.’
 (*ind_mixed2012_1M:484502*)
- (5-2) *fantasi dan emosi yang di-kendali-kan oleh kesenangan*
 fantasy and emotion REL PASS-rein/bridle-CAUS by pleasure
 ‘fantasy and emotion that is *controlled* (lit. *reined back/bridled*) by *pleasure*’
 (*ind_news2012_300K:208187*)
- (5-3) *maka hasrat dan rasa bahagia dapat kita kendali-kan.*
 so.that desire and feeling happy can 1PL.INCL OV.rein/bridle-CAUS
 ‘so that we can *control* (lit. *rein back/bridle*) desire and *feeling of happiness*.’
 (*ind_newscrawl2011_1M:936550*)

The examples show that a single RESTRAINTS frame LU, such as *kendalikan*, in its different voices, motivates different RESTRAINTS-based metaphors for HAPPINESS since the HAPPINESS nouns co-occur with the verbs filling syntactic slot associated with different semantic roles of the frame: The Restraining_entity role, which impedes the movement of a Mover ((5-1) and (5-2), cf. §6.4.2.4), and the Restrained_entity, i.e. the impeded Mover (5-3).

Furthermore, there are cases where two different lemmas should be posited for words that are formally of the same word class with the same root. For instance, the *transitive* form *kendalikan* is counted differently from the *intransitive* form with the same root occurring in a static-passive prefix *ter-*, namely *terkendali* ‘be controllable; lit. can be reined back’. The *ter-* prefixed variant evokes a static-adjectival interpretation⁵¹. If the *ter-* prefix is removed

⁵¹ While one of the functions of prefix *ter-* is as a stative passive prefix, in addition to indicating accidental event, *inter alia*, (see Arka, 2010), I am not assuming *ter-kendali* as a passive variant of the active transitive *kendali-kan* in terms of form and usage frequency. Regular expression search for the form *terkendali* and *terkendalikan* in one of the corpus files for this study (*ind_mixed_2012_1M-sentences.txt*) yields 223 tokens for *ter-kendali* compared to 11 for *ter-*

from *terkendali* into *kendali*, *kendali* is not a verb anymore, but a noun. This is in contrast with the lemmatised form *kendalikan*, which is a denominal transitive verb due to the verbal suffix *-kan*. Other similar examples include the different lemmas posited for the intransitive *ter-cermin* ‘sth. be (in a state of being) mirrored’ vs. the transitive *cermin-kan* ‘to mirror sth.’, which can occur as *men-cermin-kan* (active), *di-cermin-kan* (passive), and *cermin-kan* (objective voice).

5.3 Analysing the utilised aspects of a metaphorical source frame

§2.2.3 has discussed the idea within CMT that metaphorical mappings only partially highlight certain aspects of the target frame via utilising some aspects of the source frame (Kövecses, 2010, pp. 10, 94–95). In the SOCIAL ORGANIZATIONS ARE PLANTS metaphor, the semantics of the source-frame LUs can provide us hints of the utilised aspects of the PLANTS frame. Words such as *flourishing* and *blossom* may refer to the flowering aspect of PLANTS, which highlights the most successful stage in the target. Meanwhile, *reap* evokes the mapping between the fruit onto the beneficial consequences in the target (cf. Kövecses, 2010, p. 10). The question is how to capture the mapped, utilised aspect(s) of the source onto the target in relation to the semantics of the source-frame LUs, given the *MetaNet* (MN) framework.

kendali-kan. The results point to the conventional/prototypical usages of a form (e.g. *ter-kendali*) as an independent unit of (lexical) construction given its high token frequency (Bybee, 2010, pp. 24–25; Goldberg, 2006, p. 5; Hilpert, 2014b, pp. 66–67). The results also guide my decision that if the lemma *kendali-kan* would have its passive variant with prefix *ter-*, it should *formally* and *explicitly* include the suffix *-kan*, hence *ter-kendali-kan*. Thus, instead of collapsing *ter-kendali* as the *ter-* passive variant of the lemma *kendali-kan*, I decided to count cases like *terkendali* and *kendalikan* to be of different lemmas despite their similar formal *appearance*, namely as a verbal word class, and the meaning of *terkendali* and *terkendalikan* superficially quite similar, that is ‘can be controlled/reined back’. The questions (i) whether *ter-kendali* could be a non-formal or a more colloquial usage of *ter-kendali-kan* with potentially the same meaning, and (ii) about the acceptability of *ter-* prefixation for suffixed verbs, require another study.

As introduced in Chapter 4, one of the aims of MN is to formalise the source domain and target domain of a conceptual metaphor as semantic frames⁵², that are evoked by their corresponding LUs. A conceptual metaphor thus represents mappings between structures of the source frames onto the corresponding structures of the target frames (David, 2017, pp. 582–585; Sullivan, 2013). For instance, Sullivan (2013, p. 24) suggests that a metaphor with the BODY domain such as THE MIND IS THE BODY consists of several submappings, such as (i) IDEAS ARE FOOD (e.g. “a *tasty* thought”, “let me *digest* that”) and (ii) MENTAL FITNESS IS PHYSICAL FITNESS (e.g. “to *exercise* mentally”, “a *workout* for your brain”) (All examples are cited from Sullivan, 2013, p. 24). These two submappings, which in CMT also constitute (sub)metaphors, utilise structures of two semantic frames evoked by the italicised LUs in the expressions: the INGESTION frame for (i) and EXERCISING frame for (ii).

Given Sullivan’s examples above, it is plausible to assume the “utilised aspect of the source domain” from the structures⁵³ of the source frame as evoked by the source-frame LUs. In addition, viewing the utilised aspects in a metaphor as the activated source frame reflects Sullivan’s idea of “[p]rofiled frame structure”:

“Although one metaphor will often map structure from numerous frames, *certain frames are more important than others in any given instance of metaphoric language*. These frames will usually be those that are *directly evoked by particular items in a metaphoric phrase or clause*.” (Sullivan, 2013, p. 25, my italics)

Sullivan (2013, p. 25) illustrates this with the metaphorical pattern “mental *exercise*”. The item *exercise* is the source-frame LU evoking the EXERCISING frame. This frame provides more relevant semantic aspects in making inference about “mental *exercise*” than other frames in the broader BODY domain, such as the INGESTION or OBSERVABLE_BODY_PARTS

⁵² See §4.2.1 for the definition of semantic frames.

⁵³ The structures of a semantic frame may include semantic roles in a frame and entailed inferences, as discussed in §4.2.4.

frames. In other words, the structures of a source available for mappings onto the target come from the activated semantic frames evoked directly from the source-frame LUs (Kövecses, 2017, p. 8; Sullivan, 2013, pp. 23–24). This Frame Semantics approach is incorporated into the latest advance in the CMT proposed by Kövecses (2017) that he calls the “multi-level view of conceptual metaphor”. This view specifies the levels of conceptual structures along which one may pursue his metaphor analysis: “no level can be singled out as the *only* appropriate level of analysis” (Kövecses, 2017, p. 1, my italics). The semantic frame is one of the four levels discussed by Kövecses, who suggests that “[t]he aspects that do participate in the mappings can be, and usually are, given in the form of *frames*. The frames elaborate the select [*sic*] aspects of domains.” (Kövecses, 2017, p. 8, my italics)

Building on these insights, I determine the aspect involved as submapping in a metaphor through the link between the source-frame LUs and its evoked semantic frame. The frequency of occurrence of the evoked frame reveal the predominant aspect mapped onto the aspect of the target frame in the metaphor.

5.3.1 Highlighted aspects of an emotional state

Kövecses (2000, pp. 40–46) proposes that metaphors about a given emotion highlight semantic aspects or dimensions of the emotion in the target frame. However, there is no clear procedure for how we know the highlighted aspect(s), or meaning(s) of the metaphor in, the target frame. For instance, what does it mean by *kegembiraan terpancar* ‘joy be spurted out’ or *memancarkan kegembiraan* ‘to spurt/gush out joy’? They evoke the RELEASE LIQUID frame and highlight the (intense) expression aspect of HAPPINESS via HAPPINESS IS A LIQUID IN A CONTAINER metaphor (§5.4.6). Admittedly, semantic intuition plays a major role in identifying the meanings and highlighted aspects of metaphors and is indispensable for metaphor research in general.

Kövecses's (2000) inventory of semantic aspects of emotions provides some valuable heuristics to this end. These aspects include *intensity*, *control*, *passivity*, *existence*, *positive/negative evaluation*, *harm*, *difficulty*, and *desire/need* (Kövecses, 2000, pp. 40–47). Soriano (2013a) has shown that these aspects can bridge the findings from CMT and cross-cultural psychological studies on the semantic dimensions of emotions (e.g., valence, arousal, regulation) (see also Ogarkova, Soriano, & Gladkova, 2016). In that case, I conceive the categories as the initial foundation in making sense of the data.

5.4 Top-10 frequent metaphors for HAPPINESS in Indonesian

This section discuss which metaphors are relatively entrenched for HAPPINESS in Indonesian based on their token frequency (cf. Hilpert, 2006b, pp. 130–131). I focus on the ten most frequent metaphors as shown in Table 5-1.

Table 5-1 Top-10 metaphors sorted in descending order of the token frequency.

	Metaphors	Token	%Token
1	HAPPINESS IS A POSSESSABLE OBJECT	749	20.59
2	HAPPINESS IS A CONTAINED ENTITY	358	9.84
3	HAPPINESS IS A DESIRED GOAL	293	8.05
4	HAPPINESS IS AN (UN)VEILED OBJECT	211	5.80
5	HAPPINESS IS A LOCATED OBJECT	210	5.77
6	HAPPINESS IS A LOCATION	169	4.65
7	HAPPINESS IS A LIQUID IN A CONTAINER	156	4.29
8	INTENSITY OF HAPPINESS IS QUANTITY OF OBJECT	137	3.77
9	HAPPINESS IS FOOD	108	2.97
10	HAPPINESS IS A SUBMERGED ENTITY	99	2.72

As Table 5-1 shows, HAPPINESS is most frequently construed as a POSSESSABLE OBJECT. The following sub-sections elaborate on the submappings and the inferences evoked for construing aspects of HAPPINESS. While the discussion begins with the HAPPINESS IS A POSSESSABLE OBJECT metaphor, it may not fully follow the ranked-order of the metaphors in

Table 5-1. Instead, metaphors conveying related themes will follow from one another in the discussion to highlight similarities. For instance, the aspect of intensity is highlighted by CONTAINED ENTITY, LIQUID IN A CONTAINER, and QUANTITY OF OBJECT metaphors. These three metaphors are accordingly presented in sequence, despite their non-successive ranking in Table 5-1.

5.4.1 HAPPINESS IS A POSSESSABLE OBJECT

HAPPINESS IS A POSSESSABLE OBJECT has several frame-based submappings, foregrounding different inferences about HAPPINESS. These include the way HAPPINESS may come to be possessed and the potential consequence of possessing the HAPPINESS-possession (cf. Stefanowitsch, 2004).

The cause of HAPPINESS is referred to via interrelated frames evoking OBJECT TRANSFER. They are (i) the OFFERING frame (1.2% of the total tokens of the POSSESSABLE OBJECT metaphor, e.g. (5-4)), which in *FrameNet* is described as adopting the structure of the GIVING frame; (ii) the GIVING frame (30.17%, e.g. (5-5)); (iii) DISPERSAL, which is related to RESOURCE TRANSFER frame in *MetaNet* (13.62%, e.g. (5-6)); and (iv) the generic CAUSED MOTION frame (15.49%, e.g. (5-7)), which includes the BRINGING frame (5-8).

(5-4) *faktor materi dan kesenangan yang dunia tawar-kan.*
 factor material and pleasure REL world OV.offer-APPL
 ‘material factor and *pleasure* that the world *offers*.’ (*ind_web2012_1M:246164*)

(5-5) *ganja sebagai sumber kebahagiaan, **pem-beri** kesenangan*
 marijuana as source happiness NMLZ-give pleasure
 ‘marijuana as the source of happiness, *giver* of *pleasure*’ (*ind_web2012_1M:706822*)

(5-6) *anak yang mampu **men-(t)ebar** keceriaan (...) juga perlu di-apresiasi.*
 child REL can AV-spread.out HAPPINESS also need PASS-appreciate
 ‘kids who can *spread out cheerfulness* (...) also need to be appreciated.’ (*Koran Sindo via Webcorp:8*)

(5-7) *penghargaan dan kedudukan terhormat (...) cenderung hanya*
 appreciation and position respected tend only
men-datang-kan kebahagiaan sesaat
 AV-come-CAUS happiness temporary
 ‘appreciation and respected position (...) only tend to *bring* temporary *happiness* (lit. to *cause happiness to come*)’ (*ind_web2012_1M:966220*)

(5-8) *dewi pem-bawa bahagia*
 goddess NMLZ-bring happy
 ‘the goddess (who acts) as the *bringer of happiness*’ (*ind_mixed2012_1M:268824*)

From the perspective of the Recipient, receiving or gaining the transferred possessable object is mapped onto the onset of HAPPINESS. This inference is evoked through the GAIN POSSESSION frame (24.3%) (5-9). The frame is available in the MN frame repository.

(5-9) *jika ia men-dapat-kan kesenangan maka ia ber-syukur*
 if 3SG AV-get-TR pleasure so.that 3SG MID-gratitude
 ‘if (s)he *gets/obtains pleasure*, then (s)he will be grateful’ (*ind_web2012_1M:286519*)

The experience of happiness can be expressed as the gaining of a possessable object, invoked through the POSSESSION frame (9.35%) as in (5-10).

(5-10) *saya me-milik-i (...) kegembiraan yang tak ter-kontrol.*
 1SG AV-possession-TR joy REL NEG PASS-control
 ‘I *possess uncontrolled joy*.’ (*ind_newscrawl2012_1M:275421*)

Of course, a possessed object can be seized by others and be lost. Accordingly, the POSSESSABLE OBJECT metaphor evokes two submappings: (i) HAPPINESS NO LONGER EXPERIENCED IS A SEIZED POSSESSION and (ii) A CHANGE FROM HAPPINESS TO UNHAPPINESS IS LOSING POSSESSION. The submapping in (i) is based on the THEFT (5-11) and TAKING frames (5-12), which evoke a negative way in which one’s HAPPINESS might cease. The submapping in (ii) is based on the LOSE POSSESSION frame and focuses on the lost of HAPPINESS (5-13).

(5-11) *kegembiraan itu di-rampas oleh arogansi dan politisasi*
 joy DEM PASS-steal.by.snatching by arrogance and politicisation
 ‘that *joy* was *snatched* by arrogance and politicisation’ (*ind_news2011_300K:199470*)

- (5-12) *Keempatnya telah meny-(s)ita bahagia*
 the.four.of.them already AV-confiscate happy
 ‘The four of them has *confiscated happiness*’ (*ind_news2009_300K:17191*)
- (5-13) *yang kehilangan kesenangan hidup adalah keluarga si korban.*
 REL.NMLZ lose pleasure life COP family DEM victim
 ‘The one that *loses* life *pleasure* is the family of the victim(s).’
 (*ind_web2012_1M:252762*)

Table 5-2 shows the LU types most frequently co-occur with the HAPPINESS words to evoke the POSSESSABLE OBJECT metaphor and its frame-based submappings.

Table 5-2 Top-10 most frequent lexical units evoking HAPPINESS IS A POSSESSABLE OBJECT.

	Lexical_units	Gloss	N	Perc_overall ⁵⁴
1	<i>beri(kan)</i>	to give	170	22.70
2	<i>dapat(kan).v</i> ⁵⁵	to get	120	16.02
3	<i>bawa(kan)</i>	to bring	75	10.01
4	<i>berbagi</i>	to share	71	9.48
5	<i>peroleh</i>	to acquire/earn	43	5.74
6	<i>miliki</i>	to have/own	35	4.67
7	<i>kehilangan</i>	to lose	22	2.94
8	<i>kembalikan</i>	to give back; to return	20	2.67
9	<i>datangkan</i>	to bring sth.; to cause to come	16	2.14
10	<i>hadirkan</i>	to present sth. to; to bring sth.	15	2.00

Beri(kan) ‘to give’, for instance, is the most frequent LU for the GIVING frame (75.22% of the total tokens of GIVING), compared to *kembalikan* ‘to give sth. back; to return sth.’ (8.85%). For GAIN POSSESSION frame, *dapat(kan)* ‘to get’ (66.3%) is the most frequent LU. *Berbagi* ‘to share’ is the most common LU (69.61%) for the DISPERSAL frame, while *miliki* ‘to have/own’ (50%) and *kehilangan* ‘to lose’ (81.48%) are representative for the

⁵⁴ “Perc_overall” column refers to the percentage of each LU type from the total tokens of a given metaphor. “N” refers to the frequency of occurrence (or token frequency) of each LU type for a given metaphor.

⁵⁵ I put the ‘v’ tag for *dapat(kan)* ‘to get’ since the form *dapat* has another function as an abilitative modal auxiliary meaning ‘to be able to; can’.

POSSESSION and LOSE POSSESSION frames respectively. Lastly, *bawa(kan)* ‘to bring sth. (to sb.)’ (64.66%) is the most frequent LU for the CAUSED MOTION frame.

Overall, the predominant submappings in the POSSESSABLE OBJECT metaphor are those involving (potential) object transfers (60.48% of the total frequency of the metaphor), highlighting the cause for HAPPINESS. It is then followed by the receiving of the possessable object, hence the attainment of HAPPINESS (24.17%); the possessing, or existence, (9.35%); and lastly the losing, or ceasing, of HAPPINESS (6.01%).

Those submappings converge on an additional construal of HAPPINESS as a precious state that can be owned and lost. The high token frequency of the POSSESSABLE OBJECT metaphor suggest that viewing HAPPINESS as a precious possession may be entrenched for Indonesian as represented in my sample (cf. Stefanowitsch, 2004, pp. 145–146). From the most frequent metaphor where the candidate Experiencer is viewed as the Recipient of a transferred emotion, §5.4.2 proceeds with the metaphor that conceptualises the candidate Experiencer as moving towards a desired goal (i.e., a destination or a desired object therein).

5.4.2 HAPPINESS IS A DESIRED GOAL

In §5.4.1, HAPPINESS is understood as an object caused to move to the Goal, namely the candidate Experiencer, via various kinds of transferring scenes. In this sense, the candidate Experiencer takes a passive role in acquiring the possession. In contrast, HAPPINESS IS A DESIRED GOAL construes HAPPINESS as a location or object towards which the candidate Experiencer moves, reflecting the QUEST metaphors family proposed by Stefanowitsch (2004) (cf. Lakoff & Johnson, 1999, pp. 196–197).

HAPPINESS IS A DESIRED GOAL consists of submappings built upon structures of the SELF-PROPELLED MOTION TO A DESTINATION frame (Lakoff & Johnson, 1999, pp. 190–191). The submappings provide rich inferences concerning (i) HAPPINESS as an aspiration (e.g. a desired object or location), (ii) process and means to achieve the aspiration, as well as (iii) how the process may be halted. Citations (5-14) to (5-16) illustrate the mapping of HAPPINESS onto the Goal role. The metaphorical expressions are based on lexical units (LUs) that evoke the schematic image of the SOURCE-PATH-GOAL (SPG) frame.

(5-14) *tidak men-jadi-kan (...) kesenangan sensual sebagai **tujuan** hidup*
 NEG AV-become-CAUS pleasure sensual as destination life
 ‘not to make sensual *pleasure* as the life *destination*’ (ind_newscrawl2012_1M:192777)

(5-15) *pencarian Edies akan sosok pria (...) tak kunjung **ber-muara ke ujung** bahagia*
 searching NAME towards figure male never MID-estuary to tip happy
 ‘Edies’ searching for a figure of man (...) never *ends* with *happiness* (lit. never *estuary* towards the tip/point of happiness)’ (ind_newscrawl2011_1M:667627)

(5-16) *perasaan gundah yang **ber-ujung** pada kesenangan*
 feeling worry REL MID-end.of.path at pleasure
 ‘the feeling of worry that *ends at pleasure*’ (ind_newscrawl2012_1M:536251)

The SPG frame describes a series of locational roles, namely Source, Path, and Goal, along which an entity, called Trajector, moves, or is conceived as moving⁵⁶. When the frame is used for designating HAPPINESS IS A DESIRED GOAL metaphor, HAPPINESS is mapped onto the Goal role. That is, HAPPINESS is understood as the Goal-end of a Path, towards which the Trajector may move along from a Source.

Concerning the conceptualisations of the attempt for achieving HAPPINESS, there are several relevant frames. Two of these frames indicate the means that are required by the Mover in h(is/er) attempt to reach the Goal; these frames are the ACCESS TO A LOCATION (as in (5-17)

⁵⁶ See *MetaNet* (MN) and *FrameNer's* (FN) definition of SOURCE-PATH-GOAL frame in their respective frame repository.

to (5-19)) and GUIDED MOTION frames (as in (5-20) and (5-21)). When mapped onto the target frame, the inference from these two frames indicates that HAPPINESS cannot be directly achieved without certain means, such as access or guidance.

(5-17) *kesuksesan bukan-lah kunci menuju kebahagiaan*
 success NEG-FOC key heading.to happiness
 ‘success is not the *key to(wards) happiness*’ (ind_mixed2012_1M:424589)

(5-18) *seperti dalam karya ‘Pintu Kebahagiaan’*
 as inside creation door happiness’
 ‘as in the work entitled “*Door to Happiness*”’ (ind_web2011_300K:108339)

(5-19) *tiket menuju kebahagiaan masa depan-nya.*
 ticket heading.to happiness period front-3SG.POSS
 ‘*ticket to(wards) his future happiness.*’ (ind_mixed2012_1M:397320)

(5-20) *Hikmah ini-lah yang akan meng-antar-kan kita menuju kebahagiaan*
 wisdom DEM-FOC REL FUT AV-take.sb.to-CAUS 1PL.INCL heading.to happiness
 ‘It is this wisdom that will *take us toward happiness*’ (ind_web2012_1M:358204)

(5-21) *ia memang yang bisa mem-(p)impin ke jalan kebahagiaan hidup*
 3SG indeed REL can AV-lead to street happiness life
 ‘he is indeed the one who can *lead (us) to the way of life happiness*’
 (ind_newscrawl2012_1M:872312)

Next, the attempt by the candidate Experiencer to achieve HAPPINESS is conceptualised via PURPOSEFUL ACTION IS SELF-PROPELLED MOTION TO A DESTINATION metaphor, based on the SELF-PROPELLED MOTION TO A DESTINATION frame⁵⁷. The metaphor is composed of two more basic metaphors. The first of these is ACTION IS SELF-PROPELLED MOTION (e.g., She *squeezed her way to* thinner thighs⁵⁸), which is grounded on the correlation of doing actions and moving. The metaphor also indicates that the Mover has his/her own control over the direction of its action/motion; yet, as can be seen from examples (5-20) and (5-21) above, the movement can also be taken over, or guided, by a co-Mover. The second constituting

⁵⁷ See https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Self_propelled_motion_to_a_destination (Last access: 15 August 2018).

⁵⁸ Taken from https://metaphor.icsi.berkeley.edu/pub/en/index.php/Metaphor:ACTION_IS_SELF-PROPELLED_MOTION_ALONG_A_PATH (Last access: 15 August 2018).

metaphor is PURPOSES ARE DESTINATION (e.g., We have *taken the first step*), which is grounded on the correlation of reaching a destination with achieving a purpose (e.g., going to a cafe for a coffee) (Lakoff & Johnson, 1999, pp. 52–53, 187–191).

In the SELF-PROPELLED MOTION TO A DESTINATION frame, the Goal role is profiled as a desirable goal, which is not inferred from its parent frame, namely MOTION TO A LOCATION; this parent frame profiles only the goal-oriented motion. The metaphor based on SELF-PROPELLED MOTION TO A DESTINATION frame suggests that becoming happy constitutes a purposeful attempt due to the desirability of the Goal (cf. (5-22) and (5-23)). Moreover, the person aiming to be happy needs to take certain action, hence movement, to realise this purpose. Indonesian voice morphology can contribute to the agentive construal of the candidate Experiencer in the metaphor. Agentivity can be inferred from the verbal LUs of the metaphor that most frequently occur in active voice construction. In Indonesian, this is marked by the prefix *meN-* (80.5% of the total 241 tokens of the verbal LUs for the metaphor) (see, for instance, (5-22), (5-24), and (5-25)).

(5-22) *pedoman hidup dalam men-(t)uju esensi bahagia yang sesungguhnya.*
 guidance life inside AV-head.to essence happy REL tru(thful)ly
 ‘life guidance in *heading to* the essence of true *happiness*’ (*ind_web2012_1M:398400*)

(5-23) *Saya ber-usaha kembali ke keceriaan*
 1SG MID-effort go.back; return to cheerfulness
 ‘I try to *return to cheerfulness*’ (*ind_newscrawl2011_1M:451099*)

The number of tokens for the SELF-PROPELLED MOTION TO A DESTINATION frame only accounts for 11.02% of the total tokens referring to the attempt to be happy. This is expressed mostly by the verb *menuju* ‘to head to a location’ as in (5-22) above. A preferable frame for conceptualising the attempt constitutes the subcase of the SELF-PROPELLED MOTION TO A DESTINATION, namely the PURSUE frame (88.98% of the total frequency for expressions evoking the attempt aspect).

The *subcase of relation* in *MetaNet* (MN) indicates that PURSUE fully incorporates the frame elements and inferential structures of its parent frame (i.e., SELF-PROPELLED MOTION TO A DESTINATION), such as the desirability of the Goal, Self-motion_x-schema/process, and the Mover. In addition, PURSUE as the child frame may have semantic specification, or elaboration, of the frame role parameters. However, MN repository has not yet provided these detailed specifications that may distinguish the PURSUE frame from its parent frame. Perhaps, PURSUE elaborates the semantics of the Self-motion_x-schema with more specific means of action undertaken to achieve the goal, such as searching (5-24), chasing (5-25), or hunting (5-26). Meanwhile, the SELF-PROPELLED MOTION TO A DESTINATION may only profile a self-initiated motion of the Mover-actor until (s)he reaches the destination. No specific means are implied in this frame for how the Goal is reached⁵⁹ and for whether the Goal is static or moving.

(5-24) *Anak dan istri ia tinggal-kan di rumah,*
 child and wife 3SG stay-CAUS LOC house
sedangkan, ia pergi men-cari kesenangan di tempat lain.
 meanwhile 3SG go AV-search pleasure LOC place other
 ‘He left his kids and wife at home while he went *searching for pleasure* in another place.’
 (ind_mixed2012_1M:397221)

(5-25) *Nafsu men-dorong kita agar selalu meng-(k)ejar kesenangan.*
 lust AV-push 1PL.INCL so.that always AV-chase pleasure
 ‘Lust *pushes* us so that we always *chase for pleasure*.’ (ind_mixed2012_1M:504905)

(5-26) *kehilangan pegangan hidup atau ter-jerumus jadi pem-buru kesenangan.*
 lose grip; handle life or PASS-fall.flat become NMLZ-hunt pleasure
 ‘losing the grip of life or falling (flat on one’s face) into becoming a *hunter* of *pleasure*.’
 (ind_newscrawl2011_1M:79925)

The lexical units (LUs) within PURSUE represent three categories of semantic type. They are LUs referring to SEARCHING (74.34% of the total 113 tokens of expressions evoking PURSUE

⁵⁹ No relevant lexical units are given in the entry of SELF-PROPELLED MOTION TO A DESTINATION frame. See https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Self_propelled_motion_to_a_destination (Last access: 9 September 2018).

frame), CHASING (22.12%), and HUNTING (3.54%). The preference for the searching process portrays HAPPINESS as something hidden and requiring exploration for its attainment. Intuitively, *mengejar* ‘to chase; run after’ in (5-25) may also invite an image of (i) a moving, desired Goal, and (ii) having an immediate expectation by the Self-mover when chasing the Goal. In the target frame, this inference maps onto the exigency for experiencing HAPPINESS. After all, examples (5-24) to (5-26) clearly single out the active role of the Self-mover in achieving the Goal. In the target frame, this inference corresponds to the active responsibility of the candidate Experiencer for h(is/er) own HAPPINESS.

A small number (0.68%) of the tokens of the HAPPINESS IS A DESIRED GOAL metaphor evoke submapping conveying potential inhibition on the attempt to achieve HAPPINESS. Example (5-27) specifies a self-internal inhibition for certain prohibited pleasure.

- (5-27) *agar seorang Muslim men-(t)ahan diri dari beragam kesenangan yang di-haram-kan*
 so.that ART Muslim AV- hold.back self from various pleasure
 REL PASS-forbidden-CAUS
 ‘so that a Muslim *holds* h(im/er)self *back from* various forbidden *pleasure*’
 (*ind_web2011_300K:118298*)

Within the arc of the HAPPINESS IS A DESIRED GOAL metaphor, the achievement of HAPPINESS is conceptualised as the final stage of the motion. This could be reaching/arriving (5-28), locating/finding (5-29), and capturing/grasping (5-30) the desired goal (cf. Stefanowitsch, 2004, pp. 142–145).

- (5-28) *Hanya dengan jalan ini-lah dia bisa men-capai kesenangan*
 only with street DEM-FOC 3SG can AV-reach pleasure
 ‘It is only through this way that (s)he can *reach* *pleasure*’ (*ind_mixed2012_1M:263518*)
- (5-29) *Ada kesedihan tapi tak sulit men-(t)emukan kebahagiaan di sana.*
 exist sadness but NEG difficult AV-find happiness LOC there
 ‘There exists sadness, but it is not difficult to *find* *happiness* there.’
 (*ind_mixed2012_1M:565135*)

- (5-30) *meng-habis-kan waktu mereka untuk me-raih kesenangan materi.*
 AV-used.up-CAUS time 3PL.POSS for AV-pull pleasure material
 ‘using up their time to *grasp* (lit. pull/reach sth. towards the body) material *pleasure*.’
 (*ind_web2012_1M:152154*)

All the source frame LUs conveying the final stage of the motion process indicate that a prior effort is required by the Mover before (s)he can reach or capture h(is/er) desired Goal. This inference maps onto the efforts required for somebody to be happy.

Table 5-3 Top-10 most frequent lexical units evoking HAPPINESS IS A DESIRED GOAL.

	Lexical units	Gloss	N	Perc overall
1	<i>cari</i>	to search/look for	74	25.26
2	<i>capai</i>	to reach	51	17.41
3	<i>raih</i>	to pull/reach sth. towards the body	27	9.22
4	<i>kejar</i>	to chase	24	8.19
5	<i>temukan</i>	to find	24	8.19
6	<i>tujuan</i>	destination/goal	13	4.44
7	<i>menuju</i>	to head to	9	3.07
8	<i>jalan</i>	way	8	2.73
9	<i>kunci</i>	key	8	2.73
10	<i>gapai</i>	to reach out	6	2.05

Overall, the percentage of the submapping indicating the attempt to attain HAPPINESS is only slightly higher (43.34%) than the attainment (41.64%). This distribution suggests that the process to and the attainment of HAPPINESS are equally highlighted in the sample. The following sections will consider metaphors that revolve around the more generic LOCATION-based frame, with the alternating metaphors supported therein. Namely, HAPPINESS IS A LOCATION (§5.4.3) and HAPPINESS IS A LOCATED OBJECT (§5.4.4)

5.4.3 HAPPINESS IS A LOCATION

HAPPINESS IS A LOCATION is a subcase of one of the central metaphors in the *Location Event Structure Metaphor* (LESM) system, namely STATES ARE LOCATIONS (Lakoff & Johnson,

1999, pp. 179–180). This metaphor is centred on the LOCATION-related frames, such as BEING AT A LOCATION frame from the *MetaNet* (MN) repository. This frame schematically describes a scene where a trajector (i.e., the Located_thing role) occupies a location (i.e., the Current_location role). The use of the frame in HAPPINESS IS A LOCATION sees the role-mappings of (i) the target frame HAPPINESS onto the Current_location role of the source frame and (ii) the candidate Experiencer onto the Located_thing role.

The principal inference invited by HAPPINESS IS A LOCATION is that the experience of HAPPINESS is expressed as the experiencer's being located at the HAPPINESS-location. The experiencer is thus depicted as the Located_thing. The metaphor tends to be expressed via prepositional phrase whose nominal object slot is filled with the HAPPINESS nouns. This nominal object slot is linked to the Current_location role. The most frequent preposition is *dalam* 'inside' (5-31).

(5-31) *mesti-nya kita juga ber-doa dalam kegembiraan besar*
 should-ADV 1PL.INCL also MID-prayer inside joy big
 'ideally, we also pray (when we are) in big joy' (*ind_newscrawl2011_1M:512071*)

Dalam indicates that the Current_location role is a bounded region with interior and exterior. The BOUNDED REGION frame invites a more specific inference compared to the unbounded location version (as in (5-32) and (5-33) below). Being happy maps onto being in the interior of the bounded region, while unhappy is mapped onto the exterior.

(5-32) *Indah-nya ber-bagi di keceriaan Ramadhan.*
 Beautiful-NMLZ MID-share at cheerfulness Ramadhan
 'The beauty of sharing at the cheerfulness of Ramadhan.' (*Kompas via WebCorp:40*)

(5-33) *mereka men-(t)ari pada suatu kegembiraan yang di-peroleh mereka*
 3PL AV-dance at ART joy REL PASS-acquire 3PL
 'they dance at a joy that they acquire' (*ind_mixed2012_1M:194551*)

The same idea indicated in (5-31) to (5-33) can be expressed by the collocation of the prepositions with stative, locational verbs (cf. examples (5-34)-(5-36)). The verbs add temporal aspect, indicating that the Experiencer is in an ongoing Location-state. The nature of the preposition will tell us whether the location is a bounded region (as in (5-34) and (5-35)) or underspecified for its interior-exteriority (5-36). The submapping of BEING HAPPY AS BEING AT A LOCATION exemplified in (5-31)-(5-36) takes up the majority of the metaphor's token (60.95% out of 169 tokens of HAPPINESS IS A LOCATION).

(5-34) *Jiwa-ku (...) ber-ada dalam keriangan.*
 soul-1SG.POSS MID-exist inside cheerfulness
 'My soul (...) exists inside cheerfulness.' (IWaC via Sketch Engine:ID77725)

(5-35) *Hanya tinggal ber-teduh dalam keriangan*
 Just stay MID-shade inside cheerfulness
 '(We just need) to shade inside cheerfulness' (Antara News via WebCorp:11)

(5-36) *Semua kebaikan Anda (...) ber-ada pada frekuensi kegembiraan*
 All goodness 2SG.POSS MID-exist at frequency joy
 'All your goodness (...) exists at the joy frequency' (ind_web2012_1M:642581)

While being happy is conceptualised as being at a location, being unhappy is conceptualised as being away from the HAPPINESS-location (5.92% of the metaphor's token) (5-37).

(5-37) *wajah gadis itu jauh dari bahagia*
 face girl DEM be.far from happy
 'the face of that girl is far from happiness' (ind_newscrawl2012_1M:26855)

Other submappings from HAPPINESS IS A LOCATION are related to the change of location as expressed via motion verbs (cf. Dodge, 2016, pp. 274–275). In the MOTION-related submappings, the Experiencer fills the Mover role and the HAPPINESS nouns fill the Location-related role, namely Source-location or Goal-location. The Mover can move (*in*)to ((5-42) and (5-43)) or *away from* the Location ((5-38) to (5-41)). These two change-of-location inferences are mapped onto the change-of-state aspect in the target, resulting in two

other submappings. Namely, BECOMING HAPPY IS MOTION TO A LOCATION (2.96% of the total 169 tokens) and CEASING HAPPINESS IS MOVING AWAY FROM THE LOCATION (11.83%).

- (5-38) *Apa-kah kamu mem-milik-i keberanian untuk*
 What-Q 2SG AV-possession-TR bravery in.order.to
men-(t)inggal-kan kesenangan duniawi
 AV-stay-CAUS pleasure worldly
 ‘Do you have bravery to *leave* worldly *pleasure behind* (lit. to cause worldly *pleasure* stay behind)’ (*ind_mixed2012_1M:950273*)
- (5-39) *dengan mereka (...) ber-sembahyang akan ter-pengaruh untuk*
 with 3PL MID-pray will PASS-influence in.order.to
meng-hindar-i luapan rasa senang yang berlebihan
 AV-get.away-APPL overflow feeling happy REL excessive
 ‘with them (...) praying, they will be influenced to *get away from/avoid* excessive overflow of *happiness*.’ (*ind_news2012_300K:116280*)
- (5-40) *Ia sangat pe-malu namun ramah, dermawan, men-jauh-i kesenangan*
 3SG very NMLZ-shy but friendly generous AV-be.far-APPL pleasure
dunia dan cinta akhirat.
 world and love hereafter
 ‘(s)he is (a) very shy (person) but friendly, generous, *stay off/get away from* worldly *pleasure* and hereafter love.’ (*ind_mixed2012_1M:25946*)
- (5-41) *semangat men-jauh-kan diri dari dunia materi dan kesenangan hidup.*
 spirit; zest AV-be.far-CAUS self from world material and pleasure life
 ‘spirit to *distance* our/(the)self *from* worldly materials and life *pleasure*.’
 (*ind_web2012_1M:825998*)
- (5-42) *dia juga mau masuk ke dalam kebahagiaan.*
 3SG also want enter to inside happiness
 ‘(s)he also wants to *enter happiness*.’ (*ind_mixed2012_1M:669544*)
- (5-43) *manusia (...) makin ter-jerumus ke dalam kesenangan singkat*
 human increasingly PASS-fall to inside pleasure temporary
 ‘humans (...) increasingly *fall over/tripping into* temporary *pleasure* (lit. to *fall flat into one’s face*)’ (*ind_mixed2012_1M:294560*)

An interesting example is the use of the downward motion verb *terjerumus* in (5-43). The uncontrolled falling movement conveyed by *terjerumus* suggests some negative harm for the Mover (e.g., harmed face). In the target frame, this construal indicates that experiencing *kesenangan* ‘pleasure’ can be a negative one. This construal could be motivated by the NEGATIVE STATES ARE LOW LOCATION (David, 2017, p. 579).

Another submapping incorporates a causal structure into the MOTION frame, such that the motion of the Mover is caused by the Agent role of some kind. This scene represents the CAUSED CHANGE OF STATE IS CAUSED MOTION TO A LOCATION submapping (5.92%). In the target frame, this suggests that there is certain cause for someone's HAPPINESS. The most common expression contains LU evoking the BRINGING frame (as in (5-44)).

- (5-44) *paham materialisme mem-bawa kehidupan manusia kepada kekayaan, kesenangan, dan kenikmatan fisik belaka*
 view materialism AV-bring life human towards wealth; riches
 pleasure and enjoyment physical merely
 'materialistic view brings humans' life towards wealth, pleasure, and mere physical pleasure/enjoyment (*ind_mixed2012_1M:976553*)

The remaining examples convey the idea that HAPPINESS is a kind of bounded region or landmark.

- (5-45) *Di balik keceriaan kaum perantau (...) ada bahaya laten*
 LOC backside cheerfulness group emigrant exist danger latent
 'At the reverse/back side of the cheerfulness of the emigrants, there exists latent danger'
 (*Koran Tempo via WebCorp:3*)

- (5-46) *Kenapa dia harus men-jelma di celah-celah keriangannya ini?*
 why 3SG must AV-incarnate LOC fissure~PL cheerfulness DEM
 'Why must he incarnate/manifest at the fissures (i.e., at the middle) of this cheerfulness?'
 (*ind_web2012_1M:522558*)

Table 5-4⁶⁰ below shows that 42.6% of the tokens for HAPPINESS IS A LOCATION is due to one LU type, namely *dalam* 'inside sth.' This proportion suggests that the metaphor is evoked by a conventional linguistic expression.

⁶⁰ The `top_n()` function of the *dplyr* package in R will include more rows from the specified 'n' number (e.g., ten) if there are ties among the group (i.e., the LUs) based on the variable used for ordering (e.g., their token frequency). Therefore, Table Table 5-4 lists twelve items when ten is requested.

Table 5-4 Top-10 most frequent lexical units evoking HAPPINESS IS A LOCATION.

	Lexical units	Gloss	N	Perc overall
1	<i>dalam</i>	inside sth.	72	42.60
2	<i>tinggalkan</i>	to let sth. stay behind; to leave	11	6.51
3	<i>di balik</i>	at the reverse/back side of sth.	10	5.92
4	<i>jauh dari</i>	to be far away from	10	5.92
5	<i>berada (di) dalam</i>	to exist inside	7	4.14
6	<i>hidup dalam</i>	to live inside sth.	6	3.55
7	<i>bawa X kepada</i>	to bring X towards	5	2.96
8	<i>jauhkan X dari</i>	to cause X be far away from	5	2.96
9	<i>pada</i>	at	5	2.96
10	<i>di</i>	at	3	1.78
11	<i>jauhi</i>	to move away from	3	1.78
12	<i>masuk ke dalam</i>	to move into; to enter	3	1.78

In sum, the HAPPINESS IS A LOCATION metaphor principally foregrounds the nature of how one experiences HAPPINESS. This is reflected through the highest proportion of the BEING HAPPY IS BEING AT A LOCATION submapping (60.95%). The metaphor also highlights the change of state *away from* or *into* HAPPINESS; the former has higher proportion than the latter (17.75% vs. 8.88%).

In §4.3.5, I have argued for the possibility of a single source frame to motivate, or host, more than one conceptual metaphor for a target frame, exemplified with the RESTRAINTS frame (cf. also 5.2.1). The possibility of multiple metaphors given a single frame is motivated by the alternating role-mapping of the HAPPINESS nouns onto the semantic role of the frame (e.g., alternation from role-mapping onto the Restraining_entity to the Restrained_entity). Such a variation of semantic role-mapping is also motivated by the different syntactic slot associated with the HAPPINESS nouns in the metaphorical expressions.

The BEING AT A LOCATION frame is one of the frames in which such role-mapping variation occurs for the conceptualisation of HAPPINESS. This frame, which is used in HAPPINESS IS A LOCATION metaphor, can also support an alternating metaphor. It occurs when the syntactic-semantic role-mapping of the HAPPINESS nouns in the frame alternates from the Current_location role to the Trajector/Located_thing role. This role-mapping variation grounds the metaphor HAPPINESS IS A LOCATED OBJECT.

5.4.4 HAPPINESS IS A LOCATED OBJECT

HAPPINESS IS A LOCATED OBJECT is based on the BEING AT A LOCATION frame. The metaphor is evoked via role-mapping of HAPPINESS onto the Located_thing role of the frame. This resembles the EMOTION IS AN OBJECT IN SOME LOCATION mapping proposed by Stefanowitsch (2006b, p. 75). The mapping is grounded in the so-called *ontological metaphor*. Ontological metaphor provides ontological status to an abstract experience, such as emotions, in terms of bounded entity, such as physical objects (Kövecses, 2010, pp. 38–39; Lakoff & Johnson, 1980). Ontological metaphor initiates further conceptualisations of an abstract concept via more specific kinds of objects, such as possessable object (§5.4.1), liquid (§5.4.6), plants, food (§5.4.10), etc.

The main theme of HAPPINESS IS A LOCATED OBJECT is the (non-)existence of HAPPINESS. It is based on the EXISTENCE IS BEING LOCATED HERE metaphor (Grady, 1997, p. 284; Lakoff & Johnson, 1999, p. 205). This metaphor correlates with our experience of judging the existence of an object according to the presence of the object around where we are. This knowledge of physical existence as being located is carried over to construe the existence of HAPPINESS.

There are three possible submappings from HAPPINESS IS A LOCATED OBJECT. The first one is the EXISTENCE OF HAPPINESS IS PRESENCE OF AN OBJECT AT A LOCATION, accounting for 77.14% of the total tokens of the metaphor.

(5-47) *kehidupan akan lebih baik ketika ada kegembiraan di sana.*
 life FUT more good when exist joy LOC there
 ‘life will be better when joy exists there.’ (ind_news2012_300K:84136)

(5-48) *Kebahagiaan seseorang ter-letak pada keyakinan-nya*
 happiness someone PASS-location LOC faith-3SG.POSS
 ‘Someone’s happiness is located at h(is/er) faith’ (ind_mixed2012_1M:764881)

(5-49) *di mana-kah letak kebahagiaan Anda?*
 LOC where-Q location happiness 2SG.FORMAL
 ‘Where is the location of your happiness?’ (ind_web2012_1M:917580)

The first submapping entails the second one, namely NON-EXISTENCE OF HAPPINESS IS ABSENCE OF AN OBJECT AT A LOCATION, representing 19.05% of the total tokens ((5-50) and (5-51)).

(5-50) *rasa bahagia yang dulu-nya ada*
 feeling happy REL beginning-NMLZ exist
sekarang telah punah ter-makan waktu.
 now already extinct PASS-eat time
 ‘happy feeling, which exists at the beginning, has now been extinct being eaten by time.’
 (ind_mixed2012_1M:944802)

(5-51) *Namun, keceriaan Aska mendadak hilang*
 however HAPPINESS NAME suddenly gone; vanished
 ‘However, Aska’s cheerfulness is suddenly gone/vanished’ (Media Indonesia via WebCorp:33)

The second submapping has its causative variant, namely CAUSING HAPPINESS TO CEASE IS CAUSING AN OBJECT TO BE ABSENT (3.81%). This third submapping introduces the Agentive role to the scene via transitivity the LU, such as *hilang* ‘be gone’, using the causative suffix *-kan*, into *hilang-kan* ‘cause sth. to be gone’ (compare (5-51) above and (5-52)).

- (5-52) *Ambisi orang tua agar anak-anak mereka meraih prestasi tertentu (...)*
 ambition parents so.that child~PL 3PL.POSS catch-hold.of achievement certain
pada saat bersamaan meng-hilang-kan kegembiraan masa kecil mereka.
 at moment simultaneously AV-gone-CAUS joy period small 3PL.POSS
 ‘Parents’ ambition to have their children grasped (i.e. achieve) certain achievements (...)
 simultaneously *eliminating* the childhood *joy* of their children.’
 (ind_web2012_1M:399318)

The third submapping exemplified in (5-52) suggests that there is a direct agentive cause, external to the (candidate) Experiencer, for the absence of the object. In contrast, the mere absence of an object at a location (as in (5-50) and (5-51) above) suppresses the idea of direct agentive cause; that is, agentive role is not a core element of the event structure evoked by *punah* ‘be extinct’ or *hilang* ‘be gone’ (though the cause for such events could be expressed via causal subordinate clause, such as *termakan waktu* ‘being eaten by time’ as in (5-50)).

Overall, many of the lexical units (LUs) in the HAPPINESS IS A LOCATED OBJECT metaphor evoke the presence of an object, followed by the absence of the object, and then the caused vanishing of the object. Table 5-5 shows the ten most frequent LUs for the metaphor.

Table 5-5 Top-10 most frequent lexical units evoking HAPPINESS IS A LOCATED OBJECT.

	Lexical units	Gloss	N	Perc overall
1	<i>ada (di/pada X)</i>	to exist (at X)	100	47.62
2	<i>di X</i>	(to be) at X	33	15.71
3	<i>hilang</i>	to disappear	22	10.48
4	<i>pada X</i>	(to be) at X	8	3.81
5	<i>hilangkan</i>	to eliminate	6	2.86
6	<i>lenyap</i>	to disappear	5	2.38
7	<i>sirna</i>	to vanish	5	2.38
8	<i>hilangnya</i>	disappearance	4	1.90
9	<i>letak</i>	location (of sth.)	3	1.43
10	<i>terletak</i>	to be located at	3	1.43

Despite its high token frequency, the LOCATED OBJECT metaphor could be considered less heterogenous in its linguistic expressions since nearly half of its total tokens (47.62%) is

evoked by *ada (di/pada X)* (Ronga, 2016, p. 53). A more specific construal of HAPPINESS IS A LOCATED OBJECT is captured when the Located_object (i) is located in a bounded region, such as a container (§5.4.5), and (ii) is semantically type-constrained as liquid located in a bounded region (§5.4.6). These conceptualisations provide richer images for understanding other aspects of HAPPINESS in addition to its (non-)existence, namely intensity, regulation of (intense) emotion, and the effects in relation to the former two aspects. These conceptualisations are presented in the following three sections.

5.4.5 HAPPINESS IS A CONTAINED ENTITY

The submappings in the CONTAINED ENTITY metaphor involve five source frames: (i) CONTAINING (80.73%), (ii) BEING IN A BOUNDED REGION REGION (16.2%), (iii) EXPLOSION (2.23%), (iv) FRAGMENTATION SCENARIO (0.56%), and (v) PRESSURE IN A CONTAINER (0.28%). The EXPLOSION and FRAGMENTATION SCENARIO frames are taken from the *FrameNet* (FN) repository, while the rest are available in the *MetaNet* (MN) repository.

In the BEING IN A BOUNDED REGION frame, the HAPPINESS nouns fill the Located_thing role that is in a Bounded_region location. This role-mapping evokes a containment inference of HAPPINESS in the respective frame; it then alternates with the conceptualisation of HAPPINESS as the Bounded_region location, with the Located_thing role is understood as the contained Experiencer (cf. §5.4.3). The five specific frames above have frame roles and inferences that are mapped onto the aspects of HAPPINESS. The aspects include such notions as existence, extent/intensity, control, and consequence of the inability to control the amount of HAPPINESS-content in the container.

The most frequent submapping (i.e., 75.42% of the total 358 tokens of the metaphor) is evoked by LU that highlights the Fullness_degree role of the CONTAINING frame. The role

refers to the fullness of the Content inside the Container (5-53); in the target frame, fullness of the contained entity is mapped onto the high extent or scale of HAPPINESS.

- (5-53) *Hanya sebuah kecupan kecil (...) tapi mampu mem-buat dada Yuri*
 Only ART kiss small but can AV-make chest NAME
di-penuh-i kebahagiaan.
 PASS-full-APPL happiness
 ‘(It is) only a small kiss (...) but it can make Yuri’s chest to be *filled up* with *happiness*.’
 (ind_web2012_1M:11014)

The second predominant submapping is evoked by LUs referring to the containment scene (21.51%). This is mapped onto the experience of HAPPINESS itself ((5-54) and (5-55)).

- (5-54) *Hidup mereka selalu di-isi dengan keceriaan dan canda tawa.*
 life 3PL.POSS always PASS-fill with cheerfulness and laughter
 ‘Their life is always *filled* with *cheerfulness* and *laughter*.’ (IWaC via Sketch
 Engine:ID47172)

- (5-55) *memang ada kegembiraan di hati prajurit itu.*
 indeed exist HAPPINESS LOC liver soldier DEM
 ‘indeed, there is *joy* in the *liver* of that soldier.’ (ind_web2011_300K:6429)

The Fullness of the Content may produce (i) pressure on the Container (5-56) (0.28%) that, when it is uncontrollable, may result in (ii) explosion/breaking out of the Container (2.79%).

The explosion-related submapping is made up of the EXPLOSION (5-57) and FRAGMENTATION SCENARIO (5-58) frames.

- (5-56) *rasa haru dan riang pasti men-denyt-i dada setiap putra Indonesia*
 feeling emotion and joy surely AV-throb-REP chest every son Indonesia
 ‘Surely, emotional feeling and *joy* (repetitively) *throb* the chest of every Indonesian people’ (ind_mixed2012_1M:89846)

- (5-57) *Demikian besar ledakan kegembiraan di hati-nya sehingga*
 so big explosion joy LOC liver-3SG.POSS so that
perempuan itu tidak dapat men-(k)uasa-i diri.
 woman DEM NEG can AV-power-APPL self
 ‘(the) *explosion* of *joy* in her *liver* is so big that that woman cannot master/control herself.’
 (ind_web2011_300K:148444)

- (5-58) *Berbagai kegembiraan pun jebol*
 various joy also break.out
 ‘Various *joy* also *broke out*’ (ind_newsrawl2011_1M:966992)

Table 5-6 Top-10 most frequent lexical units evoking HAPPINESS IS A CONTAINED ENTITY.

	Lexical units	Gloss	N	Perc overall
1	<i>penuh</i>	to be full	256	71.51
2	<i>(di) dalam X</i>	(to be) in X	23	6.42
3	<i>ada (di) dalam X</i>	to exist inside X	23	6.42
4	<i>penuhi</i>	to fill-up	13	3.63
5	<i>isi.v</i>	to fill	10	2.79
6	<i>berisi(kan)</i>	to contain	3	0.84
7	<i>di hati</i>	in the liver	3	0.84
8	<i>kandung.v</i>	to contain	3	0.84
9	<i>letupan</i>	explosion	3	0.84
10	<i>meledak</i>	to explode	3	0.84

Table 5-6 shows that 71.51% of the metaphor's tokens is expressed by one LU, namely *penuh* 'to be full', indicating a highly conventionalised property of the metaphor in its linguistic expression (cf. Ronga, 2016, p. 53). The relative entrenchment of the metaphor arises from a conventionalised expression, such as *penuh*.

5.4.6 HAPPINESS IS A LIQUID IN A CONTAINER

HAPPINESS IS A LIQUID IN A CONTAINER is more specific than the HAPPINESS IS A CONTAINED ENTITY, though they both belong to the same CONTAINMENT system. The former is based on a more specific frame, namely FLUID CONTAINMENT. In the FLUID CONTAINMENT, the Content role is type-constrained as Liquid by incorporating the semantics of the Liquid role of the LIQUID frame. Yet, FLUID CONTAINMENT also makes use of the schematic image evoked by the CONTAINMENT frame, namely a container or bounded entity contains another kind of entity, in this case liquid. The CONTAINED ENTITY and the LIQUID IN A CONTAINER metaphors are counted separately due to the generic construal of the former regarding the type of the Content contained in the Container. That is, any entity can "fill" and "fill-up" a container, not necessarily a liquid. This decision is arrived at through discussions from

interrater agreement trial (§3.5.3). Similar classification is apparent from Stefanowitsch's (2006b) and Ogarkova's (2007) studies where LIQUID/FLUID (IN A CONTAINER) is split from SUBSTANCE IN A CONTAINER and PURE/MIXED SUBSTANCE, which are both more generic.

The submappings within the LIQUID IN A CONTAINER metaphor make use of structures from five source frames reflecting a range of experiential knowledge about the behaviour of a contained liquid. These frames are (i) RELEASE LIQUID (64.1%), (ii) HEATING FLUID (20.51%), (iii) FLUID CONTAINMENT (9.62%), (iv) FLUID MOTION (2.56%), and (v) STOP FLOW OF SUBSTANCE (3.21%). They are all available in the *MetaNet* (MN) frame repository.

As in the CONTAINED ENTITY metaphor, the existence of HAPPINESS is conceptualised as (i) liquid containment (5-59) (2.56%)⁶¹ and (ii) fluidic motion of the liquid (2.56%). As to the FLUIDIC MOTION submapping, there are two scenarios attested in the sample. First, the liquid may flow inwardly from some source (5-60) and throughout the body (5-61).

(5-59) *Kakang Argapati men-coba men-cegah perjudian sabung ayam*
 brother NAME AV-try AV-impede gambling animal.fight chicken
dan kesenangan lain yang telah men-darah daging
 and pleasure other REL already AV-blood flesh
 'Brother Argapati tries to prevent cock fighting and other *pleasure* that has been
internalised (lit. become *blood-and-flesh*)' (*ind_mixed2012_IM:271028*)

(5-60) *Rasa bahagia itu ter-serap ke seluruh tubuh ini.*
 Feeling happy DEM PASS-absorb to whole body DEM
 'That feeling of *happiness* is *absorbed/soaked up* to this whole body.'
 (*ind_mixed2012_IM:598904*)

(5-61) *perasaan tenang dan bahagia te(r)-rasa meng-alir di tubuh-nya*
 feeling calm and happy PASS-feel AV-flow LOC body-3SG.POSS
 'feeling of calm and *happiness* is felt *flow* in h(is/er) body' (*ind_mixed2012_IM:48891*)

⁶¹ The percentage of liquid containment submapping does not correspond to the overall percentage of the FLUID CONTAINMENT frame because the other portion of the metaphorical expressions evoking FLUID CONTAINMENT do not profile the liquid containment *per se*, but also include highlighting the Fluid_level role of the frame. I consider the expressions profiling the Fluid_level role of the frame to evoke a separate submapping, viz. indicating the Fullness of the contained fluid.

The second scenario is ambiguous as to whether the fluid does flow *inside* the body. For instance, the co-occurrence of the verb *mengalir* ‘to flow’ with prepositional phrase complemented with body-part lexical item in (5-61) above clearly shows that happiness-as-fluid flows inside the body. However, this implicature is not explicit for the use of *mengalir* in (5-62) and of a related expression namely *arus* ‘flow/stream’ in (5-63).

(5-62) *Bulir-bulir keceriaan yang mengalir, senyuman yang me-rekah*
 ear (of corn)~PL cheerfulness REL AV-flow smile REL AV-crack
 ‘Buds/spikes/cymes of *cheerfulness* that *flow*, smile that cracks’ (IWaC via Sketch Engine:ID54142)

(5-63) *mem-bangun barikade-barikade jalanan meng-ikut-i arus kerianggan aksi*
 AV-build barricade~PL street AV-follow-APPL flow HAPPINESS action
 ‘to build barricades on the street, following the *flow/stream* of *cheerfulness* of the action’ (IWaC via Sketch Engine:ID13875)

In the case of (5-62) and (5-63), I group them as instantiations of the more general HAPPINESS IS A LIQUID metaphor (cf. Stefanowitsch, 2006b, p. 84, Table 3b). It includes such expressions as *mata air NP* ‘spring of NP’ and *sepercik NP* ‘a splash/sprinkle of NP’.

The experiential basis for construing the continuous experience of HAPPINESS as fluid motion inside the body may come from our embodiment of how the blood flow through the body supplying energy. This basis may also motivate the conceptualisation of HAPPINESS or EMOTION as LIQUID inside the body (cf. Gevaert, 2007, for an alternative explanation from the Humoral Theory). Another submapping based on the FLUID CONTAINMENT frame is shown in (5-64) by the verbal LU *menampung* ‘to collect.in (of falling liquid)’.

(5-64) *ekstrakurikuler tak hanya men-(t)ampung kesenangan*
 extracurricular NEG only AV-collect.in (of falling liquid) pleasure
dan meny-(s)alur-kan hobi
 and AV-funnel-CAUS hobby
 ‘extracurricular does not only accommodate (lit. collect in) pleasure and funnel hobby’ (ind_web2012_IM:878843)

A common semantic extension of the verb *menampung* is to ‘accommodate’ something abstract, typically hobby, interest, or idea. These abstract concepts are, in turn, contained by the one that has those hobby, interest, or the idea. The Accommodated/collected Liquid might be initially released by the original person who contains this Liquid (or HAPPINESS). This is further shown by (5-65) where the now Accommodated Liquid needs to be released.

(5-65) *agar kebahagiaan anak bisa ter-tampung dan di-cari-kan jalan keluar*
 so.that happiness child can PASS-collect.in and PASS-search-APPL street go.out
 ‘so that child’s happiness can be accommodated and be helped for finding a way out’
 (ind_newscrawl2011_1M: 369685)

Examples such as (5-64) and (5-65) indicate that words such as *kesenangan* ‘pleasure’ and *kebahagiaan* ‘happiness’ may convey something along the line ‘a thing/activity one is happy with/about doing’, a ‘pastime’ or ‘leisure interest’. The experience referred to here is in turn conceptualised as a contained liquid, the expression of which is conceptualised as releasing the liquid; other person then needs to contain/accommodate this expressed liquid.

Next, there are two submappings that focus on the intense experience of HAPPINESS. The first submapping is based on the HEATED FLUID frame, namely INTENSIFIED HAPPINESS IS HEATED LIQUID (20.51%) (5-66).

(5-66) *kegembiraan yang me-luap atas kemenangan tak ter-duga ini.*
 joy REL AV-boil.over on victory NEG PASS-expect DEM
 ‘boiled-over joy over this unexpected victory.’ (ind_news2008_300K:168635)

The second submapping is postulated via profiling the fullness of the Fluid_level role in the FLUID CONTAINMENT frame, namely INTENSE HAPPINESS IS BRIMMING LIQUID IN A CONTAINER (7.05%) ((5-67) and (5-68)) (cf. Stefanowitsch, 2006b, p. 99).

(5-67) *di mana kebahagiaan materi ber-limpah di sana kesedihan juga ber-limpah*
 where happiness material MID-brimming there sadness also MID-brimming
 ‘where there is brimming material happiness, there is also brimming sadness.’
 (ind_web2012_1M:647996)

- (5-68) *Semoga Allah me-limpah-i kita ketenangan dan kebahagiaan*
 hopefully Allah AV-brimming-APPL IPL.INCL peace and happiness
 ‘Hopefully, Allah will *cause us to brim* with peace and *happiness*’
 (ind_mixed2012_1M:971397)

Theoretically, the combination of *heat* with liquid (or whatever substances) is not expected for conceptualising HAPPINESS (as in (5-66)): “Heat/fire does *not seem to occur* as a source domain with *happiness*, sadness, pride, and surprise” (Kövecses, 2000, p. 38, my italics). While my data on HEATED FLUID for HAPPINESS runs counter to Kövecses’s (2000) theory, this should be expected in the light of usage-based, cross-linguistic data (cf. the next paragraph). In fact, in Kövecses’s (2015) latest study on HAPPINESS, the generic FIRE/HEAT metaphor is listed as one of the metaphors applicable for HAPPINESS. The only example given is “**Fires** of *joy* were **kindled** by the birth of her son.” (Kövecses, 2015, p. 160), which evokes the FIRE metaphor rather than HEATED LIQUID IN A CONTAINER.

The reason why LUs from the HEATED FLUID frame are used to talk about HAPPINESS in the sample could be because there is association between heat and intensity of the experienced HAPPINESS. It could also be that the HEATED FLUID frame’s LUs are amongst the preferred choices for conceptualising intensity of *any emotion* in Indonesian. This assumption is based on Handl’s (2011, pp. 272–273) idea concerning the “preferred metaphorical construals” of a metaphorical expression. However, further corpus-based study is needed to determine the preferred metaphorical construal of all potential HEATED FLUID-related LUs in Indonesian. Moreover, and more importantly, the present study analyses the domain of HAPPINESS via *a set* of noun words denoting HAPPINESS. It could be that a specific HAPPINESS word preferably collocates with LUs evoking the HEATED FLUID frame as compared to its synonyms. The answer to this assumption, and the implications on emotion metaphor study based on specific emotion lexical items, are discussed in Chapter 7 when each HAPPINESS synonyms are contrasted in terms of their distinctive metaphors.

The next submappings convey inferences related to the regulation of the intense HAPPINESS and its consequence. There are two relevant frames here: (i) STOP FLOW OF SUBSTANCE (5-69) and (ii) RELEASE LIQUID (5-70).

(5-69) *ketiga teman-teman-nya pun tak dapat mem-bendung kegembiraan mereka*
 three friend~PL-3SG.POSS also NEG can AV-dam joy 3PL.POSS
 ‘h(is/er) three friends also cannot *dam* their joy.’ (*ind_web2012_1M:434000*)

(5-70) *Ia (...) tak bisa meny-(s)embunyi-kan rasa bahagia yang ter-pancar*
 3SG NEG can AV-hide-CAUS feeling happy REL PASS-spurt.out
 ‘(S)he cannot hide the *feeling* of *happiness* that is *spurred out*’
 (*ind_newscrawl2012_1M:999615*)

The STOP FLOW OF SUBSTANCE frame focuses on the regulation for intense HAPPINESS as if impeding a flowing liquid. However, all expressions for this frame are negated, indicating inability to control the pressing flow of HAPPINESS. The RELEASE LIQUID frame suggests the consequence of the inability to control the flowing liquid, highlighting the expression, or visibility, of the intense HAPPINESS. RELEASE LIQUID is the most frequently evoked frame (i.e. 100 tokens) with the highest number of LU types (i.e., 18 types) compared to the other frames for the LIQUID IN A CONTAINER metaphor. This suggests that the metaphor highlights the uncontrolled intense HAPPINESS that is eventually expressed, hence EXPRESSION OF HAPPINESS IS RELEASED LIQUID submapping.

Indonesian has a morphological resource that can further emphasise the passivity of the Experiencer and the uncontrollability of the experienced HAPPINESS evoked by the RELEASED LIQUID submapping. This can be seen in the verbal LUs evoking EXPRESSION OF HAPPINESS IS RELEASED LIQUID submapping. The verbs occur most frequently in static-passive form prefixed with *ter-* (cf. the most frequent LU in Table 5-7 below). One of the functions denoted by *ter-*prefixed passive verbs is to indicate “accidental” or “uncontrolled action” (Sneddon et al., 2010, pp. 117–118), which invokes involuntariness in expressing

the intense emotion. This brief discussion can only suggest that there is a room for further study concerning the semantic contribution of certain morphological forms used in metaphorical expressions to the construal of the aspects of a target frame.

Table 5-7 Top-10 most frequent lexical units evoking HAPPINESS IS A LIQUID IN A CONTAINER.

	Lexical units	Gloss	N	Perc overall
1	<i>terpancar</i>	to be spurted out	43	27.56
2	<i>luapan</i>	overflow	25	16.03
3	<i>luapkan</i>	to boil sth. over	21	13.46
4	<i>pancarkan</i>	to spurt sth.	9	5.77
5	<i>meluap(-luap)</i>	to boil over	8	5.13
6	<i>limpahkan</i>	to brim liquid onto sth.	4	2.56
7	<i>salurkan</i>	to funnel sth.	4	2.56
8	<i>bendung</i>	to dam up sth.	3	1.92
9	<i>pancaran</i>	a spurting-out	3	1.92
10	<i>berlimpah</i>	to be brimming/abundant	2	1.28
11	<i>curahan</i>	outpouring	2	1.28
12	<i>limpahi</i>	to brim sth. with liquid	2	1.28
13	<i>meruap</i>	to boil to froth/bubble	2	1.28
14	<i>sumbat</i>	to clog sth.	2	1.28
15	<i>tampung</i>	to collect-in (of liquid)	2	1.28
16	<i>tertuang</i>	to be poured out	2	1.28
17	<i>tuangkan</i>	to pour out sth.	2	1.28

Considering the LUs in Table 5-7, it can be inferred that the primary focus of the LIQUID IN A CONTAINER is on the intensity of HAPPINESS. It is clear especially from LUs evoking the (i) RELEASE LIQUID frame, such as *terpancar* ‘to be spurted out’, *tertuang* ‘to be poured out’, *pancarkan* ‘to cause to spurt out’, and *luapan* ‘overflow’; and the (ii) HEATED FLUID frame, such as *luapkan* ‘to boil sth. over’ and *meluap* ‘to boil over’. Overall, the discussion in this section and in §5.4.5 on the CONTAINED ENTITY metaphor shows that HAPPINESS can be uncontrollably intense, a notion that is also highlighted by the QUANTIFIED OBJECT metaphor to which we turn next.

5.4.7 INTENSITY OF HAPPINESS IS QUANTITY OF OBJECT

The QUANTIFIED OBJECT metaphor schematically captures the extent of HAPPINESS and is based on structures of the QUANTITY frame (cf. Stefanowitsch, 2006b, pp. 75, 93). The difference between the previous two CONTAINMENT metaphors with the QUANTIFIED OBJECT metaphor is that the former contributes richer submappings for conceptualising other aspects of HAPPINESS than its extent, namely the attempt at regulating or internalising HAPPINESS, the kinds of intensity or arousal (e.g., fullness and heated liquid), and the kinds of expressions (e.g., release liquid, explosion, and fragmentation scenario). In contrast, the QUANTIFIED OBJECT metaphor provides at least two submappings, namely MORE QUANTITY (5-71) or LESS QUANTITY (5-72), that respectively map onto the intense and less-intense ends of the intensity scale. Overall, 78.83% of the total 137 tokens of the expressions refers to the ‘more quantity’ end of the entire QUANTITY frame.

(5-71) *Kelahiran-nya tentu saja **men-(t)ambah** kebahagiaan pasangan suami istri*
 birth-3SG.POSS surely just AV-add happiness couple husband wife
 ‘h(is/er) birth of course *adds* the *happiness* of this husband-and-wife couple’
 (*ind_newscrawl2012_1M:89733*)

(5-72) *ada **sedikit** rasa senang di hati saya*
 exist a.little.bit feeling happy LOC liver 1SG.POSS
 ‘there is *a little bit feeling of happiness* in my liver’ (*ind_web2011_300K:59522*)

More quantity of the HAPPINESS-object could highlight at least two aspects in the target domain: (i) high intensity, and/or (ii) enhanced quality, thus presumably correlates with the positive valence of the experienced HAPPINESS. The positive evaluation may also be captured through the FOOD metaphor discussed in §5.4.10.

Table 5-8 Top-10 most frequent lexical units evoking QUANTITY OF OBJECT.

	Lexical units	Gloss	N	Perc overall
1	<i>tambah(kan)</i>	to add	35	25.55
2	<i>banyak</i>	many/much	27	19.71
3	<i>berlebih(an)</i>	excessive	14	10.22
4	<i>berkurang</i>	to be lessened	7	5.11
5	<i>kurangi</i>	to lessen/reduce sth.	7	5.11
6	<i>sedikit</i>	a little bit	7	5.11
7	<i>bertambah</i>	to add up; to increase	6	4.38
8	<i>seribu</i>	a thousand	5	3.65
9	<i>lebihi</i>	exceeds	4	2.92
10	<i>sejuta</i>	a million of sth.	4	2.92

Among the predominant LUs of the metaphor include *tambah(kan)* ‘to add sth.’, *banyak* ‘many/much’, and *berlebih(an)* ‘excessive’.

5.4.8 HAPPINESS IS AN (UN)VEILED OBJECT

HAPPINESS IS AN (UN)VEILED OBJECT utilises structures from the PERCEPTION frame family, especially the SEEING, CAUSE TO SEE, and VISUAL OBSTRUCTION frames. These frames are available in the MN repository. The utilised aspect of the frames is on the (in)visibility of the object. This aspect is then mapped onto the (in)existence of the emotional state. The basis of this conceptualisation is on our experience in evaluating the (in)existence of something when we are (not) able to see it. Hence, the EXISTENCE IS VISIBILITY metaphor (Grady, 1997, p. 284). In the case of HAPPINESS, the metaphor highlights the existence and regulation of HAPPINESS (i.e., whether it is expressed or not). These two aspects are captured via three submappings. The most frequent one is the EXISTENCE OF HAPPINESS IS VISIBILITY OF AN OBJECT (58.77%), based on the SEEING frame ((5-73) and (5-74)).

- (5-73) *Ekspresi ceria **ter-lihat** di wajah-wajah para prajurit*
 expression cheerful PASS-see LOC face~PL DEM.PL soldier
 ‘Expression of *cheerfulness* is *visible* on the faces of the soldiers’
 (ind_newsrawl2011_1M:910288)

- (5-74) *Meski badan penat dan penuh keringat, rona senang ter-pampang*
 even though body tired and full sweat colour happy PASS-display
di wajah kami
 LOC face IPL.EXCL.POSS
 ‘even though our bodies are tired and full of sweat, colour of *happiness* is *displayed* on our faces.’ (*ind_web2012_IM:881492*)

These two examples involve *wajah* ‘the face’ as the location where HAPPINESS is physically visible. These expressions, and the (UN)VEILED OBJECT metaphor in general, may involve metonymy⁶² (cf. Theodoropoulou, 2012, p. 168), namely, the EFFECT OF EMOTION FOR EMOTIONS (Kövecses, 2015, p. 158), especially the expressive responses associated with a particular emotion (§2.5.1). HAPPINESS may cause change in one’s facial expression, allowing physical visibility of the effects of HAPPINESS on the face (cf. §5.5).

The second submapping is based on the CAUSE TO SEE frame, namely EXPRESSING HAPPINESS IS SHOWING AN OBJECT (31.28%) (5-75). The key inference here is that HAPPINESS is deliberately caused to be expressed or visible.

- (5-75) *Tidak-kah cukup bahwa mereka telah (...) mem-(p)amer-kan kegembiraan*
 NEG-Q enough that 3PL already AV-show.off-CAUS joy
mereka pada dunia.
 3PL.POSS at world
 ‘Isn’t it enough that they have (...) *showed off* their *joy* towards the world.’
 (*ind_newscrawl2012_IM:877907*)

The third submapping is REGULATING HAPPINESS IS HIDING AN OBJECT (9.95%). This mapping is expressed by lexical units (LUs) from the VISUAL OBSTRUCTION frame. In seventeen tokens of the total 21 citations of this submapping, the LUs co-occur with abilitative modal auxiliaries (i.e. *dapat/bisa* ‘can’, *mampu/sanggup* ‘be able to’) (cf. (5-76)). Yet, sixteen of these seventeen tokens are negated. Overall, including tokens without the

⁶² I wish to thank one of the examiners in pointing this out to me.

abilitative modality, 85.71% of the citations for HIDING AN OBJECT submapping are negated, highlighting the inability to conceal the emotion.

(5-76) *para atlet Indonesia (...) tidak bisa meny-(s)embunyi-kan kegembiraan.*
 DEM.PL athlete Indonesia NEG can AV-hide-CAUS joy
 ‘the Indonesian athletes (...) cannot *hide* (their) *joy*.’ (*ind_news2012_300K:256024*)

Table 5-9 below shows that The HAPPINESS IS AN (UN)VEILED OBJECT metaphor is predominantly evoked by *lihat* ‘to see/look at’, *terlihat*, ‘to be visible’, *(t/n)ampak* ‘to be visible’, and *tunjukkan* ‘to show’.

Table 5-9 Top-10 most frequent lexical units evoking HAPPINESS IS AN (UN)VEILED OBJECT.

	Lexical units	Gloss	N	Perc overall
1	<i>lihat</i>	to see/look at	40	18.96
2	<i>terlihat</i>	to be visible	38	18.01
3	<i>(n/t)ampak</i>	to be visible	34	16.11
4	<i>tunjukkan</i>	to show	27	12.80
5	<i>sembunyikan</i>	to hide	17	8.06
6	<i>perlihatkan</i>	to show	15	7.11
7	<i>tampakkan</i>	to display	8	3.79
8	<i>tampilkan</i>	to show	7	3.32
9	<i>saksikan</i>	to watch; to witness	6	2.84
10	<i>siratkan</i>	to display	3	1.42

In general, the predominant focus of HAPPINESS IS AN (UN)VEILED OBJECT metaphor is on two aspects. First, HAPPINESS is an expressive emotional state (based on the SEEING and CAUSE TO SEE frames). Second, HAPPINESS can be kept secret, based on the metaphorical expressions evoking the VISUAL OBSTRUCTION frame, though it is negated in most cases, thus supporting the more expressive and overt nature for HAPPINESS. In addition, CAUSE OF EMOTIONS FOR EMOTIONS metonymy may motivate the (UN)VEILED OBJECT metaphor.

5.4.9 HAPPINESS IS A SUBMERGED ENTITY

HAPPINESS IS A SUBMERGED ENTITY captures a scene where an Entity is surfacing or sticking out. The metaphor focuses on different aspect compared to the (UN)VEILED OBJECT metaphor. The latter implies that HAPPINESS already exists; the issue is whether the Experiencer is keen to express it (showing/unveiling) or not (hiding). The former implies the nature of how HAPPINESS metaphorically exists (i.e., emerges).

Table 5-10 below shows all the lexical units (LUs) grouped under the SUBMERGED ENTITY metaphor. The high token frequency of the metaphor is accounted for mostly by the first three LUs in Table 5-10, taking up 81.81% of the metaphor's token frequency.

Table 5-10 All lexical units evoking the HAPPINESS IS A SUBMERGED ENTITY.

	Lexical units	Gloss	N	Perc overall
1	<i>muncul</i>	to emerge	30	30.30
2	<i>timbulkan</i>	to cause to surface (from within the water, ground, etc.)	30	30.30
3	<i>timbul</i>	to surface (from within the water, ground, etc.)	21	21.21
4	<i>munculkan</i>	to bring sth. out to the open	9	9.09
5	<i>timbulnya</i>	surfacing/emergence	2	2.02
6	<i>angkat</i>	to lift/bring up	1	1.01
7	<i>cuatkan</i>	to cause to protrude	1	1.01
8	<i>kemunculan</i>	emergence	1	1.01
9	<i>mencuat</i>	to protrude; to stick out	1	1.01
10	<i>menyeruak</i>	to make way through	1	1.01
11	<i>pancing.v</i>	to fish	1	1.01
12	<i>terbitkan</i>	to bring sth. to the surface	1	1.01

The three most frequent LUs in Table 5-10 instantiate what I call the OUT-AND-UPWARD MOTION frame.

(5-77) *Saat men-dengar kabar itu, timbul rasa senang*
 When AV-hear news that surface feeling happy
 'When hearing that news, surfaces the feeling of happiness' (*ind_web2012_1M:263931*)

- (5-78) *kita tetap mampu me-muncul-kan rasa bahagia*
 1PL.INCL still be.able.to AV-emerge-CAUS feeling happy
 ‘we are still able to *bring up feeling of happiness* (lit. cause feeling of happiness to emerge)’ (*ind_web2012_1M:173174*)

The emerging, out(/up)ward Mover role maps onto HAPPINESS as an effect of a particular cause (cf. Lakoff & Johnson, 1999, pp. 213–214). There is an interesting LU, namely *pancing* ‘to fish for sth.’ (5-79), that can be used to mean ‘to cause a situation to occur’.

- (5-79) *olahraga yang mem-(p)ancing canda dan keceriaan lain-nya.*
 sport REL AV-fishing.rod.and.hook joke and cheerfulness other-DEM
 ‘sports that *fish (out) joke/laughter and the other cheerfulness.*’
 (*ind_newscrawl2012_1M:918633*)

Memancing indicates a unique manner through which a state is brought to existence. A plausible grounding for its causal interpretation would be on the experience with fishing that requires certain action and bites to cause the fish to come. The closest English expression for *memancing* is *to fish for something* (such as a compliment).

In sum, all the metaphorical expressions of HAPPINESS IS A SUBMERGED ENTITY indicate the manner through which HAPPINESS may exist. It is conceptualised as a surfacing or outward motion of an Entity, be it (i) naturally emerging (56.57%) (as in (5-77)) or (ii) caused to emerge by some agent (43.43%) (as in (5-78)).

5.4.10 HAPPINESS IS FOOD

The HAPPINESS IS FOOD metaphor is based on frames related to gastronomical experience. These include the FOOD frame itself (0.93%) (as in (5-80)), INGESTION (2.78%) (5-83), FOOD PREPARATION⁶³ (9.26%) (5-81), and TASTE (87.04%) (5-82).

⁶³ The entry for FOOD PREPARATION frame is not represented in the MN frame repository, but is included as the source frame label for a metaphorical entailment of the IDEAS ARE FOODS metaphor, namely PREPARING IDEAS TO BE

- (5-80) *Bahagia yang men-jadi makanan jiwa-nya ter-pancar*
 happy REL AV-become food soul-3SG.POSS PASS-spurt.out
 ‘Happiness that becomes the *food* of h(is/er) soul is spurted out’
 (*ind_web2012_1M:106870*)
- (5-81) *setelah itu keriang-an demi keriang-an di-saji-kan dengan manis.*
 after DEM cheerfulness after cheerfulness PASS-serve-TR with sweet
 ‘after that, *cheerfulness* after *cheerfulness* are *served* beautifully (lit. with sweetness).’
 (*Suara Merdeka via WebCorp:10*)
- (5-82) *Mereka yang terlalu lama me-nikmat-i kesenangan akan meng-alam-i*
 3PL REL too long.time AV-tasty-TR pleasure FUT AV-nature-TR
masa-masa sulit.
 period~PL difficult
 ‘Those who *taste pleasure* too long will experience difficult periods.’
 (*ind_mixed2012_1M:744192*)
- (5-83) *Mereka tidak sampai hati me-rusak kegembiraan yang baru saja*
 3PL NEG arrive liver AV-damaged joy REL new just
mereka reguk sejak keduanya pulang.
 3PL OV.gulp.down since both go.home
 ‘They do not have the heart (lit. not until the liver) to damage the *joy* that they just *gulled*
down since both went back home.’ (*ind_web2011_300K:67233*)

The most frequent LU for the TASTE frame, namely *menikmati* ‘to taste; to enjoy’, suggests that the metaphor focuses on the pleasantness of HAPPINESS. This could be considered as a submapping along the lines of EXPERIENCING (PLEASANT) HAPPINESS IS GUSTATORY PERCEPTION/TASTE. Next, the INGESTION frame could indicate a fuller, internalised experience than a mere tasting, leading to a positive consequence, namely being nourished.

Other submappings are motivated from elements of the FOOD PREPARATION frame. Each of these submappings maps different inferences to HAPPINESS. Most of the LUs in this frame profile the serving stage of the food preparation (70%), as in (5-81) above that can map onto the cause of HAPPINESS. Additional inference evoked by LUs from the FOOD PREPARATION frame is the kind and the means of preparation done over the food before it is served. The

UNDERSTOOD IS FOOD PREPARATION (cf.

https://metaphor.icsi.berkeley.edu/pub/en/index.php/Metaphor:PREPARING_IDEAS_TO_BE_UNDERSTOOD_IS_FOOD_PREPARATION [Last access: 9 September 2018]). A related frame whose entry is available in the FN frame repository is COOKING_CREATION.

adverbial phrase *dengan manis* ‘with sweetness; beautifully’ in (5-81) shows how HAPPINESS may be prepared and served for the targeted Experiencer. Additional inference involved in FOOD PREPARATION frame is the recipe for the food (5-84).

- (5-84) *di antara resep bahagia adalah me-lihat orang yang di bawah kita.*
 amongsts recipe happy COP AV-see person REL LOC under IPL.INCL
 ‘amongst the *recipe of happiness* is to look at the people below us (in terms of socio-physical and economic circumstances).’ (*ind_mixed2012_1M:715755*)

A recipe for HAPPINESS can also map onto the means to achieve HAPPINESS. Lastly, spicing-up the prepared food invokes inference of enhancing, or intensifying, the HAPPINESS experience in certain manner (5-85).

- (5-85) *Gelak tawa dan keceriaan sesekali di-bumbu-i pertengkaran.*
 laughter and cheerfulness sometimes PASS-spices-APPL dispute
 ‘Laughter and *cheerfulness* are occasionally *spiced up* with dispute.’ (*IWaC via Sketch Engine:ID2414*)

Example (5-85) indicates that the manner through which HAPPINESS is spiced-up is by having a dispute, which is inherently negative. This contradiction signifies that duality, namely good (e.g., happiness and laughter) and bad (e.g., dispute), should be part and parcel of a balanced life (at least for a certain cultural-religious view, such as the Balinese Hindu in Indonesia).

The proportion of the LUs in Table 5-11 suggests that the entrenchment of the metaphor is promoted through an established linguistic expression with high token frequency, namely *nikmati* ‘to taste; to enjoy’. It takes up 74.07% of all tokens of the metaphor.

Table 5-11 All lexical units evoking HAPPINESS IS FOOD.

	Lexical units	Gloss	N	Perc overall
1	<i>nikmati</i>	to taste; to enjoy	80	74.07
2	<i>sajikan</i>	to serve (of food)	5	4.63
3	<i>kecap</i>	to taste	4	3.70
4	<i>cecap</i>	to lick and taste	2	1.85
5	<i>cicipi</i>	to taste	2	1.85
6	<i>kecapi</i>	to taste	2	1.85
7	<i>reguk</i>	to gulp down	2	1.85
8	<i>resep</i>	recipe	2	1.85
9	<i>bumbui</i>	to spice up	1	0.93
10	<i>kenyam</i>	to taste	1	0.93
11	<i>makanan</i>	food	1	0.93
12	<i>manis</i>	sweetness	1	0.93
13	<i>penikmat</i>	connoisseur	1	0.93
14	<i>rasai</i>	to taste	1	0.93
15	<i>suguhkan</i>	to serve (of food)	1	0.93
16	<i>telan</i>	to swallow	1	0.93
17	<i>tersaji</i>	to be served	1	0.93

In sum, HAPPINESS IS FOOD adds different inferences not highlighted in the previous metaphors, such as the pleasantness and enjoyment of HAPPINESS and its nourishing effect to the Experiencer.

5.5 The co-occurrence of body-part terms and the metaphors

This section presents the token frequency of body-part terms found in metaphors across the whole sample. The aim is to determine the bodily locus of HAPPINESS in Indonesian (Figure 5-1). The top-10 most frequent BODY-PARTS*METAPHORS co-occurrences are presented in Table 5-12. This co-occurrence data aims to show (i) which metaphors are associated with which body-parts, and (ii) whether the motivation for their co-occurrence can be qualitatively assessed according to the nature of the metaphors and the body-parts

themselves. Brief comparison is also made regarding the role of body-parts in the conceptualisation of emotions in other languages.

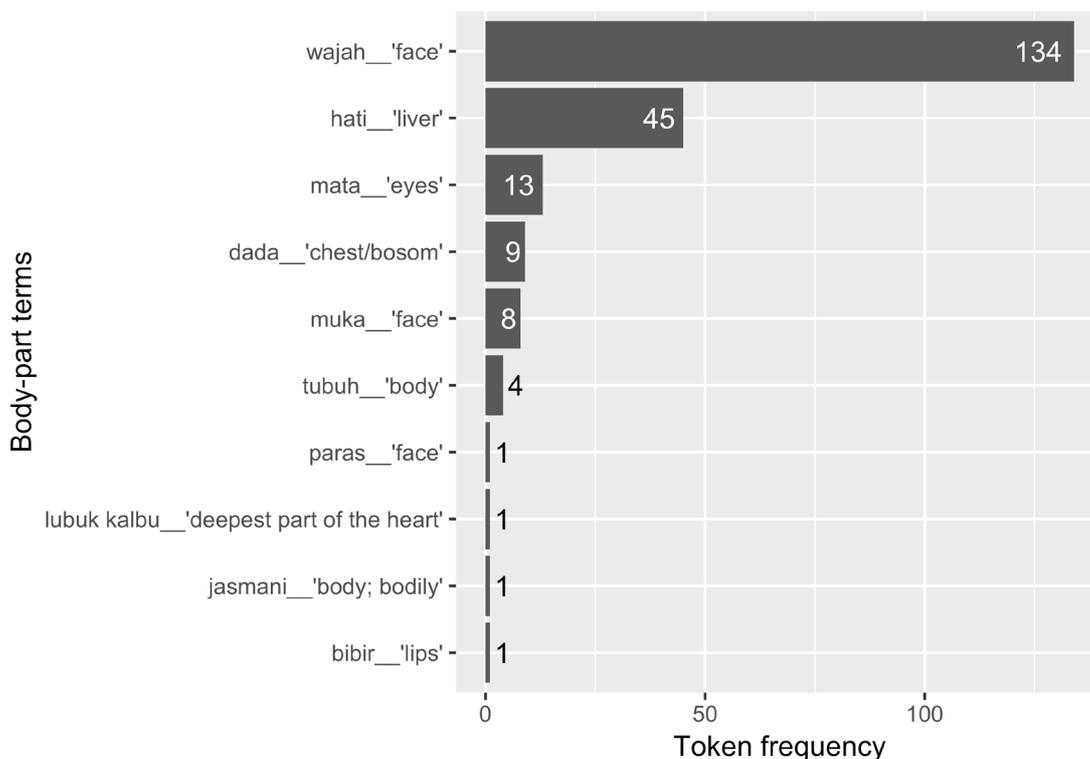


Figure 5-1 Token frequency of the body-part terms in the sample.

Figure 5-1 demonstrates that *face* is the most frequent body-part category explicitly mentioned in the metaphorical expressions sample, with *wajah* 'face' as the most frequent term compared to the other two face-related terms, namely *muka* 'face' and *paras* 'face'⁶⁴. The fact that face is most often explicitly mentioned can be motivated by its function as a locus to communicate not only one's state of HAPPINESS, but also other emotions.

Cross-linguistic evidence supporting the association of the face with HAPPINESS comes from Theodoropoulou's (2012) study on Greek. Theodoropoulou (2012, p. 172, examples (12.2b)

⁶⁴ *Muka* in the Big Dictionary of Indonesian (KBBI) is defined as 'the front part of the head, covering the area from the forehead to the chin, and from the left to the right ear' (<https://kbbi.kemdikbud.go.id/entri/muka> [Last access: 9 September 2018]). *Paras* also has an archaic meaning of a 'surface of a sandstone' (<https://kbbi.kemdikbud.go.id/entri/paras> [Last access: 9 September 2018]).

and (12.2c)) mentions that, in Greek, metaphorical expressions involving the face are exclusive to HAPPINESS and JOY, and are never found with negative emotions. The preponderance of metaphorical expressions associating the face with HAPPINESS is also seen in Chinese metaphors (Yu, 1995, p. 76) and in the 18th and 19th century English novels (Diller, 2008, p. 116) on the history of the word *happy*. The present study adds further evidence of this association from a genetically and areally unrelated language, Indonesian.

Other studies have demonstrated an association between the face and very different emotions for various languages. Ikegami (2008, p. 182), for instance, demonstrates that word for face in Japanese, namely *kao*, can co-occur in expressions for ANGER (e.g., [in English translation] “pour vermillion over all the face”) and for SHAME (e.g., “fire issues from the face”). Similar use of face for lexicalising SHAME is also present for Indonesian in a conventional expression *mencoreng wajah/muka seseorang* ‘lit. to smear one’s face, hence, to embarrass someone’.

In addition to emotional states, the face can also serve as an external reflection of one’s MORAL CHARACTER (Wolk, 2008). Wolk (2008, pp. 303–304) argues that, in Northeastern Neo-Aramaic (NENA) spoken by Assyrians, the face can refer to ‘heart’, as indicated in the Assyrians proverbs translated in English as follows: “If you look at a person’s face, you will know their heart.”. In this proverb, the face is conceptualised as representation of one’s MORAL CHARACTER. For instance, someone with “*black face*” in NENA has bad reputation (Wolk, 2008, p. 304). In contrast, “*white face*” in NENA means “a person who has managed to dodge being disgraced” (Wolk, 2008, p. 305). This paragraph aims to point out that the face is not a unique locus for the conceptualisation of HAPPINESS, let alone emotional states

in general. Table 5-12 shows the most frequent co-occurrence of body-part terms with certain metaphors.

Table 5-12 The ten most frequent BODY-PART*METAPHORS co-occurrence for HAPPINESS in Indonesian.

Metaphors	Body parts	N
HAPPINESS IS AN (UN)VEILED OBJECT	<i>wajah</i> ‘face’	45
HAPPINESS IS A LIQUID IN A CONTAINER	<i>wajah</i> ‘face’	27
HAPPINESS IS A CONTAINED ENTITY	<i>hati</i> ‘liver’	17
HAPPINESS IS A CONTAINED ENTITY	<i>wajah</i> ‘face’	12
HAPPINESS IS A LOCATED OBJECT	<i>wajah</i> ‘face’	8
HAPPINESS IS AN EMBELLISHMENT	<i>wajah</i> ‘face’	8
HAPPINESS IS LIGHT	<i>wajah</i> ‘face’	8
HAPPINESS IS A CONTAINED ENTITY	<i>dada</i> ‘chest/bosom’	7
HAPPINESS IS A LIQUID IN A CONTAINER	<i>mata</i> ‘eyes’	7
HAPPINESS IS A DRAWING	<i>wajah</i> ‘face’	7

The co-occurrence of HAPPINESS IS A CONTAINED ENTITY with *dada* ‘chest/bosom’ and *hati* ‘liver’ supports the view that the force of the contained HAPPINESS-entity onto the Experiencer is construed internally (Kövecses, 2000). Siahaan’s (2008) specialised study on *hati* ‘liver’ has shown that *hati* is also associated with HAPPINESS, evidenced in a conventional Indonesian compound with the word *senang* ‘happy’, namely *senang hati* (‘lit. happy liver’), where *hati* is metonymic to the person feeling happy/contented. This is similar to the Old English compound with *heart*, for instance *blid̥heort* (‘lit. happy-hearted; happiness, kindness, merciful’) (Geeraerts & Gevaert, 2008, p. 322). Gaby (2008, pp. 35–36) also shows that, in Kuuk Thaayorre (an Aboriginal language), the abdomen organ (*ngeengk* ‘belly’) can be used in a compound specifically associated with HAPPINESS (and/or LOVE), for instance *ngeengk watp* (dead-bellied), indicating that someone’s love and/or happiness is destroyed. Overall, my study on HAPPINESS and Siahaan’s (2008) study on *hati* ‘liver’ support previous findings in other languages that the abdomen (i.e., *hati*) and cardio-

centric (i.e., *dada*) body parts are construed as containers of a variety of emotions, including HAPPINESS (cf. the collection of papers in Sharifian et al., 2008).

The occurrence of *wajah* ‘face’ and *mata* ‘eyes’ with HAPPINESS IS A LIQUID IN A CONTAINER is most frequently related to the submapping EXPRESSION OF HAPPINESS IS RELEASE OF LIQUID. This usage harmonises with the foregrounded semantics of HAPPINESS in this submapping. RELEASE LIQUID frame highlights the expression of HAPPINESS. *Wajah* and *mata* are used in this frame-based submapping most frequently in prepositional phrase indicating the Source_container from which HAPPINESS is expressed.

The use of the externally perceivable body-parts, such as *mata* ‘eyes’ and *wajah* ‘face’ can also indicate that the experienced HAPPINESS is visible/overt. The metaphors that most frequently co-occur with *wajah*, and whose lexical units evoke the idea of visibility, include EMBELLISHMENT (5-86), LIGHT (5-87), DRAWING/PAINTING (5-88), and (UN)VEILED OBJECT. As discussed in §5.4.8, metonymic motivation is present within these expressions given the role of face as the location on which the effects of HAPPINESS are most likely to be visible.

(5-86) *Keceriaan terus meng-hias-i wajah-nya yang ter-lihat renta.*
 HAPPINESS continuously AV-embellish-TR face-3SG.POSS REL PASS-see decrepit
 ‘Cheerfulness keeps embellishing h(is/er) face that appears very old.’ (*Suara Merdeka via WebCorp:49*)

(5-87) *namun rasa suka dan gembira tetap ter-besit di wajah Rasulullah SAW*
 however feeling like and excited still PASS-radiate LOC face NAME
 ‘however, feeling of happiness and excitement is still briefly radiated on the face of Rasulullah SAW’ (*ind_web2012_1M:814193*)

(5-88) *Keceriaan yang ter-lukis di wajah beliau*
 HAPPINESS REL PASS-paint LOC face 3SG.POSS.HON
 ‘Cheerfulness that is painted on h(is/er) face’ (*IWaC via Sketch Engine:ID42933*)

Despite the explicit mentioning of all these body-part terms in the metaphorical expressions, one genuine question remains. Namely, whether all CONTAINMENT-related metaphors could

be implicitly construing HAPPINESS as located within the body/torso when the body-related terms are not mentioned in the metaphorical expressions.

5.6 Summary

This chapter has discussed the ten most frequent metaphors in talking about and conceptualising HAPPINESS in my Indonesian sample. These top-10 metaphors offer several insights concerning the typical and entrenched metaphorical representations for HAPPINESS in Indonesian.

The focus on the existence of HAPPINESS is conveyed by several metaphors, such as LOCATED OBJECT, LOCATION, and SUBMERGED ENTITY metaphors. In addition, HAPPINESS in Indonesian is viewed as something precious and desirable. The preciousness is captured by the POSSESSABLE OBJECT metaphor where HAPPINESS can be gained, possessed, and lost.

The desirability of HAPPINESS is captured by HAPPINESS IS A DESIRED GOAL. The submappings within this metaphor represent HAPPINESS as an aspiration one attempts to achieve. The DESIRED GOAL metaphor also has submapping indicating possible impediment in achieving well-being, even though this is not frequently highlighted. Also, we have seen that both the attempt and the attainment aspects are central in the way HAPPINESS is construed as an aspiration. In addition, the desirability of experiencing HAPPINESS can be captured through the FOOD metaphor. In this metaphor, the most frequent submapping construes HAPPINESS experience as tasting the HAPPINESS-food, suggesting the pleasantness of HAPPINESS as a beneficially nourishing state.

Once HAPPINESS is attained and experienced, it can be intense. The intensity of HAPPINESS is captured by the CONTAINED ENTITY, LIQUID IN A CONTAINER, and QUANTITY OF OBJECT

metaphors. The CONTAINED ENTITY and the LIQUID IN A CONTAINER metaphors offer rich inferences regarding the experience of intense HAPPINESS. Several submappings for intensity are the fullness of the liquid or entity, the heating up of the liquid, and the inability to control the contained substance leading to explosion and releasing the liquid. These two consequences show that HAPPINESS can be an uncontrollably intense and expressive state.

The expression or visibility of HAPPINESS is also captured via the PERCEPTION-related metaphors, such as HAPPINESS IS AN (UN)VEILED OBJECT. Additional evidence for the expressivity is discussed in terms of the prominence of the externally perceivable body-part terms, such as *wajah* ‘face’ (Figure 5-1), together with its co-occurrence with several metaphors highlighting the perceptibility of HAPPINESS (Table 5-12).

Chapter 6 demonstrates that the other two modest frequency profiles that centre on the type frequency of the metaphors may reveal different metaphorical perspectives in understanding aspects of HAPPINESS. In addition, the frequency profiles of these metaphors reflect certain usage properties of the metaphors, such as the conventionality at the linguistic level, productivity, and creativity.

Chapter 6 Productive and creative metaphors for HAPPINESS in Indonesian

6.1 Introduction

This chapter presents different range of HAPPINESS metaphors that are prominent according to the *type frequency* and *type/token ratio* (TTR). §6.2.1 introduces the view from several metaphor scholars concerning the properties of metaphors reflected through their type frequency (Clausner & Croft, 1997; Lakoff, 1987; Lakoff & Turner, 1989, *inter alia*). Then, §6.2.2 discusses the property of metaphors that can be characterised by their TTR values, based on the previous applications of TTR in other linguistic subfields (e.g., Anishchanka, Speelman, & Geeraerts, 2015; Stefanowitsch & Flach, 2016, pp. 117–120) and in emotion metaphors (e.g., Oster, 2010, 2018, p. 206). The main discussions of the results are presented in §6.3, for the productive metaphors, and in §6.4, for the creative metaphors. It is argued that the metaphors revealed via these two measures offer different insights about the construal of HAPPINESS in Indonesian compared to the frequent metaphors in Chapter 5.

6.2 Type frequency and type/token ratio of a metaphor

6.2.1 Properties of a metaphor according to the type frequency

The type frequency of a metaphor in Conceptual Metaphor Theory (CMT) is understood as the number of different linguistic expressions that manifest a given conceptual metaphor (Lakoff, 1987, p. 384; Lakoff & Turner, 1989, p. 55). As mentioned in §5.2.1, the counted linguistic expressions of a metaphor are the lexical units or lemmas of the metaphor's source frames. To date, three proposals can be gathered concerning the properties of a metaphor according to its type frequency. First, Lakoff (1987, p. 384) suggests that the

productivity of a metaphor can be measured in terms of its type frequency (see also Clausner & Croft, 1997, pp. 257, 263; Gries, 2017, p. 593; Taylor, 2012, pp. 174–175). Second, a relatively high type frequency of a metaphor is also assumed to strengthen the representation (i.e., entrenchment) of the metaphor as a conceptual-metaphor schema for its manifesting, and further coining of, its metaphorical expressions (Clausner & Croft, 1997, p. 264; Sanford, 2012, pp. 358–359). Third, Lakoff and Turner (1989, p. 55) argue that type frequency reflects the conventionality of a metaphor at the linguistic level:

“Conventionalization also applies to the *connection* between the conceptual and linguistic levels. When [...] we speak of the degree to which a conceptual metaphor is conventionalized in the language, we mean the extent to which **it underlies a range of everyday linguistic expressions**. For example, DEATH IS DEPARTURE is not just conventionalized as a way of conceiving of death; it is also widely conventionalized in language, underlying a wide range of expressions such as “pass away,” be “no longer with us,” “gone,” “among the dear departed,” and so on.” (Lakoff & Turner, 1989, p. 55, italics in original; my boldface)

The linguistic conventionality of a conceptual metaphor alluded above seems to indicate the possibility for the conceptual metaphor to be realised in language through a great deal of metaphorical expressions. It further highlights the argument that for a metaphor to be regarded as an established and conventional conceptual system (or mode of thinking), it should be evidenced in the metaphor’s ability to be expressed in language, among other modalities. Given these three views, a metaphor underlying a great number of different lexical unit types can be regarded as *entrenched* as a conceptual schema, *productive* in its linguistic manifestation, and conventionalised in the language.

6.2.2 Properties of a metaphor according to the type/token ratio

Stefanowitsch and Flach (2016, p. 118) suggests that comparison of type frequency should be normalised given type frequency may be influenced by token frequency: “the more tokens, the more opportunities for different types to occur” (see also Stefanowitsch, 2017, p.

282). Dividing the type frequency with the token frequency is the simplest means to normalise the value for comparison. Hence, the *type/token ratio* (TTR) measure.

TTR shows the ratio of tokens that are of different types from each other. Amongst the application of TTR that is central for corpus linguistics is to calculate variation in vocabulary between corpora (McEnery & Hardie, 2012, p. 50). Another application is to compare variation in the lexical realisation of a set of grammatical constructions. For instance, Stefanowitsch and Flach (2016, pp. 118–119) compares the TTR of two semi-fixed patterns: (i) [*drive* NP ADJ] ($N_{\text{patterns}} = 1,028$) and (ii) [*colour* NP ADJ] ($N_{\text{patterns}} = 46$). The focus is on counting the number of different adjective types filling the ADJ slots. The examples for [*colour* NP ADJ] include *colo(u)r* NP *unimpressed* ($N = 8$), *colo(u)r* NP *sceptical* (6), and *colo(u)r* NP *cynical* (2) (Stefanowitsch & Flach, 2016, p. 119, Exhibit 5.2). The common instantiations for [*drive* NP ADJ] are *drive* NP *crazy* ($N = 495$), *drive* NP *mad* (293), and *drive* NP *insane* (127) (Stefanowitsch & Flach, 2016, p. 119, Exhibit 5.2).

The pattern [*colour* NP ADJ] has higher TTR index (normalised per 100 tokens) (i.e. $31/46 * 100 = 67.4$) compared to the TTR of [*drive* NP ADJ] (i.e. $24/1,028 * 100 = 2.3$) (Stefanowitsch & Flach, 2016, pp. 118–119). These indexes can be understood to represent the rate of different instantiations (i.e. types) of the two patterns per 100 tokens. Despite a huge difference in token frequency between the two patterns, Stefanowitsch and Flach (2016, p. 119) argue that [*colour* NP ADJ] as a constructional schema has deeper entrenchment compared to [*drive* NP ADJ]. This is influenced by the former's “qualitative differences in productivity”, in the sense that the adjective types in [*colour* NP ADJ] is semantically more varied compared to [*drive* NP ADJ], which are mostly synonyms referring to insane and/or angry.

The idea that the TTR index of the [*colour* NP ADJ] pattern, compared to [*drive* NP ADJ], indicates higher ratio of variation in the realisation of the former than the latter can be adopted to calculate the relative variation in the linguistic realisation of a metaphor as a conceptual schema⁶⁵. Oster (2010, p. 749) proposes that TTR can indicate the “creativity ratio” of a metaphor: “the higher the number of different expressions for a metaphor with respect to its overall frequency (i.e., the more creatively it is used), the higher the ratio will be”. In this study, I consider which metaphors for HAPPINESS are creative or diverse (§6.4), given their TTR index. The index is calculated by dividing the number of LU types of a metaphor with the metaphor’s token frequency, and then normalising the ratio into the number of types per 100 tokens, hence the *normalised TTR* = $type/token * 100$ ⁶⁶ (cf. Oster, 2018, p. 206). The closer the TTR index to 100, the higher the rate of the different LU types per 100 tokens of a metaphor, hence the more creative or diverse its linguistic realisations. The normalised TTR index will be referred to as TTR throughout.

6.3 Productive metaphors for HAPPINESS in Indonesian

Table 6-1 below shows the top-10 metaphors with high type frequency. As can be seen, eight metaphors from the ten most frequent metaphors discussed in Chapter 5 are also those that have high type frequency. It suggests that, given their high type frequency, these frequently attested metaphors are also (i) *conventional* at the linguistic level, according to Lakoff & Turner’s (1989, p. 55) view (§6.2.1), and (ii) *productive* as conceptual-metaphor schemas underlying many linguistic expressions (Clausner & Croft, 1997, p. 257). The other

⁶⁵ A similar analogy is also adopted by Clausner and Croft (1997) in characterising the productivity of a metaphor as a “semantic schema” regarding the type frequency of a morphological schema, such as derivational and past-tense schemas.

⁶⁶ Oster (2010, p. 749, footnote 14) normalises the absolute TTR value by dividing it to the ratio of the mean of the type and the mean of the token frequency for the results to be distributed around 1. The formula of Oster’s *Creativity Ratio* for a given metaphor is: $(Type/Token)/(mean(Type)/mean(Token))$. In Oster’s (2010) study, *type frequency* is called the *Number of Different Expression* (NDE) while *token frequency* is *Absolute Frequency* (ASF).

two frequent metaphors discussed in Chapter 5 that are absent from the list in Table 6-1 are HAPPINESS IS FOOD and HAPPINESS IS A SUBMERGED ENTITY.

Table 6-1 Top-10 metaphors sorted by their type frequency.

	Metaphors	Token	%(Token)	Type	%(Type)
1	HAPPINESS IS A POSSESSABLE OBJECT	749	20.59	63	7.84
2	HAPPINESS IS A DESIRED GOAL	293	8.05	42	5.22
3	HAPPINESS IS A LIQUID IN A CONTAINER	156	4.29	37	4.60
4	HAPPINESS IS A LOCATION	169	4.65	35	4.35
5	INTENSITY OF HAPPINESS IS QUANTITY OF OBJECT	137	3.77	29	3.61
6	HAPPINESS IS LIGHT	43	1.18	27	3.36
7	HAPPINESS IS A CONTAINED ENTITY	358	9.84	26	3.23
8	HAPPINESS IS A LOCATED OBJECT	210	5.77	26	3.23
9	HAPPINESS IS AN (UN)VEILED OBJECT	211	5.80	23	2.86
10	HAPPINESS IS AN IMPERILLED ENTITY	32	0.88	21	2.61

Despite the predominance of the frequent metaphors in Table 6-1, it is apparent that the type-frequency ranking reveals two other metaphors unaccounted for in Table 5-1: (i) HAPPINESS IS LIGHT, and (ii) HAPPINESS IS AN IMPERILLED ENTITY. These two metaphors even outrank the remaining frequent metaphors in Table 6-1 when the comparison of their raw type frequencies is normalised via the TTR value as shown in Table 6-2.

Table 6-2 Metaphors with high type frequency sorted by their Type/Token Ratio (TTR).

	Metaphors	Token	Type	Type/token ratio
1	HAPPINESS IS AN IMPERILLED ENTITY	32	21	65.62
2	HAPPINESS IS LIGHT	43	27	62.79
3	HAPPINESS IS A LIQUID IN A CONTAINER	156	37	23.72
4	INTENSITY OF HAPPINESS IS QUANTITY OF OBJECT	137	29	21.17
5	HAPPINESS IS A LOCATION	169	35	20.71
6	HAPPINESS IS A DESIRED GOAL	293	42	14.33
7	HAPPINESS IS A LOCATED OBJECT	210	26	12.38
8	HAPPINESS IS AN (UN)VEILED OBJECT	211	23	10.90
9	HAPPINESS IS A POSSESSABLE OBJECT	749	63	8.41
10	HAPPINESS IS A CONTAINED ENTITY	358	26	7.26

The comparison with TTR in Table 6-2 shows that HAPPINESS IS LIGHT, and HAPPINESS IS AN IMPERILLED ENTITY have higher rate of lexical productivity and creativity per 100 tokens, despite the vast difference in their token frequencies compared to the frequent metaphors. Table 6-2 also indicates that the two most frequent metaphors, namely HAPPINESS IS A POSSESSABLE OBJECT and HAPPINESS IS A CONTAINED ENTITY, have the lowest rate of productivity and creativity per 100 tokens. This suggests the highly conventionalised status of these metaphors given their low variation in their linguistic realisation.

Kövecses (2000, pp. 24, 25, 39) suggests that the LIGHT and DARK metaphors respectively are applicable to HAPPINESS and SADNESS only. Stefanowitsch (2006b, pp. 100–101) provides corpus-based support to this assumption where he found that the LIGHT metaphor occurs significantly more frequently with the word *happiness*, especially in contrast with the word *sadness*⁶⁷.

Moreover, Stefanowitsch (2006b, p. 101) found that *happiness* is significantly more frequently framed as an IMPERILLED ENTITY (or FRAGILE OBJECT in Stefanowitsch's study) than for *sadness*. Rajeg's (2013, p. 218) study for Indonesian also found that the FRAGILE OBJECT⁶⁸ metaphor is significantly more frequent for *kebahagiaan* 'happiness' (one of the HAPPINESS synonyms analysed in my study) compared to the other four emotions (i.e., ANGER, SADNESS, LOVE, and FEAR). In my study, the IMPERILLED ENTITY metaphor is

⁶⁷ For a contrastive corpus-based study focusing on HAPPINESS IS LIGHT metaphor in English and Russian, see Pavpertova (2014, pp. 38–42)

⁶⁸ Rajeg's label for FRAGILE OBJECT is adopted from Stefanowitsch (2006b, p. 101).

prominent for HAPPINESS, not necessarily due to its token frequency, as the previous two studies focus on, but due to its type frequency and TTR index⁶⁹.

The inclusion of type frequency, in addition to the TTR, of the metaphors given the measure's assumed properties (e.g., productivity, conventionality, and entrenchment of the conceptual metaphor schema) is one of the ways my study expands both Stefanowitsch's and Rajeg's corpus-based studies. The sole focus on discussing metaphors that are frequent in their tokens may not reveal such a unique metaphor as HAPPINESS IS LIGHT that is in turn prominent along its type frequency and TTR index. Next, I discuss the data and insights revealed by HAPPINESS IS LIGHT and HAPPINESS IS AN IMPERILLED ENTITY.

6.3.1 HAPPINESS IS LIGHT

There are two broad themes that can be subsumed as submappings under HAPPINESS IS LIGHT, given the semantics of its linguistic expressions. They are (i) the emission of the light and (ii) the dimming of the light. The second submapping can indicate that the light has shone but is shadowy/hazy (e.g., (6-1)) or getting dim/dark (e.g., (6-2) and (6-3)) (cf. Stefanowitsch, 2006b, p. 101, footnote 9). In the target frame, this can be understood to indicate the lesser scale of happiness. This submapping is based on the DARKNESS frame⁷⁰ that in *MetaNet* (MN) is linked to the LUMINOSITY frame via *in a perspective of* relation.

(6-1) *Me-lihat kegembiraan mem-bayang pada wajah pe-muda yang tegang itu*
 AV-see joy AV-shade LOC face NMLZ-young REL stiff DEM
 'Seeing joy looming on that stiff/tense face of the youngster' (*ind_mixed2012_1M:62716*)

⁶⁹ The prominence could be considered domain-internal because no comparison is made in my study between HAPPINESS domain and other EMOTION domains as in Rajeg (2013) and Stefanowitsch (2006b).

⁷⁰ For DARKNESS frame, see <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Darkness> (Last access: 9 September 2018). The DARKNESS frame is *in scalar opposition to* relation to the LIGHTNESS frame (see <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Lightness> [Last access: 9 September 2018]).

- (6-2) *Keriangannya dengan cepat ber-ubah jadi kelabu yang kelam.*
 cheerfulness with fast MID-change become gray REL pitch.black; dark
 ‘Cheerfulness quickly turns into dark/pitch black gray.’ (IWaC via Sketch
 Engine:ID19113)
- (6-3) *Keceriaannya itu seolah pudar.*
 cheerfulness DEM as.if dim
 ‘That cheerfulness appears dim.’ (Media Indonesia via WebCorp:9)

The context in (6-1) shows that despite being nervous, there is happiness looming on, or vaguely reflected on, the youngster’s face. Meanwhile, examples (6-2) and (6-3) suggest that happiness is ceasing and potentially changes into sadness. Before discussing the other submapping, Table 6-3 shows all the lexical units (LUs) grouped under the HAPPINESS IS LIGHT metaphor. Most of the LUs (i.e., 70.37% of the total 27 types) are singletons (i.e., occurring only once), which are also termed as *hapax legomena* or *hapaxes* (Hilpert, 2014, p. 82). Such a high proportion of hapaxes suggests a more varied linguistic realisations of HAPPINESS IS LIGHT metaphor.

Table 6-3 All lexical units evoking HAPPINESS IS LIGHT

	Lexical units	Gloss	N	Perc overall
1	<i>cerminkan</i>	to mirror/reflect sth.	5	11.63
2	<i>sinar</i>	light	5	11.63
3	<i>binar</i>	light	4	9.30
4	<i>bayangan</i>	shadow	2	4.65
5	<i>cahaya</i>	light	2	4.65
6	<i>membayang</i>	to loom on	2	4.65
7	<i>pudar</i>	to be dim	2	4.65
8	<i>terbersit</i>	to be flashed across	2	4.65
9	<i>berkilauan</i>	to be glittering	1	2.33
10	<i>bersinar terang</i>	to shine brightly	1	2.33
11	<i>biaskan</i>	to refract sth.	1	2.33
12	<i>cerminan</i>	reflection	1	2.33
13	<i>kelabu</i>	gray	1	2.33
14	<i>lampu</i>	lamp	1	2.33
15	<i>membias</i>	to refract	1	2.33
16	<i>mentari</i>	sun	1	2.33

	Lexical units	Gloss	N	Perc overall
17	<i>pantulkan</i>	to refract (light)	1	2.33
18	<i>pencerahan</i>	enlightment	1	2.33
19	<i>sebersit</i>	a ray of sth.	1	2.33
20	<i>secercah</i>	a ray of sth.	1	2.33
21	<i>sekilas</i>	a flash of sth.	1	2.33
22	<i>semarakkan</i>	to brighten sth. up	1	2.33
23	<i>semburatkan</i>	to cause sth. to shine	1	2.33
24	<i>sinarkan</i>	to cause to shine	1	2.33
25	<i>terangi</i>	to cast light on sth.	1	2.33
26	<i>terbayang</i>	to be loomed on	1	2.33
27	<i>tercermin</i>	to be mirrored/reflected	1	2.33

The remainder of this section discusses the first submapping, that is the emitting of the light, and ends with the possible grounding of the metaphor in general. The first submapping can further show differentiation in relation to the luminosity, namely briefly shining, brightly shining, or neutral. The decision regarding these exact luminosities, based on the semantics of the source-frame LUs, is mostly not a clear-cut one. For instance, the two most frequent LUs in Table 6-3, that is *cerminkan* ‘to mirror/reflect sth; lit. to cause sth. to be mirrored’ (6-4) and *sinar* ‘light’ (6-5), are arguably neutral in terms of the extent of the radiated/reflected light; yet, they at least indicate that there is light emitting, underspecifying the extent of the luminosity.

(6-4) *Tita ter-senyum senang, binar mata-nya men-cermin-kan keriangannya.*
 NAME PASS-smile happy light eyes-3SG.POSS AV-mirror-CAUS cheerfulness
 ‘Tita smiles happily, the light of her eyes *reflects/mirrors* cheerfulness.’ (*Koran Tempo via WebCorp:18*)

(6-5) *ber-tatap-an sayu dengan mata-nya yang sama mesra*
 MID-stare-RECP dismal with eyes-3SG.POSS REL same intimate
namun ter-gambar sinar senang dan bangga di situ.
 but PASS-picture light happy and proud LOC there
 ‘staring (at each other) *dismally* with h(is/er) eyes that are equally intimate/absorbed, but there depicted *light* of *happiness* and *pride*.’ (*ind_mixed2012_IM:450577*)

- (6-6) *Ini-lah lampu keriangannya yang men-(t)erang-i jiwa seseorang.*
 DEM-FOC lamp cheerfulness REL AV-bright-TR soul someone
 ‘This is the *lamp* of *cheerfulness* that cast light on/illuminate someone’s soul.’
 (ind_web2012_1M:326334)

The expression suggesting the brief-side of the luminosity scale is exemplified in (6-7) by *terbersit* ‘to be flashed across’.

- (6-7) *Sekilas ter-bersit kegembiraannya di hati para prajurit.*
 at.a.glance PASS-radiate joy LOC liver DEM.PL soldier
 ‘At a glance, *joy flashes across* in the liver of the soldiers.’ (ind_web2011_300K:166766)

Next, the LUs evoking a shining or bright luminosity are exemplified in (6-8) to (6-10).

- (6-8) *wajah-nya ber-kilauan dengan cahaya dan kebahagiaan.*
 face-3SG.POSS MID-glittering.light with light and happiness
 ‘h(is/er) face is *glittering* with light and *happiness*.’ (ind_mixed2012_1M:244682)

- (6-9) *Keceriaan ber-sinar terang*
 cheerfulness MID-light bright
 ‘*Cheerfulness shines brightly*’ (ind_web2012_1M:206829)

- (6-10) *yang meny-(s)emburat-kan rona bahagia di muka anak bungsu saya.*
 REL AV-radiate.light-CAUS colour happy LOC front child youngest 1SG.POSS
 ‘The one that *radiates* (lit. cause to shine) the colour of *happiness* on the face of my youngest child.’ (ind_mixed2012_1M:778368)

Inference from the different luminosity maps onto the different intensity of HAPPINESS. This can be represented by a rather neutral submapping, such as EXTENT OF HAPPINESS IS THE LEVEL OF LIGHT (Stefanowitsch, 2006b, p. 101, footnote 9). The LIGHT source frame may also invoke an evaluative construal in the target frame. Someone that emits and reflects HAPPINESS as a (shining) light source may indicate h(is/er) emotionally positive/radiant attitude, which may affect both the surrounding and the experiencer themselves (6-11). This inference could be grounded in one of the common favourable experiences of the presence of a light source, namely the ability to see clearly.

- (6-11) *Ini-lah lampu keriang-an yang men-(t)erang-i jiwa seseorang.*
 this-FOC lamp cheerfulness REL AV-bright-APPL soul someone
 ‘This is the lamp of *cheerfulness* that *lights up/cast light on* someone’s soul.’
 (*ind_web2012_IM:326334*)

The degree of the experiencer’s expressivity may also be highlighted via the luminosity of the LIGHT source frame. The less luminous the radiated light is, the less open someone could be in expressing h(is/er) happiness (e.g., (6-7)).

6.3.2 HAPPINESS IS AN IMPERILLED ENTITY

HAPPINESS IS AN IMPERILLED ENTITY makes use of elements from several frames that belong to the broader HARM frame family (Dodge, 2016, pp. 282–286) (see also the discussion in §6.4.1 below). These frames include DESTROYING (56.25%), PROTECTING (28.12%), DANGER (6.25%), REJUVENATION (6.25%), and IMPACT (3.12%). All of these are available in the *MetaNet* (MN) frame repository, except for REJUVENATION, which is taken from the *FrameNet* (FN) repository.

The theme of the IMPERILLED ENTITY metaphor forms a coherent network of metaphors, especially with the DESIRED GOAL (§5.4.2) and the POSSESSABLE OBJECT (§5.4.1) metaphors. In this network, HAPPINESS is conceptualised as a state that we really want to attain and possess. As we possess it, we attempt to protect it from danger, such as destruction or any physically undesirable consequences. The IMPERILLED ENTITY metaphor broadly captures this fragility of HAPPINESS as a precious emotional asset.

The predominant submapping, namely NEGATIVELY AFFECTING HAPPINESS IS CAUSING PHYSICAL HARM TO AN ENTITY (43.75%), evokes inference about causing unhappiness to the Experiencer. The submapping makes use of the Harmful_effect_process role of the PHYSICAL HARM frame. This frame role is inherited in the two child frames of PHYSICAL HARM in the MN repository, namely IMPACT (6-12) and DESTROYING (6-13) frames.

(6-12) *Ombak yang dahsyat datang ber-gulung-gulung meng-hantam keriangannya*
 waves REL terrifying come MID-roll~DUR AV-hit; fist cheerfulness
 ‘Terrifying waves come, roll after roll, *hitting* the *cheerfulness*’ (IWA_C via Sketch Engine:ID53081)

(6-13) *rencana jahat untuk meng-hancurkan kegembiraan rakyat.*
 plan wicked in.order.to AV-crushed-CAUS joy people; society
 ‘a wicked plan to *destroy* the *joy* of the people.’ (ind_web2012_IM:621812)

Prior to causing harm to the entity, the asset could be endangered (cf. (6-14) and (6-15)).

This endangerment is evoked by LUs evoking the DANGER frame, another subcase of the PHYSICAL HARM frame in the MN repository.

(6-14) *penyakit tertentu yang dapat mem-bahaya-kan kebahagiaan keluarga*
 disease particular REL can AV-dangerous-CAUS happiness family
 ‘particular disease that can *endanger* the *happiness* of the family’
 (ind_mixed2012_IM:654999)

(6-15) *ketiadaan makanan misalnya akan meng-ancam rasa bahagia tersebut.*
 inexistence food for.instance FUT AV-threaten feeling happy DISC.DEM
 ‘inexistence of food, for instance, will *threaten* that *feeling* of *happiness*.’
 (ind_newscrawl2011_IM:174160)

This HARM metaphor model may also imply the damage or destruction of the entity because of the harmful action. This knowledge is carried over to the target frame to conceptualise the complete ceasing of HAPPINESS. Hence, END OF HAPPINESS IS A HARMED ENTITY submapping (15.62%) ((6-16) and (6-17)). This submapping is based on LUs elaborating the inherited Harmful_effect_result role for the DESTROYING frame.

(6-16) *Mike tidak mau kebahagiaan kakak-nya hancur.*
 NAME NEG want HAPPINESS older.sibling-3SG.POSS shatter(ed)
 ‘Mike does not want his older sibling’s *happiness* to *shatter*.’
 (ind_newscrawl2011_IM:576734)

(6-17) *Namun, kebahagiaan itu pun luluh sirna.*
 but happiness DEM also shatter(ed) vanish
 ‘However, that *happiness* also *shatters*, (and) *vanishes*.’ (ind_mixed2012_IM:290681)

The twists of these negative consequences may include two scenarios that can be recast as two submappings: (i) MAINTAINING HAPPINESS IS PROTECTING AN ASSET (28.12%) (6-18) and

(ii) RESTORING HAPPINESS IS REPAIRING A HARMED ENTITY (6.25%) (6-19). These scenarios suggest the importance for the experiencer to look after and maintain h(is/er) well-being.

(6-18) *bantuan rekan-rekan untuk men-jaga (...) keindahan dan juga keceriaan.*
 help fellow~PL in.order.to AV-guard beauty and also cheerfulness
 ‘help of all fellows to *protect* (...) beauty as well as *cheerfulness*.’ (IWaC via Sketch Engine:ID33101)

(6-19) *sarana komunikasi untuk mem-(p)ulih-kan keceriaan anak-anak*
 medium communication in.order.to AV-repaired; recovered-CAUS cheerfulness child~PL
 ‘communication medium to *repair/restore* the *cheerfulness* of the children’
 (ind_newscrawl2012_1M:247262)

Table 6-4 shows all the LUs evoking HAPPINESS IS AN IMPERILLED ENTITY metaphor.

Table 6-4 All lexical units evoking HAPPINESS IS AN IMPERILLED ENTITY

	Lexical_units	Gloss	N	Perc_overall
1	<i>rusak.v-tr</i>	to damage sth.	6	18.75
2	<i>hancurkan</i>	to destroy sth.	4	12.50
3	<i>pertahankan</i>	to defend/protect	3	9.38
4	<i>simpan</i>	to keep in a safe place	2	6.25
5	<i>ancam</i>	to threaten	1	3.12
6	<i>bahayakan</i>	to endanger	1	3.12
7	<i>borbardir</i>	to bombard	1	3.12
8	<i>hancur.v-intr</i>	to shatter; to be destroyed	1	3.12
9	<i>hantam</i>	to hit/fist sth.	1	3.12
10	<i>hapus</i>	to erase	1	3.12
11	<i>jaga</i>	to guard/protect	1	3.12
12	<i>kepingan-kepingan</i>	splinters	1	3.12
13	<i>koyak</i>	to rip-up	1	3.12
14	<i>luluh</i>	to shatter	1	3.12
15	<i>luruh</i>	to shatter	1	3.12
16	<i>musnah</i>	to be obliterated	1	3.12
17	<i>pelihara</i>	to take care	1	3.12
18	<i>perjuangkan</i>	to fight/struggle for	1	3.12
19	<i>pulih</i>	to be repaired/restored	1	3.12
20	<i>pulihkan</i>	to repair/restore	1	3.12
21	<i>rawat</i>	to take care/maintain	1	3.12

As with the HAPPINESS IS LIGHT metaphor, most of the LUs for HAPPINESS IS AN IMPERILLED ENTITY occur only once (80.95% of the total 21 LU types). This suggests few repetitions of the LUs that also do not appear dominant in their tokens, as compared to the predominance of *penuh* ‘to be full’ in HAPPINESS IS A CONTAINED ENTITY (cf. Table 5-6). §6.4 explores more metaphor types with high creativity ratio in their linguistic manifestations.

6.4 Creative metaphors for HAPPINESS in Indonesian

This section presents HAPPINESS metaphors that are creative, or diverse, in terms of the manifesting metaphorical expressions, but do not have a high token frequency in the sample. These metaphors are shown in Table 6-5. The creativity ratio is measured using the normalised *type/token ratio* (TTR) per 100 tokens as introduced in §6.2.2.

Table 6-5 Top-10 creative metaphors sorted by their TTR value and occurring at least three tokens.

	Metaphors	Token	Type	Type/token ratio
1	HAPPINESS IS A HARMFUL AGENT	11	11	100.00
2	HAPPINESS IS DRUGS	6	6	100.00
3	HAPPINESS IS A MOVED ENTITY	4	4	100.00
4	HAPPINESS IS A TREATMENT TOOL	3	3	100.00
5	HAPPINESS IS AN ACCOMPANIED OBJECT	3	3	100.00
6	HAPPINESS IS BEING SOAKED	9	8	88.89
7	HAPPINESS IS A RESOURCE	8	7	87.50
8	HAPPINESS IS IMPEDIMENT TO MOTION	6	5	83.33
9	HAPPINESS IS A DECEIVER	20	16	80.00
10	HAPPINESS IS AN ADVERSARY	24	19	79.17

The TTR of 100 for HAPPINESS IS A HARMFUL AGENT indicates that all its token is expressed by different lexical unit (LU) types (cf. Table 6-6). Metaphors with TTR index of 100 are mostly those occurring with fewer than ten tokens. In contrast, the frequent metaphors discussed in Chapter 5 have much lower TTR index for their lexical realisation, indicating the conventionalised way they are evoked (cf. Table 6-2).

As the ensuing discussion shows, most of these top lexically creative metaphors convey specific and different construal for what HAPPINESS might be that is not captured via the frequent metaphors discussed in Chapter 5. One of these construals include the powerfully harmful image of HAPPINESS, which is captured by the HARMFUL AGENT metaphor (§6.4.1). Other metaphors convey a negative spectrum of HAPPINESS (§6.4.2), as in the ADVERSARY, DECEIVER, DRUGS, and IMPEDIMENT TO MOTION metaphors. Some other metaphors may capture the positive phenomenology of HAPPINESS (§6.4.3), especially the TREATMENT TOOL, BEING SOAKED, and RESOURCE metaphors. The remaining, more generic metaphors, namely HAPPINESS IS A MOVED ENTITY and HAPPINESS IS AN ACCOMPANIED OBJECT, are discussed in §6.4.4.

6.4.1 Powerfully harmful image of HAPPINESS

HAPPINESS IS A HARMFUL AGENT evokes an image that HAPPINESS can be physically powerful and harmful to a certain extent. This metaphor makes use of frames from the HARM frame family. However, there is a role-mapping variation of the HAPPINESS nouns in the metaphorical patterns that evoke the frame in relation to the IMPERILLED ENTITY metaphor discussed in §6.3.2. In the HARMFUL AGENT metaphor, HAPPINESS is mapped onto the Cause_of_harm role of the HARM-related frames, but onto the Harmed_entity role in the IMPERILLED ENTITY metaphor. This variation illustrates that different frame elements/roles of a single frame, such as HARM, may be used to construe a single target concept differently. These intra-frame, alternative mappings clearly result in distinct conceptualisations for HAPPINESS. Table 6-6 presents all LUs for the HARMFUL AGENT metaphor.

Table 6-6 All lexical units evoking HAPPINESS IS A HARMFUL AGENT

	Lexical units	Gloss	N	Perc overall
1	<i>hapus</i>	to erase	1	9.09
2	<i>iris-iris</i>	to slice	1	9.09
3	<i>kuat</i>	strong	1	9.09
4	<i>landa</i>	to run/knock down sth.	1	9.09
5	<i>lebur dalam</i>	to be destroyed/deformed	1	9.09
6	<i>luluh</i>	to be crushed	1	9.09
7	<i>menguat</i>	to become strong	1	9.09
8	<i>menyakitkan</i>	hurting; lit. to cause to hurt	1	9.09
9	<i>perkuat</i>	to strengthen	1	9.09
10	<i>terkena</i>	to get hit	1	9.09
11	<i>torehkan</i>	to incise	1	9.09

Except for *hapus* ‘to erase’⁷¹ (6-20), which occurs in a context indicating the harmful effect of HAPPINESS to other undesirable events (i.e. an intricate or difficult trip), most of the other LUs occur with human Experiencer filling the role of the undergoer of the potentially harmful effects. The harmful events include (i) physical contact/impact (based on IMPACT frame, as in (6-21)) or (ii) being destroyed (DESTROYING frame, as in (6-22)); thus, the predominant submapping EXPERIENCING INTENSE EMOTION IS BEING HARMED or STRONG EMOTIONAL EFFECT IS PHYSICAL HARM (45.45%)⁷² (Lakoff & Johnson, 1980, p. 50).

(6-20) *kegembiraan bertemu sahabat meng-hapus semua pengalaman perjalanan*
 joy meet friend AV-erase all experience journey; trip
yang penuh lika-liku.
 REL full intricate
 ‘joy (because) of meeting with friends erases all difficult journey experience.’
 (ind_mixed2012_IM:424575)

⁷¹ ‘To erase’ evokes the DESTROYING frame in the MN frame repository (cf.

<https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Destroying> [Last access: 21 August 2018]).

⁷² The exact phrasing by Lakoff and Johnson (1980, p. 50) is EMOTIONAL EFFECT IS PHYSICAL CONTACT. However, in this study, the PHYSICAL HARM frame, which acts as the parent frame of PHYSICAL CONTACT/IMPACT as well as DESTROYING frames, is chosen as the cover term (cf. Dodge, 2016, pp. 282–286).

- (6-21) *Anda menang dan di-landa kegembiraan.*
 2SG win and PASS-run/knock.down joy
 ‘You win and are *run/knocked/struck down* by joy.’ (*ind_newscrawl2012_1M:868289*)
- (6-22) *Jika Anda ber-mimpi (...) hidup nyata, lepas dari resah dan luluh dengan perasaan gembira, ber-makna waktu-nya kembali sadar*
 if 2SG MID-dream live real unleashed from worry and
 crushed with feeling exuberant MID-meaning time-DEM return conscious
 ‘If you are dreaming (...) living a real life, being released from worry and being *crushed* with feeling of exuberance/joy, it means it is time to be awake/conscious’
 (*ind_web2012_1M:144442*)

Three other LUs indicating the strength or power scale may highlight the powerful nature of HAPPINESS. These LUs are based on a single root (viz. *kuat* ‘strong’) that is realised as three different words reflecting different morphosyntactic functions: (i) predicative adjective (6-23), (ii) inchoative, intransitive verb (6-24), and (iii) causative transitive verb (6-25).

- (6-23) *Perasaan bahagia biasanya akan semakin kuat ketika ia meny-(s)aksi-kan prosesi dari awal sampai bayi-nya lahir.*
 feeling happy usually FUT more strong when 3SG AV-witness-CAUS
 procession from beginning until baby-3SG.POSS born
 ‘Feeling of happiness will be increasingly *strong* when (s)he witnesses from the beginning of the process until h(is/er) baby was born.’ (*ind_newscrawl2012_1M:160664*)
- (6-24) *Di ruang tengah, keceriaan meng-(k)uat dengan alunan lagu anak-anak*
 LOC room central cheerfulness AV-strong with billowing song child~PL
 ‘In the central room, *cheerfulness* gets *stronger* with the billowing of children song’
 (*Suara Merdeka via WebCorp:20*)
- (6-25) *Kegembiraan hati umat Katolik lereng Merapi saat Natal itu kian di-per-kuat melalui pergelaran wayang*
 joy liver disciple Catholic slope NAME during Christmas DEM
 more PASS-CAUS-strong go.through show shadow.puppet
 ‘The *joy* of the Catholics disciples in the slope of the mount Merapi during that Christmas was increasingly *strengthened* via shadow puppet show’ (*ind_web2012_1M:25850*)

It is proposed that the primary focus of the metaphor here is on the intense and powerful experience of HAPPINESS. In addition to intensity, the HARM-related metaphor evokes the idea that HAPPINESS can be experienced as physical contact or sensation (Kövecses, 1990, p. 175). This relates to Lakoff and Johnson’s EMOTIONAL EFFECT IS PHYSICAL CONTACT metaphor. The potentially harmful and forceful contact made by the HAPPINESS-Agent onto

the Experiencer may trigger the produced sensation. However, the contact may also result in a deformation/destroying of the Experiencer since the metaphor also includes LUs evoking the DESTROYING frame, such as *luluh* ‘to be crashed’.

More generally, the metaphor can be subsumed under what Kövecses (2000, p. 61) calls the *Master Metaphor* for emotions, namely EMOTION IS FORCE. EMOTION IS FORCE represents “emotions as forces that bring about certain responses, or effects.” One of the metaphorical “effects” is (physical) harm. The FORCE metaphor for emotion is in turn based on the more generic metaphor for CAUSATION, namely CAUSES ARE FORCES (Lakoff & Johnson, 1999, pp. 184–185). Other FORCE-related metaphors also apparent in the ADVERSARY, DECEIVER, and DRUGS metaphors discussed below

6.4.2 Negative construal of HAPPINESS

This section presents four lexically diverse metaphors that mostly highlight the negative tone of HAPPINESS. Namely, HAPPINESS IS AN ADVERSARY, HAPPINESS IS A DECEIVER, HAPPINESS IS DRUGS, and HAPPINESS IS IMPEDIMENT TO MOTION metaphors

6.4.2.1 HAPPINESS IS AN ADVERSARY

In the emotion metaphor literature, it is recognised that emotions are commonly construed as an opponent in a struggle (Kövecses, 2000, pp. 68–69). In the MN frame repository, the closest frame that evokes the elements of opponent is the PHYSICAL COMBAT⁷³ frame. The frame consists of LUs that describe a fight or hostile encounter between two oppositions for an outcome over certain dispute. The frame has two participant roles (Fighter_1 and

⁷³ The closest FN frame is HOSTILE_ENCOUNTER frame. See https://framenet2.icsi.berkeley.edu/fnReports/data/frame/Hostile_encounter.xml (Last access: 21 August 2018).

Fighter_2), a process role (Physical interaction) and an outcome role (Winning/Losing).

Table 6-7 presents all LUs that evoke the PHYSICAL COMBAT frame.

Table 6-7 All lexical units evoking HAPPINESS IS AN ADVERSARY

	Lexical units	Gloss	N	Perc overall
1	<i>atasi</i>	to overcome	2	8.33
2	<i>hadapi</i>	to confront	2	8.33
3	<i>kalahkan</i>	to defeat	2	8.33
4	<i>uji.v</i>	to challenge/test	2	8.33
5	<i>ujian</i>	challenge/test	2	8.33
6	<i>ancaman</i>	threat	1	4.17
7	<i>berebut tempat</i>	fight for a place	1	4.17
8	<i>dominasi</i>	dominance	1	4.17
9	<i>dominasi.v</i>	to dominate	1	4.17
10	<i>kalah dengan</i>	to be defeated with sth.	1	4.17
11	<i>kelemahan terhadap</i>	weakness towards sth.	1	4.17
12	<i>lawan.v</i>	to fight sth.	1	4.17
13	<i>musuh</i>	enemy	1	4.17
14	<i>pertentangan antara</i>	dispute between sth.	1	4.17
15	<i>sedot</i>	to suck	1	4.17
16	<i>taklukkan</i>	to defeat	1	4.17
17	<i>tekan</i>	to hold down	1	4.17
18	<i>tekuk</i>	to cause to surrender	1	4.17
19	<i>tentang.v-tr</i>	to dispute	1	4.17

Kövecses (2000, p. 69) proposes that the fight captured by the ADVERSARY metaphor occurs between the Self as an Experiencer and the opposing emotion. The key inference of the ADVERSARY metaphor is “an attempt for emotional control” (Kövecses, 2000, p. 69). There is a force tendency of the emotion to cause the Self to lose control; in the target domain, losing control over the opposing emotion may be mapped onto either the expression of the emotion/emotional response or the existing experience of the emotion.

However, things are not always as neat as in the theory when looking at the authentic usage data. In half of the 24 tokens of HAPPINESS IS AN ADVERSARY, the Experiencer is construed as one of the opponents (as in (6-26) and (6-27)).

(6-26) *Imam Ali R.A. sanggup men-(t)akluk-kan rayuan kesenangan duniawi*
 NAME can; manage AV-surrender-CAUS seduction pleasure worldly
 ‘Imam Ali R.A. is able to *make* the seduction of worldly/earthly *pleasure surrender*’
 (*ind_mixed_2012_1M:373952*)

(6-27) *dalam meng-hadap-i kesenangan, dia ber-sabar agar tidak*
 inside AV-face-APPL pleasure 3SG MID-patient so.that NEG
ter-jatuh dalam kelalaian.
 PASS-fall inside carelessness
 ‘in *confronting pleasure*, (s)he is patient so as not to fall into carelessness.’
 (*ind_mixed2012_1M:86757*)

In the other half, HAPPINESS is engaged in a struggle against abstract entities (6-28), including states ((6-29) and (6-30)).

(6-28) *Pramuka kalah dengan kesenangan remaja, seperti narkoba*
 Boy Scout defeated with pleasure teenagers such.as illegal.drugs
 ‘(Indonesian) Boy Scout Movement is *defeated* by/*loses* against teenagers’ *pleasure*, such as drugs’ (*ind_news2011_300K:58512*)

(6-29) *Kebahagiaan yang di-cetus-kan di sana-sini dalam karya-karya yang baik*
 happiness REL PASS-spark-CAUS LOC everywhere inside creation~PL REL good
akhirnya di-kalah-kan oleh dominasi kepahitan hidup.
 eventually PASS-defeated-CAUS by domination bitterness life
 ‘*Happiness* sparked everywhere through good creation is eventually *defeated* by the dominance of life bitterness.’ (*ind_mixed2012_1M:279712*)

(6-30) *Kegetiran demi kegetiran dan kegembiraan demi kegembiraan*
 bitterness after bitterness and joy after joy
silih be(r)-rebut tempat dan ber-semayam dalam jiwa.
 RECP MID-fight.over.sth. place and MID-reside inside soul
 ‘Bitterness after bitterness and *joy* after *joy* fight over a place and reside inside the soul.’
 (*ind_mixed2012_1M:828957*)

The latter cases suggest that there is a competition between different kinds of abstract entities and HAPPINESS. The outcome may determine which entities or states will be associated with the Experiencer. I group these examples with the ADVERSARY metaphor because the source-domain LUs collocating with the HAPPINESS nouns as metaphorical

patterns evoke the PHYSICAL COMBAT frame, regardless whether this collocation directly reflects the self-vs-emotion metaphor alluded by Kövecses' OPPONENT metaphor. Similar phenomena can be found in the metaphorical patterns for OPPONENT metaphor for ANGER in English (Stefanowitsch, 2006b, p. 74, Table 1a). Examples (6-28) to (6-30) suggest that emotion such as HAPPINESS may be in combat not only with the self, but also with other states or entities.

6.4.2.2 *HAPPINESS IS A DECEIVER*

The HAPPINESS IS A DECEIVER metaphor is based on the role-mapping of HAPPINESS words into the Deceiver role in metaphorical patterns evoking the DECEPTION SCENARIO frame from the *FrameNet* repository. The semantic focus of the metaphor is on the potential of HAPPINESS to change the Experiencer's mental and behavioural attitude (via deceiving acts). This idea resembles the TRICKSTER metaphor proposed by Kövecses (2000, pp. 72–73). The following citations illustrate the HAPPINESS IS A DECEIVER metaphor.

- (6-31) *Dan kehidupan dunia ini tidak lain adalah kesenangan yang men-(t)ipu*
 and life world DEM NEG other COP pleasure REL AV-deceive
 'And life in this world is nothing but *pleasure that deceives*' (*ind_web2012_1M:73097*)
- (6-32) *Terlalu asik dengan tipu muslihat kesenangan dunia*
 too busy; immersed with cunning trick pleasure world
yang di-cipta-kan oleh kekuatan iblis.
 REL PASS-create-CAUS by power demon
 'Too engrossed with the *cunning trick* of earthly *pleasure* that is created by the power of demons' (*ind_mixed2012_1M: 245312*)

Indonesian morphology also plays a role in suggesting the passivity and helplessness of the DECEIVER metaphor. The following citations illustrate the verbal LUs occurring in passive morphological constructions.

- (6-33) *masyarakat kita pun seperti ter-sihir oleh segala kesenangan*
 society IPL.INCL.POSS also.EMPH as.if PASS-magic by every pleasure
 ‘our society is also as if being bewitched by every pleasure’
 (ind_newscrawl2012_1M:564179)
- (6-34) *sayang banget kan kalau para pemuda (...) ter-lena*
 a.pity very.COLQ TAG if DEM.PL youth PASS-fall.asleep; unconscious
dengan kesenangan sesaat.
 with pleasure temporary
 ‘isn’t it pity if the youths are all lulled/engrossed in temporary pleasure.’
 (ind_web2012_1M:924559)
- (6-35) *sering banget kalau kita senang, kita nggak pernah nanyain Tuhan,*
 often very if IPL.INCL happy IPL.INCL NEG ever ask.about God
kita di-lupa-kan oleh kesenangan
 IPL.INCL PASS-forget-CAUS by pleasure
 ‘(it is) very often that when we are happy, we never ask about God, we are made forgetful/neglectful by pleasure’

Most of the verbal metaphorical expressions for the metaphor occur with the static-passive prefix *ter-* (cf. Table 6-8 below). In Indonesian, the passive construction with *ter-* can convey unintentionality of the event experienced by the syntactic subject of the verb (in this case related to the Experiencer) (cf. §5.4.6). The semantics of the *ter-* construction fuses well with the knowledge underlying the source frame of DECEPTION SCENARIO where the filler of the Victim role has no intention for, or is unaware of, being deceived by the Deceiver.

Table 6-8 All lexical units evoking HAPPINESS IS A DECEIVER

	Lexical units	Gloss	N	Perc overall
1	<i>menipu</i>	to deceive	3	15
2	<i>godaan</i>	entice/seduction	2	10
3	<i>terlena</i>	to be lulled	2	10
4	<i>dilupakan oleh</i>	to be caused into neglect	1	5
5	<i>leka dengan</i>	to be negligent with	1	5
6	<i>memanjakan</i>	to pamper sb.	1	5
7	<i>meninabobokkan</i>	to lull sb.	1	5
8	<i>pesona</i>	magic spell	1	5
9	<i>rayuan</i>	flattery/seduction	1	5
10	<i>tergiur</i>	to be enticed	1	5
11	<i>tergoda</i>	to be enticed/seduced	1	5
12	<i>terpesona</i>	to be spellbound	1	5
13	<i>tersesatkan</i>	to be misled	1	5
14	<i>tersihir</i>	to be bewitched	1	5
15	<i>tertipu</i>	to be deceived/tricked	1	5
16	<i>tipu muslihat</i>	cunning tricks	1	5

As can be seen from Table 6-8, the other metaphorical expressions with the *ter-*morphological construction are *ter-giur oleh kesenangan* ‘to be *enticed/lured* by pleasure’, *ter-goda oleh kesenangan* ‘to be *enticed/seduced* by pleasure’, *ter-pesona dengan kesenangan* ‘to be *spellbound* with pleasure’, *ter-sesatkan oleh kesenangan* ‘to be *misled* by pleasure’, and *ter-tipu dengan kesenangan* ‘to be *deceived/tricked* with pleasure’. The relationship between the constructional semantics of a morphological construction, such as *ter-* static-passive, and their contribution to the semantic focus of emotion metaphorical expressions is a promising area for future research.

6.4.2.3 HAPPINESS IS DRUGS

The HAPPINESS IS DRUGS metaphor is based on two frames represented in the MN frame repository. The first one is the DRUGS frame⁷⁴, which is indicated as being closest to FN's INTOXICANTS frame; the second one is the ADDICTION frame (see further below).

The DRUGS frame describes various kinds of digested intoxicants to gain “an altered state of consciousness”⁷⁵. In this frame, the Drugs-related role is mapped onto the HAPPINESS itself and the Drug_user role maps onto the Experiencer. The LUs evoking the DRUGS frame also profile two roles in the frame: the Drugs ((6-37) and (6-38)) and the Physical_effects ((6-36) and (6-39)). This profiling highlights the experience of HAPPINESS that is construed as if someone is (i) being drunk (6-36), (ii) anaesthetised (6-39), or (iii) strengthened because of drugs ((6-37) and (6-38)). The context in (6-38) tends to suggest a more positive effect of HAPPINESS as a doping.

(6-36) *kita ber-ada pada parade keberhasilan yang mem-buat kita*
 1PL.INCL MID-exist at parade success REL AV-make 1PL.INCL
mabuk dalam ekstase keriangan.
 drunk inside ecstasy cheerfulness
 ‘we are at a parade of success that makes us *drunk inside* the ecstasy of *cheerfulness*.’
 (IWaC via Sketch Engine:ID65224)

(6-37) *mabuk dalam ekstase keriangan.*
 drunk inside ecstasy cheerfulness
 ‘drunk inside *ecstasy* of *cheerfulness*.’ (IWaC via Sketch Engine:ID65224)

(6-38) *kegembiraan yang jujur ku=rasa merupakan doping yang manjur bagi*
 joy REL sincere 1SG=feel to.be doping REL efficacious for
jiwa-jiwa yang polos tersebut.
 soul~PL REL innocent DISC.DEM
 ‘sincere *joy*, I feel, is the efficacious *doping* for those innocent souls.’
 (ind_mixed2012_1M:913329)

⁷⁴ See <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Drugs> (Last access: 9 September 2018).

⁷⁵ See <https://framenet2.icsi.berkeley.edu/fnReports/data/frame/Intoxicants.xml> (Last access: 9 September 2018).

- (6-39) *keceriaan dan tawa mem-bius mereka sepanjang malam.*
 cheerfulness and laughter AV-anaesthetise 3PL as.long.as night
 ‘cheerfulness and laughter anaesthetise them the whole night.’ (IWaC via Sketch
 Engine:ID78804)

Being under the influence of some drugs may lead to addiction for the Drug_user. It is indicated by LUs evoking the ADDICTION frame exemplified in (6-40) and (6-41).

- (6-40) *Kurang-nya inteligensi dan ke-candu-an atas kesenangan.*
 lacking-NMLZ intelligence and ADVS-opium-ADVS on pleasure
 ‘the lack of intelligence and being addicted to pleasure (lit. under the adverse effect of opium ‘pleasure’).’ (ind_mixed2012_1M:1830)

- (6-41) *dia ke-tagih-an kesenangan dunia, dan meng-ikut-i hawa nafsu-nya*
 3SG ADVS-addiction-ADVS pleasure world and AV-follow-APPL air lust-3SG.POSS
 ‘(s)he is addicted to world(ly) pleasure, and follows h(is/er) lust’
 (ind_mixed2012_1M:583291)

MN links the ADDICTION frame to the DRUGS via *makes use of*⁷⁶ relation. The relation is specified through the bindings of the Drugs role onto the Addicted_thing role and the Drug_user role onto the Addicted_person role. In the target frame, the Addicted_thing role is mapped onto the “insatiable emotional desire” (Kövecses, 2000, p. 79), forcing the Addicted-Experiencer to keep wanting HAPPINESS.

Note that the above citations are all the metaphorical expressions instantiating the HAPPINESS IS DRUGS. Despite only occurring for six tokens, the LUs for the metaphor are all different types, indicating the metaphor’s high degree of lexical creativity with TTR index of 100. Moreover, the metaphor highlights both (i) the different way pleasure of HAPPINESS is construed (compare the HAPPINESS IS FOOD metaphor in §5.4.10) and (ii) the potential negative effect for the Experiencer in perceiving the pleasure as drugs (e.g. being addicted).

⁷⁶ See <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Addiction> (Last access: 21 August 2018).

6.4.2.4 *HAPPINESS IS IMPEDIMENT TO MOTION*

The undesirable notion of HAPPINESS can also be conveyed by HAPPINESS IS IMPEDIMENT TO MOTION. The metaphor is evoked by LUs from the MOTION IMPEDIMENTS frames family, namely BURDEN and RESTRAINTS frames. In the MN frame repository, BURDEN and RESTRAINTS are defined as the subcases of MOTION-AFFECTING OBJECTS frame, which is in turn a subcase of MOTION-AFFECTING EXTERNAL FACTORS frame. It is this latter frame that is the subcase of MOTION IMPEDIMENTS frame.

The idea that HAPPINESS can impede one's motion is based on one of the *Location-Motion Event Structure Metaphors* (LESM) that conceptualises DIFFICULTY in terms of IMPEDIMENTS TO MOVEMENTS (Lakoff & Johnson, 1999, pp. 188–190). This conceptualisation is related to the PURPOSEFUL ACTION IS SELF-PROPELLED MOTION TO A DESTINATION. Given these two conceptual backgrounds, HAPPINESS IS IMPEDIMENT TO MOTION suggests the inhibiting nature of HAPPINESS for its Experiencer to do certain action. The frames evoking the IMPEDIMENT TO MOTION metaphor add more detailed inferences regarding the nature of this inhibition and its consequence to the Experiencer. Consider the metaphorical expressions evoking the RESTRAINTS frame below.

- (6-42) *Semua kesenangan duniawi (...) tak lagi **meng-ikat**=nya*
 all pleasure worldly NEG again AV-tie=3SG
 'All earthly *pleasure* no longer *ties* h(im/er)' (*ind_web2012_IM:608660*)
- (6-43) *Landasan-landasan indera ini bisa **mem-(p)ikat** kita **pada** kesenangan*
 foundation~PL the.senses DEM can AV-decoy 1PL.INCL at pleasure
 'foundation over the senses can *decoy/ensnare* us at *pleasure*'
 (*ind_mixed2012_IM:175574*)
- (6-44) *(bagi mereka) kesenangan **meng-(k)endali-kan** jutaan manusia.*
 for 3PL pleasure AV-rein/bridle-CAUS millions human
 '(for them) *pleasure control* (lit. *rein back/bridle*) millions of people.'
 (*ind_mixed2012_IM:484502*)

One of the inferences suggested by the expressions from the RESTRAINTS frame is that the Experiencer's action/movement can be (i) restricted, because of being tied (6-42), and (ii) under certain control of the Restraining entity (6-44) (cf. also (5-2)). In fact, the negated verbal LU in (6-42) (i.e. *mengikat* 'to tie') indicates that the Experiencer is no longer tied to the earth-bound pleasure. Another inference of the RESTRAINTS frame includes the entrapping nature of HAPPINESS for decoying the Experiencer (6-43). All these inferences express the submapping HAPPINESS/BEING HAPPY IS BEING RESTRAINED, which is the most frequent of all cases (66.67%).

The other metaphorical expressions evoke a submapping based on the BURDEN frame (6-45) (16.67%) and the MOTION-AFFECTING PROPERTIES OF THE LANDSCAPE frame (6-46) (16.67%), the latter of which is the sister frame of the MOTION-AFFECTING OBJECTS frame.

(6-45) *Namun, kegembiraan itu kini ber-ubah men-jadi **beban**.*
 but joy DEM now MID-change AV-become burden
 'However, that joy becomes a burden.' (*ind_mixed2012_IM:764405*)

(6-46) *Ia **meny-(s)ingkir-kan** kesenangan, kebencian, dan kemelekatan*
 3SG AV-to.side.way-CAUS pleasure hatred and attachment
 '(s)he pushes aside/clears the way off pleasure, hatred, and attachment'
 (*ind_mixed2012_IM:322212*)

The broader picture given by the IMPEDIMENT TO MOTION metaphor is the potential difficulty for the Experiencer when being in a certain kind of HAPPINESS. Indeed, this is not a frequent metaphor for HAPPINESS in the sample. However, it is diverse in its lexical realisation, showing high creativity index (all the LU types as used in the metaphorical patterns have been presented in the examples). Moreover, HAPPINESS IS IMPEDIMENT TO MOTION reveals an aspect that could have been missed should we only discuss the frequent metaphors in Chapter 5. This aspect is related to the negative valence/evaluation ascribed to certain kind of HAPPINESS, as in the case of the ADVERSARY, DECEIVER, and DRUGS.

6.4.3 Positive phenomenological nature of HAPPINESS

§6.4.2 above illustrates the lexically creative metaphors that mostly invite negative construals of HAPPINESS. This section presents the reverse, focusing on metaphors that tend to evoke positive construals of HAPPINESS.

6.4.3.1 HAPPINESS IS BEING SOAKED

The HAPPINESS IS BEING SOAKED metaphor is based on lexical units (LUs) that evoke the *MetaNet's* (MN) WET frame. All the LUs of the frame convey a scene where the Experiencer is in a process or state of being soaked with substance of some kind. In the target frame, this highlights the experience or feeling stage of HAPPINESS, construed as if the Experiencer is being HAPPINESS-soaked. Table 6-9 shows all the LUs for the metaphor.

Table 6-9 All lexical units evoking HAPPINESS IS BEING SOAKED

	Lexical units	Gloss	N	Perc. overall
1	<i>bergelimang</i>	to be smeared (with substance)	2	22.22
2	<i>basuh</i>	to wash	1	11.11
3	<i>berkubang</i>	to wallow in sth.	1	11.11
4	<i>bermandi</i>	to be bathed	1	11.11
5	<i>disimbah</i>	to be drenched	1	11.11
6	<i>percikkan</i>	to splash/sprinkle	1	11.11
7	<i>selami</i>	to dive/plunge	1	11.11
8	<i>siramkan</i>	to flash/water/splash sth.	1	11.11

In addition to the fact of being soaked, the semantics of the LUs also indicate the specific ways the person may be soaked, such as drenching through shower/bathing ((6-47) and (6-49)) or wallowing (6-48).

(6-47) *ada dua sosok ber-mandi kegembiraan lantaran pasukan-nya*
 exist two figure MID-take.a.bath joy because troop-3PL.POSS
maju perang dan menang.
 go.forward war and win
 'there are two figures who bathe in joy because their army went for a war and won.'
 (ind_newscrawl2011_1M:583981)

- (6-48) *Orang yang terus-menerus (...) ber-kubang dalam kesenangan jasmani*
 person REL recurrently MID-puddle inside pleasure bodily
 ‘Someone who keeps (...) wallowing inside bodily pleasure’ (*ind_web2012_1M:478956*)
- (6-49) *Hati-ku di-simbah rasa bahagia*
 liver-1SG.POSS PASS-drenched; bathed feeling happy
 ‘My liver is drenched with feeling of happiness’ (*ind_mixed2012_1M:724339*)

Other examples indicate that there is an agentive cause for the experience of HAPPINESS, as illustrated in (6-50). The verbal LU suggests an action of drenching Experiencers (denoted by *penghuninya* ‘the inhabitants’) with liquid/water.

- (6-50) *Sinar-nya (...) meny-(s)iram Kademangan Sangkal Putung, seolah-olah sengaja*
 light-DEM AV-splash NAME NAME NAME as.if deliberately
meny-(s)iram-kan kegembiraan bagi para penghuni-nya.
 AV-splash-APPL joy for DEM.PL inhabitant-3SG.POSS
 ‘The light (...) splashes Kademangan Sangkal Putung, as if deliberately splashing joy for all its inhabitants.’ (*ind_web2011_300K:228279*)

Previous expressions may also indicate the relation between the LIQUID and QUANTITY metaphors since being soaked requires large quantity of liquid⁷⁷. Next, one example shown in (6-51) below describes the experiencer’s intention to get wet by diving. It describes a need for parents to experience, feel, and thus understand, whatever feeling their children are experiencing; *senang* ‘happiness’ is one of those feelings.

- (6-51) *Akan tetapi, sebaiknya orang tua juga bisa meny-(s)elam-i perasaan senang*
 however it.is.better parents also can AV-dive-APPL feeling happy
sedih, marah, maupun keluhan kesah anak.
 sad angry as.well.as complaints child
 ‘However, it would be better if parents can also dive into their children’s feeling of happiness, sadness, anger, and their complaints.’ (*ind_newscrawl2012_1M:758770*)

In sum, HAPPINESS IS BEING SOAKED provide a more vivid image for the experience of HAPPINESS. The experiential grounding of the source frame may be based on a refreshing

⁷⁷ I thank one of the anonymous examiners for pointing this out to me.

sensation of being soaked with water (e.g., during a hot summer day). This pleasing sensation inference is carried over in conceptualising the desirable sensation of being happy.

6.4.3.2 *HAPPINESS IS A TREATMENT TOOL*

The TREATMENT TOOL metaphor that I propose here is expressed through the LUs that evoke the MN's TREATING A PHYSICAL AFFLICTION frame⁷⁸, which is most closely linked to the FN's CURE frame. MN further defines TREATING A PHYSICAL AFFLICTION frame as having a causal relation with PHYSICAL AFFLICTION, which is in turn the subcase of the HARM TO LIVING ENTITY frame. In this regard, TREATING A PHYSICAL AFFLICTION frame is part of the broader HARM-related frames.

§6.4.1 has shown that HAPPINESS can map onto the Harmful_agent/Cause_of_harm role in the HARM frames family. In contrast, HAPPINESS IS A TREATMENT TOOL metaphor is postulated through a different role-mapping of HAPPINESS in this frame family, namely the mapping onto the Treatment_tools role in the TREATING A PHYSICAL AFFLICTION frame. In the frame entry, this role is defined as “medication or other treatment devices”. All citations for HAPPINESS IS A TREATMENT TOOL are shown in (6-52) to (6-54).

(6-52) *Karena kesenangan hati itu adalah **obat** bagi hati*
 because pleasure liver DEM COP medicine for liver
 ‘Because that *pleasure* of the liver is the *medicine/medication* for the liver’
 (*ind_mixed2012_IM:195050*)

(6-53) *Bagi dunia, keceriaan karakter Winston Churchill men-jadi **penawar***
 for world cheerfulness character NAME NAME AV-become antidote
kekejaman Adolph Hitler.
 cruelty NAME
 ‘For the world, the *cheerfulness* of Winston Churchill’s character becomes *antidote* to the cruelty of Adolph Hitler.’ (*IWaC via Sketch Engine:ID10468*)

⁷⁸ See https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Treating_a_physical_affliction (Last access: 9 September 2018).

- (6-54) *Kemurungan dan keputusasaan telah di-transformasi-kan menjadi*
 moodiness and despair PERF PASS-transform-CAUS AV-become
kegembiraan yang meny-(s)ehat-kan jiwa raga.
 joy REL AV-healthy-CAUS soul body
 ‘Moodiness and despair has been transformed into *joy* that *sanifies* (lit. *makes healthful*)
 the body and the soul.’ (*ind_web2012_1M:368699*)

The curing effect that the medication has on the Patient or the Treated_ affliction can be the experiential basis for the use of the metaphor to highlight the positive evaluation that HAPPINESS may offer to its Experiencer. For instance, in (6-54), the Treated_ affliction role can be identified as the two negative emotions functioning as the subject of the sentences (i.e. *kemurungan* ‘moodiness; melancholy; depression’ and *keputusasaan* ‘despair’). Changing these negative emotions into *kegembiraan* ‘joy’ is indicated in the citation to treat the soul (of the Experiencer) to be healthy.

6.4.3.3 *HAPPINESS IS A RESOURCE*

HAPPINESS IS A RESOURCE also invites positive evaluations of HAPPINESS. Namely, the benefit of HAPPINESS as an emotional resource that typically serves certain purposes. The RESOURCE metaphor is postulated based on lexical units (LUs) denoting the RESOURCE frame⁷⁹. The LUs are mostly less specific as to whether the resources are ECONOMIC, FINANCIAL, or NATURAL, the three of which are subcases of the RESOURCE frame in the MN repository. Table 6-10 shows all the LUs evoking the metaphor, most of them are hapaxes.

⁷⁹ See <https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Resource> (Last access: 21 August 2018).

Table 6-10 All lexical units evoking HAPPINESS IS A RESOURCE

	Lexical units	Gloss	N	Perc overall
1	<i>tersedia</i>	to be available	2	25
2	<i>habiskan</i>	to use up	1	12.5
3	<i>olah</i>	to process (of a raw resource)	1	12.5
4	<i>saklar</i>	electrical switch	1	12.5
5	<i>sediakan</i>	to provide	1	12.5
6	<i>sia-siakan</i>	to waste	1	12.5
7	<i>suplai</i>	supply	1	12.5

There is one LU from Table 6-10 that conveys a specific feature of resource as shown in (6-55). The word *saklar* ‘electrical switch’ can be thought to evoke the ENERGY frame, which is also the subcase of RESOURCE and is closest to FN’s ELECTRICITY frame.

(6-55) **Saklar** *kebahagiaan* *ada* *dalam* *diri* *kita* *sendiri*
 electrical switch happiness exist inside self IPL.INCL alone
 ‘the *electrical switch* of *happiness* exists inside oneself’ (*ind_web2012_IM:686338*)

Most of the metaphorical expressions with the LUs in Table 6-10 refer to the availability of the resource, as illustrated in (6-56) and (6-57).

(6-56) *internet tampaknya meny-(s)edia-kan kesenangan bagi pencarian pasangan baru.*
 internet seemingly AV-available-CAUS pleasure for the.search partner new
 ‘internet seems to *provide pleasure* for the search of a new partner.’
 (*ind_news2011_300K:239911*)

(6-57) *Drama, aliran adrenalin dan kesenangan adalah suplai-2 yang di-butuh-kan jiwa narsistik-nya*
 drama adrenaline flow and pleasure COP supply~PL (informal)
 REL PASS-need-APPL soul narcissistic-3SG.POSS
 ‘Drama, adrenaline flow and *pleasure* are *supplies* that are needed by h(is/er) narcissistic soul.’ (*ind_mixed2012_IM:478882*)

Two other metaphorical expressions highlight the ceasing of HAPPINESS as resources that are being used up (6-58) or wasted (6-59).

(6-58) *Ia meng-habis-kan kesenangan dan kepuasan hidup bagi diri-nya sendiri*
 3SG AV-used.up-CAUS pleasure and satisfaction life for self-3SG.POSS alone
 ‘(S)he *used up* (all) the life *pleasure* and satisfaction for h(im/er)self’
 (*ind_web2011_300K:286677*)

- (6-59) *Kesenangan yang pernah ku=raih dulu mengapa ku=sia-sia-kan saja*
 pleasure REL ever.once 1SG=pull in.the.past why 1SG=wasted-CAUS just
 ‘Why I just *wasted pleasure* that I once grasped/gained before’
 (ind_web2012_IM:136277)

Another LU, namely *olah* ‘to process (raw material)’ (6-60), suggests that benefiting from HAPPINESS is conceptualised as processing a raw resource for gain.

- (6-60) *mekanisme pengendalian diri dari godaan duniawi, meng-olah rasa bahagia*
 mechanism reining.back self from seduction worldly AV-process feeling happy
ketika mem-beri, disiplin dan be(r)-kerja keras.
 when AV-give discipline and MID-work hard
 ‘self-control mechanism from earthly seduction, *processing the feeling of happiness* when giving, being disciplined and working hard.’ (ind_newscrawl2012_IM:39571)

In sum, HAPPINESS IS A RESOURCE illustrates a different way of portraying HAPPINESS as a positive state via its value and usefulness as an emotional resource.

6.4.4 Other lexically creative metaphors

The two remaining metaphors from Table 6-5 are HAPPINESS IS A MOVED ENTITY and HAPPINESS IS AN ACCOMPANIED OBJECT (cf. Stefanowitsch, 2006b, p. 75).

6.4.4.1 HAPPINESS IS A MOVED ENTITY

HAPPINESS IS A MOVED ENTITY metaphor is based on the collocation of the HAPPINESS nouns with lexical units (LUs) evoking the FORCED MOTION frame⁸⁰. The FORCED MOTION frame is a subcase of the AFFECTED/CAUSED MOTION frame, which in turn (i) has a causal relation to MOTION ALONG A PATH frame and (ii) is a subcase of the CAUSATION frame. FORCED MOTION, and more generally AFFECTED MOTION, binds the Cause role of the CAUSATION frame, but shares the other key MOTION-related roles, such as Mover, Motion_x-schema (motion process) and Direction. The Cause role in FORCED MOTION, namely the Agent, applies force to the Mover so that it moves. The Agent in FORCED MOTION binds the Actor

⁸⁰ See https://metaphor.icsi.berkeley.edu/pub/en/index.php/Frame:Forced_motion (Last access: 21 August 2018).

role of the FORCE APPLICATION frame. The caused movement of the Mover is bound to the Motion_x-schema role in the MOTION ALONG A PATH, while the action causing the Mover's movement is bound to the Force role of the FORCE APPLICATION frame.

In that forced movement scenario, the HAPPINESS IS A MOVED ENTITY metaphor is motivated by the role-mapping of HAPPINESS onto the Mover role. There are only four tokens for this mapping. Despite being mapped onto the same Mover role, there are two different interpretations, highlighting two different aspects of HAPPINESS. One of the tokens uses a generic forced movement verb that only suggests the cause of HAPPINESS (6-61):

- (6-61) *nyanyian yang di-maksud-kan untuk meng-gerak-kan kegembiraan*
 song REL PASS-intention-CAUS for AV-motion-CAUS joy
 'song that is meant to *actuate* (lit. to set in motion) joy' (*ind_mixed2012_1M:269339*)

The 'cause' sense of *menggerakkan* may be based on the combination of two *Event Structure Metaphors*: ACTION IS MOVEMENT and CAUSES ARE FORCES (e.g. I can't *budge* him; It would take a bulldozer to *get him going* on this job) (examples are from Lakoff & Johnson, 1999, p. 272). The remaining tokens are expressed by specific forced movement verbs, namely hurling, or throwing (see below). These verbs have a conventional extension of 'expressing something (e.g., feeling, ideas)', potentially involving COMMUNICATION IS OBJECT TRANSFER metaphor (Lakoff & Johnson, 1980). That is, communicating/expressing emotion is conceptualised as throwing/hurling an object. In (6-62), inference for expression is indicated through the head noun *ungkapan* 'expression' modified by *bahagia* 'happiness'.

The use of the hurling/throwing verbs highlights the sudden expression of HAPPINESS.

- (6-62) *Bukan-lah ungkapan bahagia yang ter-lontar,*
 NEG-FOC expression happy REL PASS-throw/hurl
sebaliknya si ibu me-marah-i anak-nya.
 on.the.contrary DEM mother AV-angry-APPL child-3SG.POSS
 'it is not the expression of *happiness* that is *hurled/thrown/expressed*, on the contrary, the mother scolded her child (*ind_web2012_1M:49056*)

- (6-63) *Bukan saja lontaran kegembiraan, tetapi semacam isyarat,*
 NEG only the.hurling joy but a.kind.of hint; cue
bahwa satu kemenangan telah di-capai dalam pertempuran itu.
 that one victory already PASS-reach inside battle DEM
 ‘It is not only the *hurling* (i.e. expression) of *joy*, but a kind of hint, that a victory has been reached in that battle.’ (*ind_web2011_300K:60812*)
- (6-64) *Sekalipun itu hanya me-lempar senyum atau keceriaan terhadap sesama.*
 albeit DEM only AV-throw smile or cheerfulness towards fellows
 ‘Even though that is just *throwing* (i.e. cast a) smile or *cheerfulness* towards fellows.’
 (*Republica via WebCorp:24*)

It seems that the two interpretations, namely cause and expression, under the same role-mapping ([Caused-]Mover) in the same source frame (FORCED MOTION) are determined primarily by the lexical semantics of each of the FORCED MOTION LUs in the metaphorical patterns. One possible reason for this could be that each LU has its own semantic trajectory for its by now conventional metaphorical meaning extensions in different target frames (e.g., *menggerakkan* ‘to cause to move’ indicate cause to exist, while the hurling/throwing verbs are extended to mean ‘expressing something’).

6.4.4.2 HAPPINESS IS AN ACCOMPANIED OBJECT

There are only three tokens for HAPPINESS IS AN ACCOMPANIED OBJECT. The metaphorical expressions consist of verbal LUs that evoke the ACCOMPANIMENT frame. The frame describes an event, which can be a motion event⁸¹, with two participants. One of the participants, namely the Accompanying_entity role, is a co-participant of the other, the Accompanied_entity. In this scene, the ACCOMPANIED OBJECT metaphor is postulated based on the role-mapping of the HAPPINESS nouns into the Accompanied_entity slot. All expressions for this metaphor are shown in (6-65) to (6-67).

⁸¹ In the case of motion event with two co-participants, the FN labels the frame as COTHEME.

- (6-65) *anak-anak me-main-kan bola dengan meng-guna-kan benang untuk*
 child~PL AV-play-APPL ball with AV-the.use-CAUS yarn; thread in.order.to
men-damping-i keceriaan besar
 AV-in.proximity-APPL cheerfulness big
 ‘children play the ball by using yarn for *accompanying* the big *cheerfulness*’ (*Suara Pembaruan via WebCorp:1*)
- (6-66) *Perayaan musim semi selalu di-riya-kan dengan meriah,*
 celebration season autumn always PASS-great-CAUS with merry; cheerful
meng-iring-i kegembiraan men-(t)inggal-kan musim dingin.
 AV-accompany-TR joy AV-stay-CAUS season cold
 ‘The celebration of autumn is always celebrated cheerfully, *accompanying* the joy for leaving winter behind.’ (*ind_web2012_IM:780812*)
- (6-67) *kebahagiaan ini tak jarang di-serta-i berbagai kekhawatiran*
 HAPPINESS DEM NEG seldom PASS-along-TR various worry
 ‘This *happiness* is often *accompanied with* various worries’ (*ind_mixed2012_IM:306277*)

One interpretation for the metaphor is that HAPPINESS as a state may co-occur with other events or states, such as *kekhawatiran* ‘worry’ in (6-67). In other words, it suggests that HAPPINESS is not a stand-alone emotion with respect to its occurrence or experience. This interpretation may be related to the conceptualisation of events via Moving Time metaphor that involves two Movers (cf. Moore, 2014, pp. 306–307).

6.5 Summary

This chapter has presented different stocks of metaphors in the sample according to different frequency profiles from Chapter 5, namely the *type frequency* and *type/token ratio* (TTR). Sorting the metaphors by their type frequency reveal which metaphors are linguistically productive, conventionalised (i.e., manifested) in language, and entrenched as conceptual metaphor schemas. As Table 6-1 shows, most of the metaphors with high token-frequency in Chapter 5 are also among the top-10 metaphors that have high type-frequency. However, it is also clear that two new metaphors emerge in Table 6-1: HAPPINESS IS LIGHT, and HAPPINESS IS AN IMPERILLED ENTITY.

HAPPINESS IS LIGHT has been considered to be distinctive for HAPPINESS in previous emotion metaphors studies in English (Kövecses, 2000; Stefanowitsch, 2006b, pp. 100–101). This thesis identifies HAPPINESS IS LIGHT to be prominent in Indonesian as well according to its type frequency. The HAPPINESS IS LIGHT metaphor highlights the positive valence of HAPPINESS and its Experiencer. This positive focus of the LIGHT metaphor could be grounded experientially on the positivity of having light (compared to being without light/in the darkness). Meanwhile, HAPPINESS IS AN IMPERILLED ENTITY suggests the fragility of HAPPINESS as a precious (possessed) emotional-object that requires maintenance and protection from harm for its sustenance.

More specific construals for HAPPINESS in Indonesian are also revealed by the top-10 lexically diverse, or creative, metaphors according to the TTR measure. Discussion on these metaphors also reveals which metaphors are less frequent in the sample, complementing the discussion on the most frequent metaphors in Chapter 5. Three broad themes for the conceptualisations of HAPPINESS are captured by most of the top-10 creative metaphors. Namely, (i) the power and the harmful image of experiencing HAPPINESS (HAPPINESS IS A HARMFUL AGENT), (ii) the positive phenomenology of HAPPINESS (HAPPINESS IS BEING SOAKED, HAPPINESS IS A TREATMENT TOOL, and HAPPINESS IS A RESOURCE), and (iii) the more negative valence of HAPPINESS (HAPPINESS IS AN ADVERSARY, HAPPINESS IS A DECEIVER, HAPPINESS IS DRUGS, and HAPPINESS IS IMPEDIMENT TO MOTION).

From a broader methodological point of view, this chapter and Chapter 5 aim to emphasise the importance of considering individually different usage-frequency profiles that point to different usage properties of the metaphors, such as entrenchment, conventionality, productivity, and creativity. Such consideration is a way to justify the richness of the

quantitative data gained from a corpus-based approach to metaphors. Moreover, these quantitative data provide means to put metaphors frequently discussed in the literature into perspective (e.g., HAPPINESS IS LIGHT may not necessarily be high in its token, but in its productivity) (cf. Stefanowitsch, 2006a, p. 7). Indeed, the discussion is only restricted to the top-10 metaphors in each three frequency profiles under consideration, given many metaphors identified in the sample⁸². Nevertheless, different range of insights emerges concerning the prominent metaphorical conceptualisations for the generic HAPPINESS domain in the studied Indonesian corpus. Lastly, I argue that a key notion in CMT concerning the variety of different metaphors for conceptualising a given target domain (i.e., *the range of target or metaphorical pluralism* [cf. §2.2.4]) can be enriched via considering the usage properties revealed by these three different frequency profiles derived from a corpus-based analysis.

⁸² The full set of metaphors found in the study is available in the dataset included in the *happyr* R package accompanying the thesis (cf. §3.4).

Chapter 7 Distinctive metaphors for HAPPINESS near-synonyms in Indonesian

7.1 Introduction

This chapter discusses the second theme of this thesis, namely the interaction of metaphors and emotion near-synonyms. Using Indonesian data, I will test the hypothesis proposed by Kövecses (1990, pp. 207–208), namely the potential role of metaphors for distinguishing semantically similar emotion concepts (cf. the discussion of Kövecses’ example of PRIDE in English in §2.5.1 and of the corpus-based evidence from Stefanowitsch (2004) for the distinctive metaphor for *happiness* and *joy* in English in §2.5.2). To date, Kövecses’ hypothesis and Stefanowitsch’s (2004, 2006b, pp. 96–102) findings constitute one of the desiderata in the study of emotion metaphors, concerning the extent to which semantically similar emotions differ in their metaphorical conceptualisations (cf. Ogarkova, 2007; Ding, 2011; Soriano, 2013b, pp. 72, 75; Ogarkova & Soriano, 2014, p. 111; Soriano, 2015, p. 208). All these studies, however, have focused on English.

Before this thesis, no such study had been done for Indonesian (but see, G. P. W. Rajeg, 2014, for a pilot study). In line with Hilpert’s (2014b, p. 204) assertion that “the replication of studies is a very important part of science”, my thesis aims to extend the existing metaphor-synonyms interface studies by applying their methodologies to Indonesian data. In addition, it further tests the generalisability of Kövecses’ *principal metaphor hypothesis* to Indonesian. Simultaneously, this study aims to contribute new insights into one of the central issues in the study of metaphor in general, namely universality and variation in metaphorical conceptualisations (Kövecses, 2005; Callies & Onysko, 2017; Güldenring, 2017). The thesis seeks to explore whether, and to what extent, a set of HAPPINESS synonyms

in Indonesian is distinguished along similar metaphor types that strongly distinguish *happiness* and *joy* in English (Stefanowitsch, 2004, 2006b) (cf. §7.3.1 and §7.3.3). Finally, my study offers two additional insights. First, (i) the inventory of distinctive metaphors in describing each HAPPINESS synonym in Indonesian, which may not be found in previous studies of other languages, and (ii) the methodological implications related to the study of metaphors-synonyms interface, considering the morphological feature of Indonesian in the lexicalisation of emotions (cf. §7.3.1 and §1.3.1). §7.2 below introduces the quantitative method applied to the issue in this chapter. The summary of the chapter is laid out in §7.4.

7.2 Identifying the distinctive metaphorical profiles of the HAPPINESS synonyms

The distinctive metaphors for the HAPPINESS near-synonyms are identified using the statistical technique underlying the *Multiple Distinctive Collexeme Analysis* (MDCA) (Hilpert, 2006a; Stefanowitsch, 2013; Stefanowitsch & Gries, 2009, p. 946). To that end, the discussion in this section is structured as follows. §7.2.1 outlines the methodological background of MDCA as part of the *Collostructional Analysis* (CA) (Hilpert, 2014a; Stefanowitsch, 2013, 2014). Then, §7.2.2 discusses two related points: (i) the relevance of MDCA for the *Metaphorical Profile* approach developed in the thesis and (ii) how Metaphorical Profile is related to a recent usage-based method in Cognitive Linguistics, namely *Linguistic Profile* (Janda, 2013b, 2016; Kuznetsova, 2015). Finally, §7.2.3 exemplifies the underlying statistical technique implemented in MDCA, namely the one-tailed *Binomial Test* (as illustrated in Hilpert, 2006a).

7.2.1 Introduction to Multiple Distinctive Collexeme Analysis

Multiple Distinctive Collexeme Analysis (MDCA) is a member of family of methods in quantitative corpus linguistics, namely *Collostructional Analysis* (CA) (Hilpert, 2014a;

Stefanowitsch, 2011, 2013, 2014; Stefanowitsch & Gries, 2009, pp. 940–949). CA has been used in the study of the semantics of ([partially] schematic) constructions by investigating the lexical elements, termed as *collexemes*, that occur more frequently than expected by chance in one or more slots in the constructions. The foundational paper of CA (Stefanowitsch & Gries, 2003) demonstrates one of the methods, namely *Simple Collexeme Analysis* (SCA). SCA is applied to analyse the semantics of ditransitive construction (including few other constructions) in English through the strongly attracted collexemes occurring in the verbal slot of the construction. It is identified that *give* is the strongest attracted collexeme indicating the basic ‘transfer’ sense of the ditransitive construction. The other attracted collexemes form several semantic classes representing different semantics of the ditransitive (Stefanowitsch & Gries, 2003, p. 230). For instance, *offer*, *owe*, and *promise* imply transferring the theme under certain satisfied condition, while *tell* and *teach* show the ‘communication’ meaning based on the metaphor COMMUNICATION IS OBJECT TRANSFER.

Another variant of CA is the *Distinctive Collexeme Analysis* (DCA). DCA aims at contrasting *two semantically/functionally similar* constructions in terms of their strongly distinctive collexemes. An example of the use of DCA is investigating the constructional-variation phenomena, such as distinctive verbs occurring in prepositional dative vs. ditransitive constructions; verbs that tend to occur in active vs. passive constructions; the infinitives strongly attracted to one of the two English future-constructions, namely *will+INF* vs. *be going to+INF* (Gries & Stefanowitsch, 2004; for the application of DCA to metaphor studies, see Hilpert, 2010; Stefanowitsch, 2005).

MDCA, as its name suggests, extends DCA for comparison of distinctive collexemes across *multiple* semantically/functionally similar constructions. The applications of MDCA include

(i) Hilpert (2008) who contrasts collocational preferences of a set of Germanic future constructions across multiple periods of diachronic corpus data; (ii) Gilquin (2010, 2013) who compares periphrastic causatives in English with the verbs *make*, *have*, *get*, and *cause* in terms of the verbal complements of the main verbs in the constructions; (iii) Desagulier (2014) who investigates the differences between near-synonymous degree modifiers, namely *rather*, *quite*, *pretty*, and *fairly*, in terms of the preferred modified adjectives; and recently (iv) Levshina (2015, pp. 241–251) who contrasts three English varieties (British, American, and Canadian) in terms of the preferred adjectives for a single degree modifier construction with the pattern [*quite*+ADJ].

7.2.2 Metaphorical Profile

The analytical concepts of MDCA are relevant to my study and can be adapted into the so-called *Metaphorical Profile* approach (G. P. W. Rajeg, 2014, 2016a; Ogarkova & Soriano, 2014, 2018). MDCA typically involves two variables in the analysis, namely (MULTIPLE, NEAR-SYNONYMOUS) CONSTRUCTIONS and COLLEXEMES, and then determines the *distinctiveness*, or *association strength*, of the collexemes with one of these constructions.

Metaphorical Profile involves co-occurrence frequency of conceptual metaphors with a given target domain, such as the HAPPINESS synonyms. The underlying distributional statistics in MDCA, namely the one-tailed *Binomial Test*, can essentially be extended to analyse such association strength between (the levels/values of) two variables, such as METAPHORS and NEAR-SYNONYMS, thus not only between COLLEXEMES and CONSTRUCTIONS as mentioned in §7.2.1. In other words, Metaphorical Profile aims to determine the association strength of the METAPHORS with more than two NEAR-SYNONYMS (i.e., the LEXICAL CONSTRUCTIONS) evoking certain target-domain concepts, such as EMOTIONS.

This quantitative tool provides a means to operationalise Kövecses' notion of *principal metaphors*, or as here, the *metaphorical profiles* of an emotion target-domain, that may distinguish between semantically related emotion words. In this respect, the *distinctive metaphorical profiles* of a set of semantically related emotion words are operationalised as the metaphors strongly preferred to occur with a given emotion in comparison to its synonyms according to the Binomial Test as implemented in MDCA.

Distributional statistics is also used in Stefanowitsch's (2004, 2006b) studies for identifying emotion-specific metaphors between different emotions, and between two synonymous and antonymous emotions. Therefore, the quantitative approach and design to identify distinctive metaphors for a target domain in this thesis is not entirely new. However, through this thesis, I further propose that Metaphorical Profile can form part of, and share underlying principles with, the Linguistic Profile suite of methods (Janda, 2013b, 2016; Kuznetsova, 2015).

Linguistic Profile is a family of quantitative methodologies that (i) benefits particularly from the recent "quantitative turn" in Cognitive Linguistics (Janda, 2013a), and (ii) bridges theoretical linguistic questions and quantitative methods in addressing and operationalising these questions (Janda, 2013b, 2016). Linguistic Profile involves measuring the frequency distribution of certain forms (e.g., emotion near-synonyms) in relation to certain linguistic phenomena of interest (e.g., conceptual metaphors) (cf. Janda, 2016, p. 129). Metaphorical Profile is suited for addressing theoretical hypotheses in the Conceptual Metaphor Theory as pursued in this chapter. Metaphorical Profile also embodies the recent "quantitative turn" in Cognitive Linguistics (Janda, 2013a), of which the Conceptual Metaphor Theory is part.

7.2.3 Multiple Distinctive Collexeme Analysis in action

This section illustrates the underlying statistics in *Multiple Distinctive Collexeme Analysis* (MDCA), namely the one-tailed *Binomial Test*. As an example, I use the *observed (co-occurrence) frequencies* of HAPPINESS IS A DESIRED GOAL across the synonyms. The co-occurrence frequencies are shown in the “n” column in Table 7-1 below; the remaining columns are explained successively. The discussion focuses on how the *distinctiveness* or *association strength* of HAPPINESS IS A DESIRED GOAL for *kebahagiaan* ‘happiness’ is computed via the Binomial Test. A metaphor is considered distinctive if it occurs more often than expected by chance with a synonym compared to the others.

Table 7-1 The MDCA output for HAPPINESS IS A DESIRED GOAL across the synonyms.

synonyms	gloss	n	exp	assoc.str	p.binom	p.holm	dec
<i>kebahagiaan</i>	happiness	125	55.169	20.208	6.190e-21	3.838e-18	***
<i>kesenangan</i>	pleasure	110	51.625	15.265	5.430e-16	3.351e-13	***
<i>bahagia</i>	(peaceful and) happy; happiness	34	28.752	0.758	1.745e-01	1.000e+00	ns
<i>riang</i>	very happy, joyous	0	0.966	-0.420	3.798e-01	1.000e+00	ns
<i>ceria</i>	cheerful; lit. pure, clean	0	3.141	-1.371	4.251e-02	1.000e+00	ns
<i>senang</i>	happy, to feel well, contented	5	15.383	-2.756	1.753e-03	1.000e+00	ns
<i>gembira</i>	excited, enthusiastic	0	6.363	-2.794	1.608e-03	9.215e+00	ns
<i>keriangan</i>	cheer(fulness)	3	17.477	-4.729	1.867e-05	1.119e-02	*
<i>keceriaan</i>	purity; cheerfulness	10	60.082	-16.982	1.042e-17	6.440e-15	***
<i>kegembiraan</i>	joy, cheerfulness	6	54.042	-17.855	1.398e-18	8.652e-16	***

Abbreviation notes: *Observed frequency* (n), *expected frequency* (exp), *Association Strength* (assoc.str) from the *log10-transformed of the p_{Binomial}-values*, *p_{Binomial}-values* (p.binom), *Holm’s correction for p_{Binomial}-values* (p.holm), and *decision* (dec) (for significance) of the Holm’s corrected *p_{Binomial}-value*.

The observed co-occurrence frequency between *kebahagiaan* and metaphorical patterns evoking the HAPPINESS IS A DESIRED GOAL is 125 tokens. In addition to this observed co-occurrence frequency, one also needs the *expected frequency* for the co-occurrence between HAPPINESS IS A DESIRED GOAL and *kebahagiaan* (column “exp” in Table 7-1). The expected frequency (for a metaphor and a synonym) represents the frequency that one would expect under the null-hypothesis that there are no distributional differences for the metaphor with

each synonym (cf. Levshina, 2015, pp. 210–211). The expected frequency for our example is arrived at by multiplying (i) the total frequency of *kebahagiaan* in the sample (i.e., 685), with (ii) the total frequency of HAPPINESS IS A DESIRED GOAL occurring with any synonyms in the sample (i.e., 293), then (iii) dividing the results with the total metaphorical tokens in the sample (i.e., 3638); hence $(685*293)/3638 = 55.1690489$ ⁸³.

Differences between the observed and expected frequencies allow us to determine the direction of the association between the co-occurring items. The association can be (i) *positive*, if the observed frequency exceeds the expected frequency, or (ii) *negative*, if the observed frequency is below the expected frequency (cf. Stefanowitsch & Gries, 2009, p. 943). The comparison between the expected and the observed frequency in Table 7-1 for HAPPINESS IS A DESIRED GOAL with *kebahagiaan* indicates positive association, or attraction, between the metaphor and the synonym since the observed frequency of 125 is higher than the expected frequency of 55.1690489 (cf. Hilpert, 2006a, p. 247). Additional value required by the Binomial Test is the *a priori* probability that if *kebahagiaan* is used metaphorically, it will occur in metaphorical patterns evoking HAPPINESS IS A DESIRED GOAL. This probability is calculated by dividing the expected frequency of *kebahagiaan* with the metaphor (i.e., 55.1690489) against the total frequency of the metaphor in the sample (i.e., 293); hence $55.1690489/293 = 0.1882903$ (Hilpert, 2006a, p. 247).

The observed co-occurrence frequency, the total frequency of the metaphor, and the *a priori* probability then become the inputs for the one-tailed Binomial Test implemented in MDCA (Hilpert, 2006a, p. 247). Given our example, the Binomial Test determines the probability

⁸³ The floating points for the expected frequencies, association strengths and the *p*-values have been rounded to three digits for representational purpose in the tables in this chapter. Thus, the rounding happened *after* the calculations that generate the values for these variables.


```
binom.test(x = 6, # co-occ.freq between "kegembiraan" and the "desired goal" metaphor
          n = 293, # total tokens of the "desired goal" metaphor
          p = 0.184442, # a priori probability
          alternative = "less"
          )$p.value # retrieve only the binomial p-value

## [1] 1.397791e-18 # the binomial p-value output
```

Here we also see a very small p_{Binomial} -value. Given the observed frequency is less than the expected one, it indicates a significantly high degree of dissociation, or repulsion, between *kegembiraan* ‘joy’ and the DESIRED GOAL metaphor. A similar calculation as above is performed for the co-occurrence frequencies of each of the synonyms with the metaphors.

For expository reason, CA \log_{10} -transforms the p_{Binomial} -value into the so-called *Coll(ostruction) Str(ength)* value; in this study, a more generic term of *Assoc(iation) Str(ength)* is used (cf. the “assoc.str” column in Table 7-1) (Stefanowitsch & Gries, 2005, p. 7; Hilpert, 2006a, p. 247). Positive or negative signs are set in the AssocStr values to indicate the direction of association. Positive AssocStr values indicate association (i.e., the observed co-occurrence frequency is higher than the expected frequency); the higher the value, the stronger the degree of association between the metaphors and the synonyms. The positive AssocStr is derived from the negative \log_{10} -transformed p_{Binomial} -value. The code-chunk below shows how it is computed in R for the *kebahagiaan* ‘happiness’ example.

```
# negative log10 for the p-binom for the *kebahagiaan* data to derive the AssocStr value
-log10(x = 6.190218e-21)

## [1] 20.20829
```

Meanwhile, negative AssocStr values indicate dissociation or repulsion (i.e., the observed co-occurrence frequency is less than expected); the lower the value, the stronger the repulsion between the metaphors and the synonyms. This value is derived from the positive \log_{10} -transformed p_{Binomial} -value. The code-chunk below shows how it is computed in R for the *kegembiraan* ‘joy’ example.

```
# positive log10 for the p-binom for the *kegembiraan* data to derive the AssocStr value
log10(x = 1.397791e-18)
## [1] -17.85456
```

Given the log-transformation of the p -value, significant association strength of $p_{\text{Binomial}} < 0.05$ is indicated by $\text{AssocStr} > 1.30103$ (Stefanowitsch & Gries, 2005, p. 7). Higher cut-off points are also set: (i) $\text{AssocStr} > 2$, which is equal to $p_{\text{Binomial}} < 0.01$, and (ii) $\text{AssocStr} > 3$, which is equal to $p_{\text{Binomial}} < 0.001$. As in the example with *kegembiraan* ‘joy’, the AssocStr values are marked with negative sign when the co-occurrence frequencies are less frequent than expected. For each synonym, the AssocStr values of the metaphors can be sorted from the highest (positive) to the lowest (negative) values. This will rank the metaphors from the most distinctive ones to the most strongly repelled. Table 7-1 illustrates that significant repulsion for the DESIRED GOAL metaphor according to the AssocStr begins from *ceria* ‘cheerful’ ($\text{AssocStr} = -1.371$) down to *keceriaan* ‘cheerfulness’ ($\text{AssocStr} = -16.982$) and *kegembiraan* ‘joy, cheerfulness’ ($\text{AssocStr} = -17.855$).

One can also notice from Table 7-1 that the DESIRED GOAL metaphor is significantly distinctive to *kesenangan* ‘pleasure’, though in a lower degree compared to *kebahagiaan* ‘happiness’, as reflected in their AssocStr values. Despite the similar association, it will be shown that *kesenangan* ‘pleasure’ and *kebahagiaan* ‘happiness’ differ in relation to the preferred submappings of the HAPPINESS IS A DESIRED GOAL (cf. §7.3.1 and §7.3.2). Multiple association of an item (e.g., a metaphor) to more than one construction of interest (e.g., the synonyms) is not uncommon in MDCA, as Gilquin (2010, p. 201, Table 60) has shown in her study of ten periphrastic causative constructions in English. Yet, the AssocStr values of the shared, distinctive item with the constructions can be used to compare the relative association strength of the item with the constructions.

Note that MDCA, and the other members of CA, involves repeated significance testing on the same data set (Stefanowitsch & Gries, 2005, p. 36, endnote 3, 2009, p. 944). As a rule-of-thumb, the standard threshold for the significance level, that is $p_{\text{Binomial}} < 0.05$, should be corrected for such repeated significance testing, using the Holm's or the more conservative Bonferroni correction methods⁸⁵ (Gries, 2009b, pp. 242–243). The correction is meant to restrict the significance threshold for repeated tests since there can be more chances for “a seemingly significant result has come about by accident” when more significance tests are performed (Stefanowitsch, 2011, p. 275, footnote 5). Consequently, only certain items, whose original p_{Binomial} -values are below the corrected significance threshold, if any, will be considered significant. However, most CA studies are relaxed regarding such correction. The main reason is that it is the AssocStr-based ranking of the collexemes (or, in our case, the metaphors) that is the most relevant for the CA, rather than the strict corrected significance level (Stefanowitsch, 2005, p. 178; Stefanowitsch & Gries, 2005, p. 36, endnote 3, 2009, p. 944). Another reason is the corpus linguistics tradition that considers each significance test as an independent test (Stefanowitsch & Gries, 2009, p. 944).

In this chapter, following Stefanowitsch (2011), I report the distinctive and repelled metaphors for each synonym that are both significant at the uncorrected significance level, based on their AssocStr values, and at the corrected one, using the Holm method (Gries, 2009b, p. 249). The reason for this report structure is that collexemes/metaphors that are identified as only marginally, or even not, significant, given a certain significance threshold, may also reveal systematic differences between the contrasted construction, as shown by

⁸⁵ These correction methods are available in *R* via the `p.adjust()` function in the `{stats}` package.

`p.adjust()` requires at least two input-arguments: (i) the numeric vector of p -values from each significance testing, and (ii) the names of the correction methods to be used, such as “bonferroni” or “holm”. See the following website for examples: http://rcompanion.org/rcompanion/f_01.html (Last access: 9 September 2018).

Stefanowitsch (2005, p. 178). In Table 7-1, the column “p.holm” shows the corrected p_{Binomial} -values with the Holm method. The “dec” column indicates the “decision” (Gries, 2009b, p. 251) for the significance threshold of the Holm’s corrected p_{Binomial} -values: (i) *** = $p_{\text{Holm}} < 0.001$; (ii) ** = $p_{\text{Holm}} < 0.01$; (iii) * = $p_{\text{Holm}} < 0.05$; (iv) *ms* = marginally significant at $p_{\text{Holm}} > 0.05$; and (v) *ns* = not significant at $p_{\text{Holm}} > 1$. For the AssocStr limit, I present the metaphors with the AssocStr > 2 (for attraction) and AssocStr < -2 (for repulsion).

The AssocStr-based ranked-list of the metaphors for each synonym is a starting point for qualitative discussion concerning the way semantically similar emotion concepts are characterised by, and differ in terms of, their distinctive and repelled metaphors. A set of metaphors are strongly distinctive for an emotion compared to its near-synonyms presumably because these metaphors evoke conceptual knowledge that best characterises the semantics of the emotion. The repelled metaphors may then indicate the less prominent metaphorical model in conceptualising the given emotion.

7.3 Distinctive metaphorical profiles of the HAPPINESS near-synonyms

This section discusses the results of the Binomial Test in the *Multiple Distinctive Collexeme Analysis* (MDCA) for the Indonesian HAPPINESS near-synonyms. Overall, MDCA provides quantitative evidence for Kövecses’ (1990, p. 208) *principal metaphor hypothesis* that semantically similar emotion concepts (lexicalised as near-synonyms in language) differ in terms of a set of distinctive metaphors for the characterisation of the concept in question when compared to other semantically related concepts (cf. §2.5.1). After all, it is a basic assumption in Cognitive Linguistics, in relation to its usage-based tenet (Evans & Green, 2006, p. 122), that different usage forms (e.g., metaphorical patterns) of a linguistic unit (e.g., an emotion lexeme), have impacts on its meaning construction (e.g., its metaphorical

conceptualisation). Given such quantitative method as MDCA, this usage-based assumption can be fleshed out, and the way a set of emotion synonyms differ in their preferred metaphorical conceptualisations can be made more explicit.

7.3.1 Distinctive metaphors for *kebahagiaan* ‘happiness’ and *bahagia* ‘happiness’

The results of MDCA for *kebahagiaan* ‘happiness’ ($N_{\text{metaphorical}} = 685$ ⁸⁶ tokens) and the root-nominal *bahagia* ‘happiness’ ($N_{\text{metaphorical}} = 357$) are laid out in Table 7-2.

Table 7-2 Distinctive metaphors for *kebahagiaan* ‘happiness’ and *bahagia* ‘happiness’

Result(s) for <i>kebahagiaan</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A DESIRED GOAL	125	55.169	20.208	6.190e-21	3.838e-18	***
INTENSITY OF HAPPINESS IS OBJECT’S DIMENSION	22	10.733	3.867	1.357e-04	8.032e-02	ms
HAPPINESS IS A POSSESSABLE OBJECT	181	141.029	3.767	1.711e-04	1.011e-02	ns
HAPPINESS IS A MOVING OBJECT TO A GOAL	19	9.979	2.577	2.650e-03	1.000e+00	ns
Result(s) for <i>bahagia</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS (UN)MIXED SUBSTANCE	19	5.495	6.092	8.098e-07	4.891e-04	***
HAPPINESS IS BEING COVERED	15	4.121	5.254	5.576e-06	3.351e-03	**
HAPPINESS IS A PENETRATING ENTITY	5	0.589	4.300	5.013e-05	3.993e-02	*
HAPPINESS IS A LIFE CYCLE	6	0.981	3.879	1.321e-04	7.833e-02	ms

One of the features of Indonesian in the lexicalisation of emotions is that an overarching emotion concept can be denoted by words that are related paradigmatically. These words can be of two types (Musgrave, 2001, pp. 164–166). First, they are the simple root forms, such as *bahagia* ‘happy’, that can occur in nominal syntax (in addition to being used in predicative and attributive syntax) (cf. §3.2). Second, they are the nominalised derivatives with *ke-* *-an* confix attached to the (adjectively construed) roots (e.g., *kebahagiaan* ‘happiness’ is based on the root *bahagia* ‘happy’).

⁸⁶ This “N” value indicates the total tokens of metaphorical patterns/expressions for a synonym in the sample.

Feeding this formal variation into MDCA reveals that the root-nominal and its nominalised derivative may attract different metaphors. This is demonstrated in the present discussion for noun words based on the root *bahagia* as shown in Table 7-2 (Nevertheless, §7.3.3 exemplifies a case where the root and nominalised form converge to attract the same metaphor). Such variation indicates that semantically related target-domain words of different morphology, such as the root-nominal *bahagia* ‘happy; happiness’ and the nominalised derivative *kebahagiaan* ‘happiness’, can be associated with different metaphorical usage patterns in the corpus. This is in line with one of Newman and Rice’s (2006, p. 255) findings in their study of English EAT and DRINK that “inflected verb forms have their own semantic and constructional properties”, a phenomenon that they call the “*inflectional island*”. The finding that metaphor variation also exists at the level of paradigmatic morphological variation offers additional insights to previous works on metaphor-synonyms interface of EMOTION in English, which only analyse one noun per concept denoted by synonyms (e.g., *happiness* for HAPPINESS and *joy* for JOY).

The metaphor that is most distinctive for *kebahagiaan* ‘happiness’, namely HAPPINESS IS A DESIRED GOAL metaphor, reveals the desirability of *kebahagiaan*. This can be inferred from the broad semantic frame underlying most of the metaphorical patterns, namely SELF-PROPELLED MOTION TO A DESTINATION. In this frame, the Goal role, onto which *kebahagiaan* is mapped, is profiled as desirable. While HAPPINESS IS A DESIRED GOAL is also significantly distinctive for *kesenangan* ‘pleasure’ (§7.3.2), there is a difference between the two concepts when the proportion of the submappings of the metaphor is considered.

From the total tokens of the DESIRED GOAL metaphor occurring with *kebahagiaan* ‘happiness’, most of the lexical units (LUs) focus on attainment rather than on the other

aspects, such as the pursuing. The prominence of attainment is reflected in both its token (58.4% of the metaphor's 125 tokens) and type frequencies (10 different LU types). The attainment aspect is captured by lexical items denoting (i) reaching a destination/goal (e.g., *mencapai kebahagiaan* 'to reach happiness', *sampai pada kebahagiaan* 'to arrive at happiness')⁸⁷, (ii) grasping (e.g., *meraih kebahagiaan* 'to catch-hold of happiness', *kebahagiaan yang X rengkuh* 'happiness that X catches-hold of'), and (iii) finding/locating (e.g., *menemukan kebahagiaan* 'to find happiness').

The finding that the DESIRED GOAL metaphor is most distinctive for *kebahagiaan* corroborates Rajeg's analysis (2013) for *kebahagiaan* in which he chose to represent HAPPINESS in Indonesian in comparison to the other basic-level emotion categories (cf. §1.3.1). Rajeg determined that the three submappings of DESIRED GOAL metaphor are significantly associated with HAPPINESS in Indonesian compared to the other emotions. These submappings, counted as separate metaphors by Rajeg (2013, pp. 217–218), are (i) AIMING FOR EMOTION IS SEARCHING/CHASING/HUNTING AN OBJECT, (ii) EXPERIENCING EMOTION IS FINDING/GRASPING AN OBJECT, and (iii) PROCESS TO EXPERIENCE EMOTION IS JOURNEY⁸⁸. Rajeg (2013, pp. 217–218) also found that, among these metaphors, the FINDING/GRASPING metaphor has the highest token frequency (i.e., 29 tokens) compared to the SEARCHING/PURSuing (19 tokens) and the JOURNEY/MOTION ones (19 tokens).

The similar finding in my study for *kebahagiaan* further supports the overall prominence of the QUEST-related metaphors, as well as the high frequency of the attainment aspect, as a

⁸⁷ In this chapter, I only present full citation examples for metaphors that have not been discussed in the previous two chapters but giving only the metaphorical patterns for those that have appeared in the preceding two chapters.

⁸⁸ These submappings are the English translations of the following Indonesian versions, presented in the same order of the English ones in the text: (i) "MENCOBA MENJADI EMOSI ADALAH MENCARI/MENGEJAR/MEMBURU SUATU OBJEK", (ii) "MENJADI EMOSI ADALAH MENEMUKAN/MERAIH SUATU OBJEK", and (iii) "PROSES MENJADI EMOSI ADALAH PERJALANAN" (I. M. Rajeg, 2013, pp. 217–218).

prominent locus of metaphorical conceptualisation for *kebahagiaan* in Indonesian. Similar attraction for the metaphors to *happiness* in English compared to *joy* is also reported by Stefanowitsch (2004, p. 143). This suggests a cross-cultural similarity for the central metaphorical models of HAPPINESS-like concept denoted by translation equivalents between English and Indonesian (i.e., between *happiness* and *kebahagiaan* ‘happiness’). This could be due to the lasting property ascribed to *happiness* and *kebahagiaan*, where they are conceptualised as the ultimate prize one wishes to attain. This property is reflected by two of the distinctive collocates for *kebahagiaan* in Table 7-4 below, such as *abadi* ‘eternal’ and *akhirat* ‘hereafter; afterlife’.

The focus on attainment for *kebahagiaan* is also captured by HAPPINESS IS A MOVING OBJECT TO A GOAL, though not significant at the corrected level. This metaphor takes an alternating perspective from the DESIRED GOAL metaphor. The MOVING OBJECT metaphor construes the Experiencer as a Goal to which the HAPPINESS-object moves. The arrival of the moving object, which most of the metaphorical expressions focus upon, is mapped onto the attainment or onset of HAPPINESS (cf. example (7-1)).

(7-1) *dia tidak pernah mem-bayang-kan kebahagiaan seperti ini akan datang*
 3SG NEG ever AV-shadow-TR happiness be.like DEM will come
 ‘(s)he never imagines that *happiness* like this will come’ (*ind_mixed2012_1M:658767*)

A corpus-based study by Polley (2012, pp. 74–75) found that HAPPINESS IS A MOVING OBJECT, which he calls the STATIONARY-EGO metaphor, is more central for HAPPINESS in Mandarin Chinese than in English, the later of which prefers what Polley calls the EGO-MOVING metaphor, similar to Stefanowitsch’s QUEST metaphor.

Another related convergence with Rajeg’s (2013) finding is the distinctiveness of the POSSESSABLE OBJECT metaphor for *kebahagiaan*, which is not significant in this study, given

the Holm's correction. In my sample, *kebahagiaan* more frequently occurs in metaphorical expressions denoting the transferring of the possessable object (61.88%), as in *memberikan (X) kebahagiaan* 'to give (X) happiness' (based on the GIVING frame), *membawa kebahagiaan* 'to bring happiness' (CAUSED MOTION frame), and *berbagi kebahagiaan* 'to share happiness' (DISPERSAL frame), among the most frequent metaphorical patterns. In English, on the contrary, Stefanowitsch (2004, p. 145) found that POSSESSABLE OBJECT is significantly distinctive for *joy* rather than *happiness*, despite the convergent finding that this metaphor is associated with HAPPINESS (via *joy*) when contrasted with the other basic-level emotion concepts (Stefanowitsch, 2006b).

In contrast to *kebahagiaan*, the three metaphors that are strongly and significantly associated with *bahagia* 'happy; happiness' highlight the experience of *bahagia*. This is conceptualised as being covered by substance of some kind (7-2) and being penetrated, or sneaked into, by certain object or (intangible) beings (example (7-3) and (7-4)).

(7-2) *Sementara Opik di-liput-i bahagia*
 meanwhile NAME PASS-cover-APPL happy
 'Meanwhile Opik is covered/encompassed by happiness' (ind_news2012_300K:35729)

(7-3) *Rasa bahagia meny-(s)elinap dalam diri.*
 feeling happy AV-sneak.into inside self
 'Feeling of happiness sneaks into the self.' (ind_mixed2012_1M:65718)

(7-4) *Rasa bahagia yang segera me-rasuk ke dalam sukma=ku*
 feeling happy REL soon AV-enter.one's body to inside soul=1SG.POSS
 'Feeling of happiness that soon penetrates into my soul.' (ind_mixed2012_1M:38070)

The BEING COVERED, and PENETRATING ENTITY metaphors invoke intense feature of *bahagia*. The encompassing or covering of someone implies restricting the possibility for the Experiencer to move or do certain action. Meanwhile, being penetrated may suggest that the Experiencer is passive with respect to his experience of the penetrating emotion-entity. Next, the (UN)MIXED SUBSTANCE metaphor for *bahagia* ((7-5) and (7-6)) also highlights the

intensity of the experienced happiness as it seems to be intensified into a complex/blended emotional feeling with other emotions, hence, mixture of emotion-substance (Ortony & Turner, 1990, p. 326; Shaver, Schwartz, Kirson, & O'Connor, 1987, p. 1082).

(7-5) *Perasaan haru, sedih, dan bahagia ber-campur dalam diri Ji-Eun.*
 feeling emotion sad and happy MID-mix inside self NAME
 'Feeling of emotion, sadness, and happiness are mixed inside Ji-Eun's self.'
 (ind_newscrawl2011_1M:32068)

(7-6) *Se-juta perasaan bahagia mem-buncah di hati Pertiwi,*
 one-million feeling happy AV-turbid LOC liver NAME
ber-campur dengan rasa takut dan kegugupan
 MID-mix with feeling scary and nervous
 'A million of feeling of happiness becomes turbid in Pertiwi's liver, being mixed with fear and nervousness'(ind_web2012_1M:44674)

Note that there is one distinctive metaphor for *kebahagiaan* 'happiness' that highlight its extent or intensity, namely the OBJECT'S DIMENSION (e.g., *ukuran kebahagiaan* 'the measure of happiness', *tolak ukur kebahagiaan* 'the yardstick of happiness', *kebahagiaan terbesar* 'biggest/largest happiness', *kebahagiaan kecil* 'small/tiny happiness'). However, the AssocStr-based ranking of this metaphor, and its marginally significant level, suggests that it is less prominent than the DESIRED GOAL metaphor, highlighting the fact that desirability is the most distinctive feature of *kebahagiaan*. Meanwhile, the intensity-related focus is a more distinctive feature of the root-nominal *bahagia*. The list of the strongly repelled metaphors for *kebahagiaan* and *bahagia* in shown in Table 7-3.

Table 7-3 Repelled metaphors for *kebahagiaan* 'happiness' and *bahagia* 'happiness'

Result(s) for <i>kebahagiaan</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS AN (UN)VEILED OBJECT	14	39.729	-6.440	3.629e-07	2.203e-04	***
HAPPINESS IS A CONTAINED ENTITY	34	67.408	-6.099	7.959e-07	4.815e-04	***
HAPPINESS IS A SUBMERGED ENTITY	5	18.641	-4.183	6.566e-05	3.913e-02	*
HAPPINESS IS (UN)MIXED SUBSTANCE	3	10.544	-2.427	3.739e-03	1.000e+00	ns
HAPPINESS IS A RESTRAINED ENTITY	0	4.896	-2.356	4.410e-03	1.000e+00	ns
HAPPINESS IS A LIQUID IN A CONTAINER	17	29.373	-2.286	5.171e-03	1.000e+00	ns

Result(s) for *kebahagiaan*

metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A LOCATION	20	31.821	-2.001	9.974e-03	1.000e+00	ns

Result(s) for *bahagia*

metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A POSSESSABLE OBJECT	50	73.500	-2.813	1.537e-03	8.825e-01	ns
HAPPINESS IS A PHYSICAL OBJECT	0	4.416	-2.019	9.582e-03	1.000e+00	ns

It is interesting to note that metaphors evoking the intensity such as CONTAINED ENTITY, LIQUID IN A CONTAINER, and (UN)MIXED SUBSTANCE are repelled by *kebahagiaan*. The repulsion of *kebahagiaan* towards (UN)VEILED OBJECT also highlights the peripheral position of expressivity/visibility within the focused conceptualisation of *kebahagiaan*; these aspects are strongly distinctive for *keceriaan* ‘cheerfulness’ (§7.3.4) and *kegembiraan* ‘joy’ (§7.3.3). This dissociation may tie closely with the repelled metaphors for intensity, assuming the potential relationship between intense feeling and its expressivity.

In addition to analysing the conceptual metaphors, I performed MDCA for the lexical co-occurrence, or collocates, of *kebahagiaan*⁸⁹. These are words co-occurring within the span of 4 words to the right and left of the nominalised forms of the synonyms. The goal is to identify further nuances that indicate what concepts (e.g., other emotions, attitudes, descriptions, or evaluations) are strongly associated with *kebahagiaan* in the corpus. Theoretically, the concepts evoked by the distinctive collocates can operationalise Kövecses’ (2015, p. 158) idea regarding *related concepts* for certain emotions. The use of collocation data to reveal conceptual proximity and semantic prosody of an emotion is also adopted by Oster (2010) and Siepmann (2014).

⁸⁹ I limit the scope for the collocation data to the nominalised forms of the HAPPINESS synonyms for two reasons. First, they are more frequent than their corresponding root-nominal forms. Second, they are exclusively used as nominals with inherent reference function. Meanwhile, the typical usages of the root forms are attributive and predicative, rather than nominal/reference function.

Table 7-4 The 20 most distinctive, 4-window span collocates for *kebahagiaan* ‘happiness’ in the whole *Indonesian Leipzig Corpora* collection.

collocates	gloss	n	exp	assoc.str	p.binom	p.holm	dec
<i>kesejahteraan</i>	welfare; well-being	82	32.701	29.646	2.258e-30	1.646e-25	***
<i>sejati</i>	true; genuine	89	37.703	26.595	2.538e-27	1.850e-22	***
<i>mencapai</i>	to reach	87	42.704	16.944	1.136e-17	8.282e-13	***
<i>akhirat</i>	hereafter; afterlife	66	29.624	16.829	1.482e-17	1.080e-12	***
<i>kesuksesan</i>	success	42	18.467	11.562	2.745e-12	2.000e-07	***
<i>kedamaian</i>	peace	56	27.315	11.358	4.389e-12	3.198e-07	***
<i>menemukan</i>	to find; to locate	68	35.394	11.260	5.496e-12	4.005e-07	***
<i>manusia</i>	human	87	50.399	10.034	9.257e-11	6.745e-06	***
<i>hidup</i>	life	172	116.956	9.889	1.290e-10	9.401e-06	***
<i>abadi</i>	eternal	49	24.238	9.626	2.365e-10	1.723e-05	***
<i>tangga</i>	stair	37	16.928	9.191	6.447e-10	4.697e-05	***
<i>menuju</i>	to head to	45	22.314	8.829	1.483e-09	1.081e-04	***
<i>hakiki</i>	true; real; intrinsic	26	10.772	8.610	2.452e-09	1.786e-04	***
<i>dunia</i>	the world	132	88.486	8.302	4.992e-09	3.637e-04	***
<i>keselamatan</i>	safety	32	14.619	8.049	8.939e-09	6.512e-04	***
<i>kesehatan</i>	health	35	16.543	7.982	1.041e-08	7.584e-04	***
<i>meraih</i>	to catch-hold of	45	23.853	7.274	5.322e-08	3.876e-03	**
<i>umat</i>	followers of a religion	26	11.542	7.151	7.063e-08	5.144e-03	**
<i>orang</i>	people	120	82.331	6.855	1.396e-07	1.016e-02	*
<i>merasakan</i>	to feel	92	60.017	6.752	1.769e-07	1.288e-02	*

The prominent semantic spectrum emerging from the distinctive collocates is that *kebahagiaan* strongly co-occurs with a range of desirable, positive concepts. These include the notions of eternity (e.g., *abadi* ‘eternal’; *akhirat* ‘hereafter; afterlife’), intrinsic/real (e.g., *sejati* ‘true; genuine’; *hakiki* ‘true; real; intrinsic’), and well-being (e.g., *kesejahteraan* ‘welfare’; *kesuksesan* ‘success’; *kedamaian* ‘peace’; *keselamatan* ‘safety’; *kesehatan* ‘health’; *hidup* ‘life’). These positive notions may indicate that *kebahagiaan* represents the HAPPINESS-AS-A-VALUE model (e.g., Kövecses, 2015) (cf. §2.5.1) and may correlate with the distinctiveness of the DESIRED GOAL metaphor for *kebahagiaan*. These positive collocates

converge with the definition of *kebahagiaan* in the Indonesian reference dictionary (KBBI)⁹⁰: *kesenangan dan ketenteraman hidup (lahir batin); keberuntungan* ‘(the) pleasure as well as peace and quiet/tranquility of (the corporeal and spiritual/inner) life; luck’. The other distinctive collocates of *kebahagiaan*, such as *orang* ‘people’, *manusia* ‘human’, *umat* ‘a religion disciples/follower’, and *dunia* ‘the world’, seem to construe *kebahagiaan* as a property for broader entities. I argue that these distinctive co-occurrence data reflect entrenched cultural view about a HAPPINESS word in Indonesian. The following discussions show that the other HAPPINESS words in Indonesian attract a different set of metaphors and collocates, revealing a distinctive semantic spectrum in comparison to their near-synonyms.

7.3.2 Distinctive metaphors for *kesenangan* ‘pleasure’ and *senang* ‘happiness’

The results for *kesenangan* ‘pleasure’ ($N_{\text{metaphorical}} = 641$ tokens) and the root-nominal *senang* ‘happiness’ ($N_{\text{metaphorical}} = 191$) are presented in Table 7-5.

Table 7-5 Distinctive metaphors for *kesenangan* ‘pleasure’ and *senang* ‘happiness’

Result(s) for <i>kesenangan</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A DESIRED GOAL	110	51.625	15.265	5.430e-16	3.351e-13	***
HAPPINESS IS A DECEIVER	17	3.524	9.998	1.004e-10	6.166e-08	***
HAPPINESS IS FOOD	44	19.029	7.815	1.532e-08	9.345e-06	***
HAPPINESS IS A SUBJUGATOR	13	3.172	6.256	5.543e-07	3.359e-04	***
HAPPINESS IS A POSSESSABLE OBJECT	183	131.971	5.776	1.673e-06	1.009e-03	**
HAPPINESS IS A FOUNDATION (OF AN ACTION)	8	1.938	4.036	9.206e-05	5.469e-02	ms
HAPPINESS IS AN ADVERSARY	12	4.229	3.534	2.923e-04	1.710e-01	ns
HAPPINESS IS IMPEDIMENT TO MOTION	5	1.057	3.061	8.693e-04	5.033e-01	ns
HAPPINESS IS A RESOURCE	5	1.410	2.228	5.921e-03	1.000e+00	ns

⁹⁰ See <https://kbbi.kemdikbud.go.id/entri/kebahagiaan> for the entry of *kebahagiaan* in KBBI (Last access: 22 August 2018).

Result(s) for *senang*

metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A SUBMERGED ENTITY	24	5.198	9.612	2.445e-10	1.499e-07	***
HAPPINESS IS A LOCATION	28	8.873	7.136	7.317e-08	4.456e-05	***
HAPPINESS IS (UN)MIXED SUBSTANCE	13	2.940	5.289	5.141e-06	3.095e-03	**

The first point, as I have mentioned, is that HAPPINESS IS A DESIRED GOAL is also the most distinctive metaphor for *kesenangan* ‘pleasure’ as it is for *kebahagiaan* ‘happiness’, though the metaphor is most strongly associated with the latter according to its AssocStr values (15.265 for *kesenangan* vs. 20.208 for *kebahagiaan*). Despite this similar association, a finer grained difference emerges in relation to the submappings of the metaphor.

Kesenangan ‘pleasure’ most frequently occurs with metaphorical patterns denoting pursuing (64.55% of all the tokens) rather than attainment, the latter of which is more frequent for *kebahagiaan* ‘happiness’. The pursuing aspect is most frequently evoked by patterns referring to (i) searching (e.g., *mencari kesenangan* ‘to search/look for pleasure’; *kesenangan yang X cari(-cari)* ‘pleasure that X (keeps) search(ing)/look(ing) for’), followed by (ii) chasing (e.g., *mengejar kesenangan* ‘to chase for pleasure’). I argue that this specific difference reveals an asymmetry in semantic focus between these two words. The focus in talking about *kebahagiaan* in the sample mostly revolves around its attainment while *kesenangan* is talked about around its pursuit.

The distinctiveness of FOOD metaphor for *kesenangan* highlights its pleasing experience (e.g., *menikmati kesenangan* ‘to taste (of food) pleasure’, *mengecap/merasai kesenangan* ‘to taste pleasure’). Given the association of this metaphor and its semantic focus, it is intriguing to note that the Indonesian-English dictionary (Wojowasito & Wasito, 1987, p. 251; cf. Stevens & Schmidgall-Tellings, 2004) lists ‘pleasure’ as the first English equivalent of *kesenangan*. Similar semantic notion can be found from words used to define *kesenangan*

in the Indonesian reference dictionary (KBBI)⁹¹. These words include *kepuasan* ‘satisfaction; contentment’, *kenakan* ‘conviniences; easement; pleasantness’, *kebahagiaan* ‘happiness’ itself, and *kelegaan* ‘relief; at ease; relaxed’.

Nevertheless, MDCA also reveals a group of distinctive metaphors that imbue a negative valence into *kesenangan*. These metaphors include SUBJUGATOR, DECEIVER, ADVERSARY, and IMPEDIMENT TO MOTION; only the first two metaphors reach the corrected level of significance. These metaphors construct narratives concerning the undesirable attitude of experiencing *kesenangan*. I argue that negativity is the most prominent feature distinguishing *kesenangan* with its synonyms, and I focus on elaborating this idea. Collocational data in Table 7-7 is used to corroborate this argument and to hypothesise why *kesenangan* is strongly associated with metaphors highlighting its negativity.

The HAPPINESS IS A DECEIVER metaphor has been discussed in §6.4.2.2 as amongst the most lexically diverse metaphors for the domain of HAPPINESS in the Indonesian sample. This chapter shows that the kind of HAPPINESS in Indonesian that is strongly construed to be deceiving is *kesenangan* ‘pleasure’. The metaphor occurs in 20 tokens in total and 17 of these are with the word *kesenangan*. All the *ter-* static-passive lexical units of the DECEIVER metaphor occurs with *kesenangan*, indicating the helplessness, passivity, and unintentionality of the Experiencer in experiencing *kesenangan*.

Next, the HAPPINESS IS A SUBJUGATOR metaphor seems to focus on the complete control of the emotion over the Experiencer as illustrated below.

⁹¹ See <https://kbbi.kemdikbud.go.id/entri/kesenangan> for the entry of *kesenangan* in KBBI (Last access: 22 August 2018).

- (7-7) *jangan sampai kita di-per-budak oleh kesenangan.*
 Don't until 1PL PASS-CAUS-slave by pleasure
 'don't let us be *enslaved* by *pleasure*.' (ind_web2012_1M:62977)
- (7-8) *arus zaman dan massa yang men-dewa-kan kuasa dan kesenangan.*
 flow era and mass (of people) REL AV-god-CAUS authority and pleasure
 'the flow of an era and mass of people that *deify* authority and *pleasure*.'
 (ind_web2012_1M:1226)

The SUBJUGATOR metaphor is based on the SERVITUDE frame in the *MetaNet* repository. *Kesenangan*, in its collocation with the corresponding lexical units (LUs) of the frame, then maps onto the Subjugator role. This conceptualisation is similar to the SOCIAL SUPERIOR metaphor for EMOTION in general as discussed in Kövecses (2000, pp. 70–71).

The SERVITUDE frame also evokes the knowledge of social authority typically possessed by a Subjugator. This authority corresponds to the extent of control *kesenangan* has over its Experiencer. Such control can make the Subordinate obey/comply with the Subjugator, in this case, go along with the emotion (e.g., (7-9)).

- (7-9) *mereka masih suka me-laku-kan pelanggaran*
 3PL still like AV-act-CAUS violation
untuk men-(t)urut-i kesenangan panca indrya
 in.order.to AV-go.along-APPL pleasure five senses
 'they still like committing violation to *obey/comply* with the *pleasure* of the five senses'
 (ind_mixed2012_1M:189209)

Then, the HAPPINESS IS AN ADVERSARY fits into the negative narratives of the previous twos because conceptually it involves interaction between two opposing parties/sides, one of which can lose. As presented in §6.4.2.1, the metaphor is based on the PHYSICAL COMBAT frame. The focus here is on *kesenangan* to impose force over the Experiencer to lose control, which instead should be maintained by the Experiencer. Some metaphorical patterns for the metaphor include *diuji dengan kesenangan* 'to be *challenged/tested* with pleasure', *melawan/menghadapi kesenangan* 'to *fight/confront* pleasure', *menaklukkan rayuan kesenangan* 'to *make* the seduction of pleasure *surrender*'.

A related idea of control and the negative valence of being under control is captured by another distinctive metaphor, namely HAPPINESS IS IMPEDIMENT TO MOTION, which has also been discussed in §6.4.2.4. Four out of five occurrences of this metaphor with *kesenangan* evoke the RESTRAINTS frame. In this frame, *kesenangan* maps onto the Restraining_entity role (e.g., *dikendalikan oleh kesenangan* ‘to be reined back by pleasure’, *kesenangan mengendalikan/mengikat X* ‘pleasure reins back/binds X’, *memikat X pada kesenangan* ‘to decoy/ensnare X at pleasure’). In this case, the Experiencer comes under the restraining control of *kesenangan* that makes it difficult for him to take other actions.

Overall, the ADVERSARY and the DECEIVER metaphors evoke how one may give in to *kesenangan* while SUBJUGATOR and IMPEDIMENT TO MOTION metaphors highlight the consequence of what is it like to comply with *kesenangan*. The focus on control through these metaphors also capture the intensity of *kesenangan* in addition to highlighting the negative valence when experiencing pleasure. Moreover, these metaphors indicate that, in relation to the Experiencer, *kesenangan* is an external entity to confront.

Highlighting negativity is also indicated by one metaphorical expression from the HAPPINESS IS A LOCATION metaphor, which is distinctive for the root-nominal *senang* ‘happy’: *menghindari rasa senang* ‘to avoid the feeling of happiness’. Similar construal for *senang* as an intense feeling is shown by its strong association with the (UN)MIXED SUBSTANCE metaphor; all metaphorical expressions refer to the mixing substance⁹² (e.g., *EMO bercampur senang* ‘EMO be mixed with happiness’, *senang dan EMO bercampur aduk/baur* ‘happiness and EMO be intermixed’).

⁹² From the total 56 tokens of the (UN)MIXED SUBSTANCE metaphor in the sample, metaphorical expressions referring to the ‘purity’ or ‘unmixed-ness’ of the substance occur only twice and all of them with *kesenangan* ‘pleasure’: (i) *kesenangan murni* ‘pure pleasure’ and (ii) *murninya kesenangan* ‘the purity of pleasure’.

The remaining distinctive metaphor for *kesenangan* is the POSSESSABLE OBJECT metaphor, which is not significant for *kebahagiaan* ‘happiness’, given the Holm’s correction. These two words also differ in relation to the proportion of metaphorical expressions highlighting submappings of the POSSESSABLE OBJECT metaphor. For *kesenangan*, 44.26% of the tokens evoke the receiving of the Possessable_object (i.e., the onset of pleasure), which is based on the GAIN POSSESSION frame. This contrasts with the primary focus on the transferring aspect for *kebahagiaan* ‘happiness’. This suggests that when *kesenangan* is talked about via the POSSESSABLE OBJECT metaphor, there is a focus on its gaining, meanwhile the discourse around *kebahagiaan* is more frequently about causing it to someone, hence the prominence of transferring submapping.

Table 7-6 Repelled metaphors for *kesenangan* ‘pleasure’ and *senang* ‘happiness’

Result(s) for <i>kesenangan</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A CONTAINED ENTITY	16	63.078	-13.354	4.429e-14	2.728e-11	***
HAPPINESS IS AN (UN)VEILED OBJECT	8	37.177	-9.104	7.870e-10	4.817e-07	***
HAPPINESS IS A LIQUID IN A CONTAINER	6	27.487	-6.806	1.565e-07	9.514e-05	***
HAPPINESS IS A COLOUR	0	9.338	-4.461	3.457e-05	2.067e-02	*
HAPPINESS IS A LOCATED OBJECT	19	37.001	-3.477	3.335e-04	1.947e-01	ns
HAPPINESS IS A SIGN	1	8.810	-3.141	7.230e-04	4.194e-01	ns
HAPPINESS IS LIGHT	1	7.576	-2.611	2.449e-03	1.000e+00	ns
HAPPINESS IS A DRAWING	1	7.224	-2.461	3.457e-03	1.000e+00	ns
HAPPINESS IS (UN)MIXED SUBSTANCE	3	9.867	-2.164	6.854e-03	1.000e+00	ns
Result(s) for <i>senang</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A CONTAINED ENTITY	7	18.795	-2.853	1.401e-03	8.058e-01	ns
HAPPINESS IS A DESIRED GOAL	5	15.383	-2.756	1.753e-03	1.000e+00	ns
HAPPINESS IS A POSSESSABLE OBJECT	24	39.324	-2.300	5.008e-03	1.000e+00	ns

The data in Table 7-6, especially for *kesenangan* ‘pleasure’, accentuate most clearly how it differs with the remaining HAPPINESS words to be discussed, and *vice versa*. In addition, *kesenangan* and *senang* appears to be different in usage. According to the AssocStr values,

senang strongly repels (though not significant at the corrected levels) the DESIRED GOAL and POSSESSABLE OBJECT metaphors, which are strongly distinctive for *kesenangan*. *Kesenangan* exhibits convergence with *kebahagiaan* ‘happiness’ in terms of their dissociation with the HAPPINESS IS A CONTAINED ENTITY, HAPPINESS IS A LIQUID IN A CONTAINER, HAPPINESS IS A COLOUR, and HAPPINESS IS AN (UN)VEILED OBJECT metaphors. Similarly, the root form of *senang* also has the CONTAINED ENTITY metaphor ranked as the most strongly repelled given its AssocStr value. This data reflects how the lexical field of HAPPINESS may be distinguished according to the metaphorical association of the concept’s lexical manifestations. I shall now discuss the distinctive collocates for *kesenangan* in Table 7-7.

Table 7-7 The 20 most distinctive, 4-window span collocates for *kesenangan* ‘pleasure’ in the whole Indonesian Leipzig Corpora collection.

collocates	gloss	n	exp	assoc.str	p.binom	p.holm	dec
<i>duniawi</i>	worldly; earthly	52	10.298	28.818	1.520e-29	1.108e-24	***
<i>pribadi</i>	personal	30	5.994	16.702	1.985e-17	1.446e-12	***
<i>mencari</i>	to search; to look for	55	17.522	15.757	1.748e-16	1.274e-11	***
<i>kenikmatan</i>	pleasure; enjoyment	37	11.835	10.789	1.624e-11	1.184e-06	***
<i>hobi</i>	hobby	14	2.306	10.278	5.277e-11	3.845e-06	***
<i>nafsu</i>	lust	19	3.996	10.114	7.689e-11	5.603e-06	***
<i>semata</i>	simply; merely	14	2.613	8.756	1.756e-09	1.279e-04	***
<i>keuntungan</i>	profit	12	2.152	7.934	1.165e-08	8.488e-04	***
<i>kepentingan</i>	interest; concern	13	2.613	7.464	3.438e-08	2.504e-03	**
<i>seksual</i>	sexual	10	1.691	7.157	6.964e-08	5.072e-03	**
<i>menikmati</i>	to taste; to relish	42	18.291	7.136	7.312e-08	5.326e-03	**
<i>menunda</i>	to delay; to postpone	8	1.230	6.507	3.115e-07	2.268e-02	*
<i>kebutuhan</i>	needs	10	1.998	5.873	1.341e-06	9.762e-02	ms
<i>mengejar</i>	to chase; to run after	17	5.072	5.844	1.431e-06	1.042e-01	ns
<i>prinsip</i>	principle	8	1.383	5.616	2.421e-06	1.762e-01	ns
<i>mendapat</i>	to get; to receive	22	7.993	5.521	3.016e-06	2.196e-01	ns
<i>berdasarkan</i>	to be founded/based on	10	2.152	5.394	4.040e-06	2.941e-01	ns
<i>hawa</i>	air	9	1.844	5.171	6.744e-06	4.908e-01	ns
<i>waktu</i>	time	18	6.302	4.896	1.270e-05	9.242e-01	ns
<i>dosa</i>	sin	6	0.922	4.880	1.319e-05	9.594e-01	ns

Some of the distinctive collocates of *kesenangan* provide further support for the negative contour assigned to *kesenangan*, as previously inferred from the distinctive metaphors. To begin with the most distinctive collocate, namely *duniawi* ‘wordly; earthly’, everything related to it is conceived as secular and tends to be dispreferred over the divinity, incorporealism, or eternity, which is prescribed by a certain religious view. A negative nuance may also be evoked by the other worldly-related collocates, such as *nafsu* ‘lust’, *seksual* ‘sexual’, *kebutuhan* ‘needs’, and *dosa* ‘sin’. This profile is different from the positive nuances of *kebahagiaan* as conveyed by its distinctive collocates (cf. Table 7-4).

The word *hawa* ‘air’ in Table 7-7 is part of an established compound in Indonesian with the word *nafsu* ‘lust’, that is *hawa nafsu* ‘lust, lit. The air of the lust’. There are 9 tokens for which *hawa* collocates with *kesenangan* within the span of four words to the left and right. Upon inspecting these tokens, there is only one occasion in which *hawa* does not collocate with *nafsu*, but appears alone indicating its homonymy with *hawa* meaning ‘female’ (the antonym for *Adam* ‘male; lit. Adam’, hence another common phrase *Kaum Adam dan Hawa* ‘Male and Female group; lit Adam and Eve group’).

Another top collocate for *kesenangan* is *pribadi* ‘personal; private’, indicating the self-centredness of *kesenangan* compared to *kebahagiaan*, which is more about wider audience (e.g., *orang* ‘person’, *manusia* ‘human’). This ‘personal/general-audience’ feature will also be shown to be one of the semantic benchmarks distinguishing *kesenangan* ‘pleasure’ with the remaining HAPPINESS synonyms discussed in the thesis.

7.3.3 Distinctive metaphors for *kegembiraan* ‘joy’ and *gembira* ‘excitement’

Semantic foci of the distinctive metaphors for *kegembiraan* ‘joy’ ($N_{\text{metaphorical}} = 671$) and the root-nominal *gembira* ‘excitement’ ($N_{\text{metaphorical}} = 79$) revolve around intensity, control, and

expressivity/visibility (Table 7-8). This is in contrast especially to *kebahagiaan* ‘happiness’, which focus on the desirability/aspiration indicated by its most distinctive metaphor, namely HAPPINESS IS A DESIRED GOAL.

Table 7-8 Distinctive metaphors for *kegembiraan* ‘joy’ and *gembira* ‘excitement’

Result(s) for <i>kegembiraan</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A LIQUID IN A CONTAINER	67	28.773	11.824	1.501e-12	9.231e-10	***
HAPPINESS IS A SONG	6	1.291	3.634	2.320e-04	1.367e-01	ns
HAPPINESS IS AN (UN)VEILED OBJECT	60	38.917	3.583	2.611e-04	1.530e-01	ns
HAPPINESS IS A FORCEFUL BODY OF WATER	13	5.349	3.005	9.890e-04	5.717e-01	ns
Result(s) for <i>gembira</i>						
metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS (UN)MIXED SUBSTANCE	7	1.216	3.682	2.078e-04	1.226e-01	ns
HAPPINESS IS AN (UN)VEILED OBJECT	14	4.582	3.610	2.453e-04	1.442e-01	ns
HAPPINESS IS A DISEASE	3	0.282	2.604	2.487e-03	1.000e+00	ns

The focus on intensity, control, and expressivity is elaborated by the submappings of LIQUID IN A CONTAINER metaphor, which is significantly distinctive only for *kegembiraan* ‘joy’. Two submappings are dominant. First, 56.72% of the tokens consists of expressions evoking the RELEASE LIQUID frame, which is used to convey the expression of uncontrolled internal feeling, hence the submapping EXPRESSION OF HAPPINESS IS RELEASED LIQUID. This submapping is also the most productive in comparison to the others since it is expressed by eight different lexical unit (LU) types (i.e., 66.67% of all types for the metaphor occurring with *kegembiraan*). The two most frequent metaphorical patterns of the submapping are *luapan kegembiraan* ‘(the) overflow of joy’ and *kegembiraan terpancar* ‘joy is spurted’. The second pattern occurring with *ter-* passive prefix also indicates the unintentionality, hence having no control, over expressing the feeling.

The second dominant submapping is INTENSIFIED HAPPINESS IS HEATED LIQUID (37.31%), which is based on the HEATED LIQUID frame. The most frequent metaphorical pattern is

meluapkan kegembiraan ‘to boil over joy; lit. to cause joy to boil over’. Unlike the RELEASE LIQUID frame, the HEATED FLUID-based submapping is only evoked by two distinct LUs from the metaphorical patterns: *meluapkan* ‘to cause to boil over’ (a causative transitive verb) and *meluap(-luap)* ‘to (keep) boil(ing) over’ (an intransitive verb).

The high frequency of these submappings, and more generally the distinctive association of LIQUID IN A CONTAINER with *kegembiraan*, informs the discussion in §5.4.6. Namely, the prominence of the RELEASED LIQUID and HEATED LIQUID submappings for the whole HAPPINESS domain is contributed by the highest proportion of the metaphor to occur with *kegembiraan* (42.95%) rather than with the remaining nine synonyms. From a methodological perspective, the selection of target-domain lexical items can influence the metaphors that are identified, as well as their relative prominence. This is true in the study of emotion concepts but also potentially other target domains.

Given the distinctiveness of LIQUID IN A CONTAINER for *kegembiraan* ‘joy’, *kegembiraan* exhibits a similar metaphorical profile to *joy* in English, which is strongly associated to the intensity-related submappings of the LIQUID IN A CONTAINER metaphor (Stefanowitsch, 2004, 2006b). Stefanowitsch (2006b, pp. 98–100), for instance, found that *joy* and *happiness* do not significantly differ in their frequencies in metaphorical expressions evoking the generic LIQUID IN A CONTAINER metaphor, but they do in the submappings of this metaphor: *joy* occurs significantly more frequently in metaphorical expressions evoking the fullness/overflowing container submapping but less frequent for *happiness*, indicating the more intense quality of *joy*. It is intriguing to note that *kegembiraan* is rendered firstly as ‘joy’ (followed by ‘cheerfulness’) in the comprehensive Indonesian-English dictionary used for this thesis (Stevens & Schmidgall-Tellings, 2004, p. 311). This finding for *kegembiraan*

could provide another evidence for the cross-cultural convergence of metaphorical profiles for translation equivalents, especially in the lexical field of HAPPINESS concept (see §7.3.1 for similar discussion on *kebahagiaan* ‘happiness’ and *happiness*).

Related to the LIQUID IN A CONTAINER is the distinctiveness of the (UN)MIXED SUBSTANCE metaphor for the root-nominal *gembira* ‘excited; enthusiastic’. It appears that the root-nominals of the HAPPINESS synonyms so far tend to be associated with an intense profile, given that their coherent attraction to the SUBSTANCE metaphor and that all their metaphorical patterns refer to mixing emotion-substance showing intensified emotional experience (cf. (7-10) and (7-11) for *gembira*). From a linguistic perspective, these findings point to some of the conventional metaphorical collocations for a set of synonymous emotion concepts lexicalised in Indonesian as root forms occurring in nominal syntax.

(7-10) *Dengan rasa gembira ber-campur prihatin*
 with feeling excited MID-mix apprehension
kita mem-per-ingat-i hut ke-62 kemerdekaan Republik Indonesia.
 1PL AV-CAUS-remember-TR anniversary 62nd independence republic Indonesia
 ‘with feeling of excitement mixed with apprehension, we celebrate/commemorate the 62nd anniversary of the independence of the Republic of Indonesia.’
 (ind_newscrawl2012_1M:807030)

(7-11) *Noorca dan Rayni men-(t)egas-kan rasa sedih dan gembira ber-campur aduk*
 NAME and NAME AV-firm-CAUS feeling sad and excited MID-intermix
 ‘Noorca and Rayni assert that the feeling of sadness and excitement are intermixed’
 (ind_news2008_300K:77424)

The DISEASE metaphor attracted to *gembira* also seems to focus on its intensity, especially its effect on those within its surroundings. This is illustrated below.

(7-12) *mereka akan di-jangkit-i hiporia rasa gembira tanpa sebab*
 3PL FUT PASS-infectious-TR euphoria feeling excited without cause
 ‘they will be infected/afflicted with euphoria of excitement without any reasons’
 (ind_newscrawl2011_1M:406936)

- (7-13) *Dan rasa gembira bisa men-(t)ular* *bagai virus*
 And feeling excited can AV-infect as.if virus
 ‘And excitement can infect as if virus’ (*ind_web2012_1M:353009*)

Another intensity-related, distinctive metaphor for *kegembiraan*, though not reaching the corrected significance level, is HAPPINESS IS A FORCEFUL BODY OF WATER. One may also group this metaphor under a broader metaphor proposed in the literature, namely EMOTION IS NATURAL FORCE (Kövecses, 2000, pp. 71–72). The linguistic expressions of the metaphor offer quite a specific image about intensity, including passivity of the Experiencer. The pattern *larut dalam kegembiraan* ‘to be washed-and-drawn away inside joy’ illustrated in (7-14) is the most frequent one for the metaphor. The metaphor may also involve the more generic Location Event-Structure Metaphor, given the emotion is understood as a LIQUID-LOCATION surrounding the Experiencer.

- (7-14) *jangan terlalu larut dalam kegembiraan atas kematian Osama*
 don't too be.washed.and.drawn.away inside joy on death NAME
 ‘don't be too carried away inside joy over Osama's death’ (*ind_news2011_300K:80519*)

- (7-15) *ia hanyut dalam kegembiraan bersama sang anak*
 3SG be.washed.away inside joy together.with DEM.HON child
 ‘(s)he is washed/drifted away inside joy with h(is/er) child’ (*ind_web2011_300K:138078*)

- (7-16) *saat warga tenggelam dalam kegembiraan perayaan hari kemerdekaan*
 when resident sink;drown inside joy celebration day independence
 ‘when the residents are drown/sank inside the joy of the celebration of the independence day’ (*ind_newscrawl2011_1M:848271*)

The verbal LUs in these examples evoke motion through water or aquamotion, especially an uncontrolled and forceful one, that may be viewed as a subcase of the MOTION frame. The uncontrolled and forceful aquamotion undergone by the Mover may be due to the power of the body of the water in which the motion unfolds. This kind of knowledge is then mapped to construe the helplessness of the Experiencer when experiencing *kegembiraan* ‘joy’. The remaining distinctive metaphors for *kegembiraan* include HAPPINESS IS A SONG and HAPPINESS IS AN (UN)VEILED OBJECT. The following extracts illustrate the former.

- (7-17) *ter-dengar setiap malam kidung kegembiraan di-lagu-kan*
 PASS-hear every night ballad; chant joy PASS-song-CAUS
 ‘(it can be) overheard every night that the *ballad* of *joy* is *chanted*’
 (ind_web2011_300K:163254)
- (7-18) *hati yang sedih tetap dapat me-nyanyi-kan lagu kegembiraan*
 liver REL sad still can AV-sing-APPL song joy
 ‘the sad one (lit. liver) can still *sing* the *song* of *joy* (ind_mixed2012_1M:137984)

I propose that the SONG metaphor foregrounds the expressivity of *kegembiraan* ‘joy’ since singing a song is an expressive activity. A similar idea is conveyed by HAPPINESS IS AN (UN)VEILED OBJECT, which has been discussed in §5.4.8. This metaphor is strongly distinctive for both the nominalised and root-nominal forms of *gembira*, according to the metaphor’s AssocStr values. This finding further illustrates a coherent degree of conceptualisation between *gembira* and *kegembiraan*, as previously shown from their distinctiveness to the SUBSTANCE-related metaphors.

For the HAPPINESS IS AN (UN)VEILED OBJECT, the dominant submapping for the nominalised (61.67% of the metaphor’s tokens) and the root-nominal (42.86%) is the same, namely EXISTENCE OF HAPPINESS IS VISIBILITY OF AN OBJECT (e.g., *raut gembira tampak dari raut wajah Sri* ‘whittle of excitement be *visible* from Sri’s face’). The inability to conceal the feeling is further evidenced by the expressions evoking the least frequent submapping for the two words, namely REGULATING HAPPINESS IS HIDING AN OBJECT (e.g., *menyembunyikan rasa gembira* ‘to *hide* the feeling of excitement’). From the total ten tokens of the HIDING submapping across the two words, all evoked by the verb *menyembunyikan* ‘to hide’, 90% of the use of the verb are negated (e.g., *tidak dapat menyembunyikan rasa gembira* ‘cannot *hide* X’s feeling of excitement’), suggesting inability to suppress the emotional feeling. Now we turn to Table 7-9 that shows the strongly repelled metaphors for *kegembiraan* and *gembira*.

Table 7-9 Repelled metaphors for *kegembiraan* ‘joy’ and *gembira* ‘excitement’

Result(s) for <i>kegembiraan</i>							
metaphors	n	exp	assoc.str	p.binom	p.holm	dec	
HAPPINESS IS A DESIRED GOAL	6	54.042	-17.855	1.398e-18	8.652e-16	***	
Result(s) for <i>gembira</i>							
metaphors	n	exp	assoc.str	p.binom	p.holm	dec	
HAPPINESS IS A POSSESSABLE OBJECT	5	16.265	-2.979	1.048e-03	6.049e-01	ns	
HAPPINESS IS A DESIRED GOAL	0	6.363	-2.794	1.608e-03	9.215e-01	ns	

The DESIRED GOAL metaphor is equally repelled by the nominalised and root-nominal forms. It indicates a general tendency of dissociation of the metaphor in construing the concepts lexicalised by *kegembiraan* and *gembira*. Meanwhile, the strongly attracted metaphors, especially for *kegembiraan* ‘joy’, are those that are strongly repelled by *kesenangan* ‘pleasure’ (cf. Table 7-6) and *kebahagiaan* ‘happiness’ (Table 7-3), according to the AssocStr values. Table 7-10 now displays the MDCA-based, distinctive collocational analysis for *kegembiraan* ‘joy’.

Table 7-10 The 20 most distinctive, 4-window span collocates for *kegembiraan* ‘joy’ in the whole Indonesian Leipzig Corpora collection.

collocates	gloss	n	exp	assoc.str	p.binom	p.holm	dec
<i>luapan</i>	an overflow	24	4.756	13.603	2.494e-14	1.818e-09	***
<i>meluapkan</i>	to boil sth. over	21	3.835	13.269	5.377e-14	3.919e-09	***
<i>menyatakan</i>	to state; to express	17	4.142	7.592	2.559e-08	1.864e-03	**
<i>pendukung</i>	supporter	15	3.682	6.701	1.993e-07	1.451e-02	*
<i>menyambut</i>	to receive; to welcome	21	6.904	6.162	6.883e-07	5.011e-02	ms
<i>larut</i>	be washed-and-drawn away	14	3.682	5.774	1.683e-06	1.225e-01	ns
<i>kesedihan</i>	sadness	19	6.597	5.197	6.351e-06	4.622e-01	ns
<i>terlihat</i>	be visible; can be seen	22	8.591	4.907	1.238e-05	9.007e-01	ns
<i>menyaksikan</i>	to witness	10	2.455	4.628	2.357e-05	1.000e+00	ns
<i>masyarakat</i>	society	25	11.046	4.402	3.963e-05	1.000e+00	ns
<i>kubu</i>	camp; party	7	1.381	4.268	5.400e-05	1.000e+00	ns
<i>warga</i>	residents	16	5.830	4.158	6.955e-05	1.000e+00	ns
<i>gol</i>	goal	5	0.767	4.071	8.499e-05	1.000e+00	ns
<i>tim</i>	team	12	3.835	3.910	1.231e-04	1.000e+00	ns
<i>dirasakan</i>	to be felt	22	9.819	3.875	1.333e-04	1.000e+00	ns
<i>paskah</i>	Easter	6	1.227	3.560	2.755e-04	1.000e+00	ns

collocates	gloss	n	exp	assoc.str	p.binom	p.holm	dec
<i>pemain</i>	player	10	3.068	3.522	3.003e-04	1.000e+00	ns
<i>laga</i>	war; battle	5	0.921	3.352	4.448e-04	1.000e+00	ns
<i>belanda</i>	The Netherlands	4	0.614	3.257	5.540e-04	1.000e+00	ns
<i>dihati</i>	in the liver	4	0.614	3.257	5.540e-04	1.000e+00	ns
<i>gawang</i>	net/goal (of soccer)	4	0.614	3.257	5.540e-04	1.000e+00	ns

The data in this table reveal that some of the distinctive collocates are LUs expressing the distinctive metaphors for *kegembiraan* (e.g., *luapan* ‘overflow’, *larut* ‘be washed-and-drawn away’, *terlihat* ‘be visible’). Other collocates are quite revealing, especially in supporting the argument that the distinctive metaphors for *kegembiraan* focus on the notion of intensity and expressivity, in addition to showing the collective experience of *kegembiraan* compared to the more private realm of *kesenangan* ‘pleasure’ (cf. Table 7-7). Words such as *pendukung* ‘supporter’, *kubu* ‘camp; party’, *tim* ‘team’, and *Belanda* ‘The Netherlands’ suggest the association of *kegembiraan* with general/wider Experiencer as in *kebahagiaan* ‘happiness’ (Table 7-4). However, for *kegembiraan*, the audience seems to be within a specific setting, specifically events related to sporting competitions that can involve high tension and feeling, and that where the stake for expressivity and euphoric situation are high (consider also the word *menyatakan* ‘to state; to express’ in Table 7-10). This specific competition-related setting is further supported by such collocates as *gol* ‘goal’, *pemain* ‘player’, and *laga* ‘war; battle; match’. A further concept emerging from the data was the distinctiveness of *kesedihan* ‘sadness’ with *kegembiraan*, indicating their close, antonymous relationship.

7.3.4 Distinctive metaphors for *keceriaan* ‘cheerfulness’

Table 7-11 provides the MDCA results for *keceriaan* ‘cheerfulness; lit. purity’ ($N_{\text{metaphorical}} = 746$). The absence of the root-nominal *ceria* ‘cheerful; lit. pure, clean’ ($N_{\text{metaphorical}} = 39$) from Table 7-11 is due to the AssocStr values of its distinctive metaphors being below the

cut-off point used for the discussion, that is, $\text{AssocStr} \geq 2$. The same holds for the root of *keriangan* ‘cheerfulness’ (cf. Table 7-14 in §7.3.5).

Table 7-11 Distinctive metaphors for *keceriaan* ‘cheerfulness’

metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A CONTAINED ENTITY	122	73.411	8.785	1.640e-09	1.002e-06	***
HAPPINESS IS AN EMBELLISHMENT	9	2.461	4.116	7.659e-05	4.557e-02	*
HAPPINESS IS A COLOUR	22	10.868	3.385	4.117e-04	2.400e-01	ns
HAPPINESS IS AN (UN)VEILED OBJECT	64	43.267	3.318	4.809e-04	2.799e-01	ns
INTENSITY OF HAPPINESS IS QUANTITY OF OBJECT	40	28.093	2.005	9.879e-03	1.000e+00	ns

Keceriaan appears to be strongly associated with metaphors evoking intensity as well as expressivity. The CONTAINED ENTITY and QUANTITY OF OBJECT metaphors have been discussed respectively in §5.4.5 and §5.4.7 as parts of the top-10 metaphors with high token frequencies for the overarching HAPPINESS domain in Indonesian. This chapter reveals that the predominance of these metaphors in the database is triggered by their usage-bias towards a set of words rather than being equally distributed across all words. These two metaphors are used more frequently to foreground the intense experience of *keceriaan*. For the CONTAINED ENTITY, 82.79% of the tokens consist of metaphorical patterns referring to the fullness of the contained emotion. These patterns consist of three different LU types, namely *penuhi (dengan) keceriaan* ‘to be full with/of cheerfulness’, *keceriaan memenuhi X* ‘cheerfulness fills X up’, and *keceriaan menyesaki X* ‘X be jam-packed with cheerfulness; cheerfulness fills X up’. Only 0.82% (i.e. one token) indicates the exploding container, suggesting the inability to held back the feeling, hence its expression (*keceriaan yang meledak* ‘cheerfulness that explodes’).

Intensity is also indicated by the submappings of the less strongly distinctive metaphor, namely INTENSITY OF HAPPINESS IS QUANTITY OF OBJECT. The predominant submapping broadly indicates more quantity of object (77.5% of the total tokens of the metaphor with

keceriaan). This further subsumes two events: (i) adding to the quantity of an object (62.5%), which could map onto the intensification process of *keceriaan*, and (ii) the state of an object in large quantity (15%), which could map onto the intense state of *keceriaan*. The second of these is expressed by six different lexical unit (LU) types compared to only one for the first (i.e., *tambah(kan) keceriaan* ‘to add cheerfulness’). The metaphorical patterns containing LUs indicating large quantity include *berjuta/seribu/banyak keceriaan* ‘millions/thousands of/many cheerfulness’, *keceriaan menumpuk* ‘cheerfulness piles-up’, among others. The predominant submapping of QUANTITY metaphor coheres with the fullness submapping of the CONTAINED ENTITY metaphor in conveying intensity, given the fullness of a content correlates with large amount of content in relation to the capacity of the holding container.

What also stands out in Table 7-11 is, I argue, the more eloquent way the expressivity of *keceriaan* ‘cheerfulness’ is construed. This is conveyed by the EMBELLISHMENT and COLOUR metaphors. For COLOUR, the metaphorical patterns most frequently express the experience of *keceriaan* as being coloured (59.09% of the total tokens). However, the metaphorical patterns are based on only one type of lexical unit (cf. (7-19)). Being coloured can then be contrasted with being faded of colour, which can be mapped onto inexperience, or ceasing, of cheerfulness (7-20).

(7-19) *Keceriaan me-warna-i wajah siswa-siswa yang lulus ujian nasional*
 cheerfulness AV-colour-TR face student~PL REL pass examination national
 ‘Cheerfulness colours the face of the students who passed the national examination’
 (ind_newscrawl2012_IM:756209)

(7-20) *Namun hal ini tidak me-luntur-kan keceriaan setiap peserta*
 but matter DEM NEG AV-faded-CAUS cheerfulness every participant
 ‘However, this thing does not fade the cheerfulness of every participants’ (IWaC via
 Sketch Engine:ID54245)

In addition, the liveliness aspect of *keceriaan* is captured by the metaphorical patterns denoting the vibrancy of colours (cf. (7-21) to (7-23)).

(7-21) *warna-warni keceriaan*
 colour~PL cheerfulness
 ‘the multicolour/colourfulness of cheerfulness’ (*Kompas via WebCorp:86*)

(7-22) *keceriaan kembali me-rona*
 cheerfulness return AV-colour
 ‘cheerfulness is again blushing (lit. generate colour)’ (*IWaC via Sketch Engine:ID39137*)

(7-23) *keceriaan juga semakin marak*
 cheerfulness also increasingly striking (of colour)
 ‘cheerfulness is also increasingly striking’ (*Koran Jakarta via WebCorp:48*)

Similar visual tone of *keceriaan* is conveyed via the EMBELLISHMENT metaphor. Instead of being coloured, experience of *keceriaan* is conceptualised as being embellished. The most frequent metaphorical pattern (i.e., six tokens) is *keceriaan menghiasi X* ‘cheerfulness embellishes X’, with the “X” slot predominantly filled by the noun *wajah* ‘face’ (cf. Figure 5-1 in §5.5).

These two metaphors highlight the expressivity and vibrancy of *keceriaan* through their external vividness and visual image, which are different from *kegembiraan* ‘joy’ that mostly relies on the image of overflowing liquid out of a container. It is probable that the metaphors’ strong association with *keceriaan* is related to the original meaning of the Sanskrit-based root *ceria*, namely ‘pure; clean; clear’ (Jones, 2007, p. 49; Stevens & Schmidgall-Tellings, 2004, p. 198). This original meaning of *ceria* invites, and potentially support, the expressive construal of its nominalised form *keceriaan*. Be that as it may, both *keceriaan* and *kegembiraan* are equally strongly associated with the (UN)VEILED OBJECT metaphor (AssocStr = 3.318 for *keceriaan* and AssocStr = 3.583 for *kegembiraan*). The metaphor also focuses on the idea of expressivity and regulation/control of the feeling.

It should be mentioned that there are two distinctive metaphors for the nominal root *ceria* that are also distinctive for the nominalised form *keceriaan*. They are HAPPINESS IS A COLOUR (N = 3, AssocStr = 1.713, dec = ns) and HAPPINESS IS A CONTAINED ENTITY (N = 9, AssocStr = 1.786, dec = ns). This further indicates that, despite the lexical variation, there can be a tendency of similar usages and construal between root-nominal *ceria* and *keceriaan*, as has already been shown between the root and nominalised forms based on the lexeme *gembira* in §7.3.3.

Looking at Table 7-12, *keceriaan* significantly repels the DESIRED GOAL metaphor, distinguishing it from the distinctive metaphorical construal of *kebahagiaan* ‘happiness’ and *kesenangan* ‘pleasure’.

Table 7-12 Repelled metaphors for *keceriaan* ‘cheerfulness’

metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A DESIRED GOAL	10	60.082	-16.982	1.042e-17	6.440e-15	***
INTENSITY OF HAPPINESS IS OBJECT’S DIMENSION	3	11.688	-2.886	1.301e-04	7.496e-01	ns

The fact that *keceriaan* also repels OBJECT’S DIMENSION evoking an intensity interpretation does not undermine the word’s association with other metaphors highlighting similar quality. It is argued that the intensity of *keceriaan* is captured using different forms of metaphorical patterns that evoke certain semantic frames, such as OBJECT QUANTITY that is distinctive for *keceriaan*, rather than patterns evoking OBJECT’S DIMENSION frame. This is reflected by the most frequent pattern indicating the concept of OBJECT QUANTITY, that is *menambah keceriaan* ‘to add cheerfulness’ (19 tokens), compared to the three tokens for OBJECT’S DIMENSION occurring with *keceriaan*. Let us now consider the distinctive collocates of *keceriaan* in Table 7-13.

Table 7-13 The 20 most distinctive, 4-window span collocates for *keceriaan* ‘cheerfulness’ in the combined data sets (*Indonesian Leipzig Corpora*, *IWaC Sketch Engine*, and *WebCorp*)⁹³.

collocates	gloss	n	exp	assoc.str	p.binom	p.holm	dec
<i>anak-anak</i>	children; kids	91	19.123	42.698	2.003e-43	1.460e-38	***
<i>penuh</i>	be full	119	46.831	21.976	1.057e-22	7.707e-18	***
<i>mengembalikan</i>	to return; to give back	19	3.122	12.487	3.256e-13	2.372e-08	***
<i>semangat</i>	enthusiasm	25	6.374	9.732	1.852e-10	1.350e-05	***
<i>masa</i>	period; time	31	9.366	9.502	3.151e-10	2.296e-05	***
<i>wajah</i>	the face	37	13.269	8.653	2.222e-09	1.619e-04	***
<i>menambah</i>	to add	20	5.203	7.721	1.902e-08	1.385e-03	**
<i>sekolah</i>	school	13	2.602	7.016	9.638e-08	7.019e-03	**
<i>anak</i>	child	39	16.391	6.901	1.255e-07	9.142e-03	**
<i>kesegaran</i>	freshness	7	0.911	6.200	6.304e-07	4.590e-02	*
<i>lebanon</i>	Lebanon	7	0.911	6.200	6.304e-07	4.590e-02	*
<i>warna</i>	colour	12	2.602	5.972	1.067e-06	7.765e-02	ms
<i>tetap</i>	to remain; to keep on	17	5.203	5.412	3.872e-06	2.819e-01	ns
<i>suasana</i>	situation; atmosphere	22	8.195	5.115	7.672e-06	5.583e-01	ns
<i>terpancar</i>	be spurted out	22	8.326	4.989	1.026e-05	7.463e-01	ns
<i>mewarnai</i>	to colour	10	2.342	4.652	2.228e-05	1.000e+00	ns
<i>pertunjukan</i>	show	5	0.650	4.429	3.725e-05	1.000e+00	ns
<i>korban</i>	victim	7	1.301	4.278	5.269e-05	1.000e+00	ns
<i>lebaran</i>	Ramadhan	7	1.301	4.278	5.269e-05	1.000e+00	ns
<i>menghiasi</i>	to embellish	7	1.301	4.278	5.269e-05	1.000e+00	ns

Among the interesting findings are the distinctiveness of *anak(-anak)* ‘child(ren)’ for *keceriaan*. This may evoke the innocent or pure sense of *keceriaan*. The presence of the metaphorical collocate *mengembalikan* ‘to return/give back’ may relate to *korban* ‘victims’, who may lose their cheerfulness. Other distinctive collocates also indicate the associated setting for *keceriaan*, such as *sekolah* ‘school’, *pertunjukan* ‘(a) show’, and *lebaran* ‘Ramadhan’. These settings foreground the social characteristics of *keceriaan* and suggests a collective experience of *keceriaan* compared to *kesenangan* ‘pleasure’, which is more

⁹³ As explained in Chapter 3, the nominalised *ke-* *-an* forms for *ceria* and *riang* occur in a very low frequency in the whole *Indonesian Leipzig Corpora* compared to the *ke-* *-an* forms for the other synonyms. Additional data for these forms were then culled from the *IWaC* of *Sketch Engine* and ten online Indonesian newspapers via *WebCorp*.

self-centred. Affective-related collocates for *keceriaan* include *kesegaran* ‘freshness’ and *semangat* ‘enthusiasm’, the latter of which can support the proposed argument for the liveliness, intense, and vibrancy of *keceriaan* ‘cheerfulness’.

7.3.5 Distinctive metaphors for *keriangan* ‘cheer(fullness)’

As already mentioned, this section only discusses the distinctive metaphors for the nominalised form *keriangan* ‘cheer(fullness); happiness; joy’ ($N_{\text{metaphorical}} = 217$) (cf. Table 7-14). The distinctive metaphors for the root-nominal *riang* ‘very happy; joyous; glad’ ($N_{\text{metaphorical}} = 12$) are filtered out given the AssocStr values are below the set threshold of 2 for the discussion. Also, note that both *keriangan* and *riang* have the least tokens for metaphorical patterns compared to the remaining synonyms. For this reason, some of the results need to be interpreted with caution.

Table 7-14 Distinctive metaphors for *keriangan* ‘cheer(fullness)’

metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A CONTAINED ENTITY	43	21.354	4.913	1.223e-05	7.338e-03	**
HAPPINESS IS FIRE	5	0.656	3.590	2.572e-04	1.510e-01	ns
HAPPINESS IS A DRAWING	9	2.446	3.234	5.830e-04	3.387e-01	ns
HAPPINESS IS A BUILDING	5	1.074	2.474	3.356e-03	1.000e+00	ns

Overall, *keriangan* has similar intense and expressive profiles to *kegembiraan* ‘joy’ and *keceriaan* ‘cheerfulness’. The intensity of *keriangan* can be inferred from its strong association with the CONTAINED ENTITY metaphor, which is also distinctive for *keceriaan*. *Keriangan* most frequently collocates with one lexical unit (LU) type referring to fullness of the Content in the following metaphorical pattern: ***penuh*** (*dengan*) *keriangan* ‘to be full of(/with) cheer(fullness)’ (40 tokens). This salient pattern reveals that *keriangan* is prominently talked about in terms of its intense state (i.e., being full of it). The less strongly

distinctive metaphors for *keriangan* that focus on its intensity is the FIRE metaphors (cf. (7-24) and (7-25)).

(7-24) *Keriangan ber-tambah hangat saat seorang misterius ... naik pentas*
 cheerfulness MID-add warm when someone mysterious get.on stage
 ‘Cheerfulness gets warm(er) when someone mysterious ... takes on the stage’ (*IWaC via Sketch Engine:ID38503*)

(7-25) *Kunjungan Obama ke Indonesia memantik keriangan banyak orang*
 visit NAME to Indonesia AV.fire.by.rubbing.stone cheerfulness many people
 ‘Obama’s visit to Indonesia fires up/ignites cheerfulness of many people’ (*Tempo via WebCorp:10*)

Another interesting finding in Table 7-14 is the distinctiveness of HAPPINESS IS A DRAWING, highlighting the expressivity/visibility of *keriangan*. The DRAWING metaphor is based on the DRAW A PICTURE frame. This frame is not represented in the *MetaNet* frame repository but is mentioned in the *MetaNet*’s description of the COMMUNICATING IS DRAWING A PICTURE metaphor⁹⁴, which is a subcase of COMMUNICATING IS SHOWING metaphor. The previously discussed (UN)VEILED OBJECT metaphor that are distinctive for *keceriaan* and *kegembiraan* is conceptually like the COMMUNICATING IS SHOWING. The DRAWING metaphor gives a more specific image to *keriangan* as an entity that is communicated, namely as a drawing. The most frequent metaphorical pattern for the DRAWING metaphor is *menggambarkan keriangan* ‘to draw cheerfulness’ (seven tokens). The other patterns are illustrated below:

(7-26) *Lima warna tutup botol yang berbeda juga meng-gambar-kan citra keriangan*
 five colour close bottle REL different also AV-drawing-CAUS image cheerfulness
 ‘The five colours of the different bottle lids also depicts the image of cheerfulness’
 (*Kompas via WebCorp:1*)

⁹⁴ See https://metaphor.icsi.berkeley.edu/pub/en/index.php/Metaphor:COMMUNICATING_IS_DRAWING_A_PICTURE (Last access: 22 August 2018).

- (7-27) *Sedang Semar Geger adalah gending reramputan (gado-gado),*
 NAME COP song mixed
yang me-lukis-kan keriangan muda-mudi meny-(s)ambut panen.
 REL AV-paint-TR cheerfulness youth AV-receive harvest
 ‘*Sedang Semar Geger* is a mixed song that depicts (lit. paints) the cheerfulness of the youths in embracing/welcoming harvest (period).’ (IWaC via Sketch Engine:ID51799)

Next, the BUILDING metaphor highlights several aspects of *keriangan*. The most frequent one indicates the cause for *keriangan* that is understood as building an erect physical structure. This is illustrated in (7-28) and (7-29).

- (7-28) *Para bintang-bintang tersebut ber-sinergi mem-bangun keriangan untuk meng-hibur peng-gemar-nya*
 DEM.PL star~PL DISC.DEM MID-synergise AV-get/wake.up cheerfulness in.order.to
 AV-cheer NMLZ-like-3PL.POSS
 ‘Those stars (i.e., artists/celebrities) synergise in building up cheerfulness to cheer up their fans’ (Suara Merdeka via WebCorp:55)

- (7-29) *Bahrani mem-bobardir perasaan-perasaan keriangan yang telah ter-bangun*
 NAME AV-bombard feeling~PL cheerfulness REL already PASS-get/wake.up
 ‘Bahrani bombards the feelings of cheerfulness that has been built’ (IWaC via Sketch Engine:ID19113)

The remaining aspects of the metaphor include reference to (i) *keriangan* as a physical structure that needs a supporting base, highlighting the persistence of it to be experienced (i.e., *tumpuan keriangan* ‘supporting base of cheerfulness’), and relatedly, to (ii) the cause of its instability (i.e., *keriangan terguncang* ‘cheerfulness is shaken’). Table 7-15 shows the repelled metaphor for *keriangan*.

Table 7-15 Repelled metaphor for *keriangan* ‘cheer(fullness)’

metaphors	n	exp	assoc.str	p.binom	p.holm	dec
HAPPINESS IS A DESIRED GOAL	3	17.477	-4.729	1.867e-05	1.119e-02	*

It is apparent that *keriangan* has similar profile with *keceriaan* ‘cheerfulness’ and *kegembiraan* ‘joy’ given their strong repulsion towards the DESIRED GOAL metaphor. This implies that the striving to experience these three HAPPINESS-related feelings is not their distinctive characterisation. Rather, the most distinctive metaphors for these three concepts

(e.g., LIQUID IN A CONTAINER, CONTAINED ENTITY, or EMBELLISHMENT) may indicate that they are HAPPINESS-like feelings that are being experienced with intense and expressive quality. Finally, Table 7-16 provides the results of collocational analysis for *keriangan*.

Table 7-16 The 20 most distinctive, 4-window span collocates for *keriangan* ‘cheer(fullness)’ in the combined data sets (*Indonesian Leipzig Corpora*, *IWaC Sketch Engine*, and *WebCorp*).

collocates	gloss	n	exp	assoc.str	p.binom	p.holm	dec
<i>penuh</i>	be full	48	16.579	10.210	6.159e-11	4.488e-06	***
<i>kanak-kanak</i>	children; kids	7	0.599	6.230	5.894e-07	4.291e-02	*
<i>politik</i>	politics	5	0.368	4.986	1.032e-05	7.508e-01	ns
<i>terakhir</i>	last; final	5	0.368	4.986	1.032e-05	7.508e-01	ns
<i>menggambarkan</i>	to draw; to depict	8	1.151	4.967	1.079e-05	7.851e-01	ns
<i>kehebatannya</i>	the grandeur	3	0.138	4.010	9.768e-05	1.000e+00	ns
<i>bocah</i>	child	4	0.368	3.567	2.711e-04	1.000e+00	ns
<i>imajinasi</i>	imagination	3	0.184	3.423	3.772e-04	1.000e+00	ns
<i>keseronokan</i>	delight; pleasure	3	0.184	3.423	3.772e-04	1.000e+00	ns
<i>mengajar</i>	to teach	3	0.184	3.423	3.772e-04	1.000e+00	ns
<i>anak-anak</i>	children; kids	17	6.770	3.331	4.665e-04	1.000e+00	ns
<i>khas</i>	unique	4	0.414	3.328	4.701e-04	1.000e+00	ns
<i>empat</i>	four	4	0.461	3.122	7.549e-04	1.000e+00	ns
<i>kekonyolan</i>	foolishness	3	0.230	3.041	9.105e-04	1.000e+00	ns
<i>ketulusan</i>	sincerity	3	0.230	3.041	9.105e-04	1.000e+00	ns
<i>memancarkan</i>	to spurt out	4	0.507	2.942	1.143e-03	1.000e+00	ns
<i>mendengar</i>	to hear	4	0.507	2.942	1.143e-03	1.000e+00	ns
<i>hilang</i>	to vanish; be gone	6	1.243	2.913	1.222e-03	1.000e+00	ns
<i>menunjukkan</i>	to show	7	1.704	2.875	1.334e-03	1.000e+00	ns
<i>berbalut</i>	be bandaged	3	0.276	2.755	1.758e-03	1.000e+00	ns
<i>kejayaan</i>	victory	3	0.276	2.755	1.758e-03	1.000e+00	ns

Closer inspection of the table shows that *keriangan* is also strongly associated with words referring to ‘kids’ (viz. *kanak-kanak* ‘children; kids’, *boach* ‘child’, and *anak-anak* ‘children; kids’), which are also distinctive for *keceriaan* ‘cheerfulness’ (cf. Table 7-13). Several other collocates indicate other associated concepts to *keriangan*, including *imajinasi*

‘imagination’, *kehebatannya* ‘grandeur’, *keseronokan* ‘delight’, *kekonyolan* ‘foolishness’, *kejayaan* ‘victory’, and, interestingly, *politik* ‘politics’.

7.4 Summary

This chapter is motivated by the hypothesis proposed by Kövecses (1990, pp. 207–208) that semantically similar emotion concepts expressed by near-synonyms can be differentiated by the distinctive metaphors that describe them. To test the hypothesis, I analysed co-occurrence frequency between conceptual metaphors and HAPPINESS near-synonyms in Indonesian using the one-tailed Binomial Test in *Multiple Distinctive Collexeme Analysis* (MDCA). The results for Indonesian further confirm Kövecses’ assumption that emotion near-synonyms may be differentiated by the distinctive metaphors that characterise them.

My overall results for Indonesian support the other corpus-based studies in English, especially those focusing on HAPPINESS near-synonyms (Stefanowitsch, 2004, 2006b), and on the other emotion near-synonyms (e.g., Ding, 2011; Ogarkova, 2007). I identified that some of the distinctive metaphors differentiating the HAPPINESS near-synonyms in Indonesian reflect the distinctive metaphors distinguishing *happiness* and *joy* in English. As discussed in §2.5.2, *joy* is more frequently profiled as an intense emotion, given its strong association with the LIQUID IN A (BODY-)CONTAINER metaphor, while *happiness* is conceptualised as an aspired emotion to achieve, as evoked by the QUEST metaphors (e.g., JOURNEY, PURSUING, and FINDING submappings) (Stefanowitsch, 2004).

In Indonesian, three HAPPINESS synonyms in the nominalised *ke-* *-an* form strongly attract the CONTAINMENT-related metaphors: (i) *kegembiraan* ‘joy’ is attracted to LIQUID IN A CONTAINER; (ii) *keceriaan* ‘cheerfulness’ and (iii) *keriangan* ‘cheerfulness’ are attracted to CONTAINED ENTITY. Given these results, it is worth mentioning that Stevens & Schmidgall-

Tellings (2004) includes the word *joy* as one of the closest English equivalents for *kegembiraan* and *keriangan* (cf. Table 3-2 or Table 7-1), and that these two words are strongly associated with CONTANMENT-related metaphors, which are also distinctive for *joy* in English (Stefanowitsch, 2004, 2006b).

In contrast, words such as *kebahagiaan* ‘happiness; prosperity; contentment’ and *kesenangan* ‘pleasure; happiness; enjoyment’ are strongly associated with the QUEST metaphor family, namely HAPPINESS IS A DESIRED GOAL. This suggests that *kebahagiaan* and *kesenangan* are characterised most strongly with similar metaphorical construal as the English *happiness*. It further reveals that, at least for Indonesian, a subset of the synonyms (e.g., *kebahagiaan* ‘happiness’ and *kesenangan* ‘pleasure’) may be viewed as clustering together with similar distinctive metaphorical features (e.g., desirable) compared to the other synonym sets (e.g., *kegembiraan* ‘joy’, *keceriaan* ‘purity, cheerfulness’, and *keriangan* ‘cheerfulness’) that are strongly associated with metaphors evoking the intensity, passivity, and expressivity.

The overall similarity with English on the differentiation of some of the Indonesian HAPPINESS terms via certain metaphors may be indicative of some degree of cross-cultural similarity, especially on how the HAPPINESS lexical field tends to be carved up by their distinctive metaphors. However, my study includes more HAPPINESS terms than the previous study in English (e.g., Stefanowitsch, 2004), and has shown that there are other distinctive metaphors at play, which have not been reported as significant in English. For instance, §7.3.2 shows that *kesenangan* ‘pleasure; happiness; enjoyment’ attracts metaphors evoking its negative image, such as DECEIVER, ADVERSARY, SUBJUGATOR, and IMPEDIMENT TO MOTION, even though *kesenangan* also strongly attracts the HAPPINESS IS A DESIRED GOAL

metaphor. Focus on negativity for *kesenangan* ‘pleasure’ is also evidenced from the semantics of its distinctive collocates (cf. Table 7-7).

Notwithstanding some broad convergence of results from the corpus-based study of *happiness* and *joy* in English, the chapter offers an additional insight regarding the difference between morphologically different words of the same root under the same sub-category of HAPPINESS. For instance, §7.3.1 has shown that a root-nominal (i.e., *bahagia* ‘happiness’) and the derivative with *ke-* *-an* confix (i.e., *kebahagiaan* ‘happiness’) are associated with a set of distinct metaphors, and thus distinct conceptualisations.

A methodological implication from these findings for the corpus-based study of emotion metaphors is the selection of lexical items representing one emotion concept, or any other target domain. One may start from a set of synonymous, specific emotion nouns referring to one broad emotion concept. The data from this selection can be useful from two theoretical perspectives. First, the aggregated metaphor data from the studied emotion words can represent the aggregated metaphorical cognitive models of the broader concept that each word refers to (as shown in Chapter 5 and Chapter 6) (cf. Ogarkova & Soriano, 2014). Second, one can zoom in to investigate the extent to which near-synonyms differ in their distinctive metaphorical profiles. The second point here is a way to address (i) the *principal metaphor hypothesis* (e.g., Kövecses, 1990, pp. 207–208) in the emotion metaphor study as demonstrated in this chapter, and (ii) the interaction of lexical semantics (e.g., near-synonyms) and metaphors (Stefanowitsch, 2006b).

Chapter 8 Conclusion

This thesis has presented quantitative corpus-based analyses of HAPPINESS metaphors in Indonesian that are contextualised within desiderata in Conceptual Metaphor Theory (CMT) and quantitative corpus linguistics. There is a growing aspiration in CMT to take the “lexeme-specific approach” to metaphor (Ogarkova & Soriano, 2014, p. 97), as in the *Metaphorical Pattern Analysis* (MPA) (Stefanowitsch, 2004, 2006b) (cf. §1.1.2 and §2.5.2). In the case of EMOTIONS, MPA focuses on a subset of metaphorical linguistic expressions that incorporate the specific words (e.g., *rage*, *anger*, *fury*) referring to the same emotion (e.g., ANGER). This lexeme-specific approach complements the predominant practice focusing on the basic-level emotion (ANGER) through analysing metaphorical expressions that may or may not contain the specific words denoting the relevant emotion (cf. *she was brimming with rage* vs. *You make my **blood boil***) (Lakoff, 1987, p. 383) (cf. §1.1.2).

To assess the implications of the lexeme-specific approach through a corpus linguistic method, two main analytical themes are presented. The first one investigates the prominent metaphors found for the overarching HAPPINESS domain in Indonesian, as represented via the aggregated metaphor usage data of each HAPPINESS word. The second one determines the distinctive metaphors distinguishing HAPPINESS near-synonym from each other; it is related to a hypothesis that semantically similar emotions can be distinguished via their principal metaphors (Kövecses, 1990; Stefanowitsch, 2004).

8.1 Summary of findings

8.1.1 The prominent metaphors in the aggregated domain of HAPPINESS in Indonesian

This study identified 62 types of conceptual metaphors. Given the wide range of metaphors found, their prominence is put into perspective through a ranked-list of three different frequency profiles, namely *token frequency*, *type frequency*, and *type-per-token ratio* (TTR). These measures are assumed to reflect several properties, such as entrenchment, conventionality, productivity, and lexical creativity. Despite focusing on just the top-10 metaphors for each frequency profile, Chapter 5 and Chapter 6 show that these metaphors highlight a variety of aspects of how HAPPINESS is construed by speakers of Indonesian.

Chapter 5 organised the entrenched metaphors based on their high token frequency. These metaphors highlight such aspects of HAPPINESS as the (in)existence (e.g., HAPPINESS IS A LOCATION, HAPPINESS IS A SUBMERGED ENTITY), desirability (HAPPINESS IS A DESIRED GOAL, HAPPINESS IS FOOD), preciousness/value (HAPPINESS IS A POSSESSABLE OBJECT), intensity (e.g., HAPPINESS IS A CONTAINED ENTITY, HAPPINESS IS A LIQUID IN A CONTAINER), and expressivity/visibility (HAPPINESS IS AN (UN)VEILED OBJECT). The type frequency ranking of the metaphors considered in §6.3 reveals two other productive and conventional metaphors that have been identified in previous studies to be associated with HAPPINESS, namely HAPPINESS IS LIGHT (Kövecses, 2000) and HAPPINESS IS AN IMPERILLED ENTITY (cf. Stefanowitsch, 2006b). The former highlights the radiance and expressivity of the Experiencer, while the latter focuses on the fragility of HAPPINESS as a precious state. Chapter 6 has also shown different semantic spectrums emerging from metaphors with a high lexical creativity ratio according to the TTR measure (§6.4). These spectrums include power/strength and harmfulness (i.e., HAPPINESS IS A HARMFUL AGENT), negative construal

(e.g., HAPPINESS IS AN ADVERSARY; HAPPINESS IS A DECEIVER; HAPPINESS IS DRUGS), and positive phenomenology of HAPPINESS (e.g., HAPPINESS IS BEING SOAKED).

8.1.2 The distinctive metaphors for HAPPINESS near-synonyms in Indonesian

Chapter 7 integrated *Multiple Distinctive Collexemes Analysis* (MDCA) into the so-called Metaphorical Profile approach. The results for Indonesian further confirm the *principal metaphor hypothesis* for the role of the distinctive metaphors in distinguishing semantically similar emotions, the evidence of which has so far existed only for English and German (e.g., Stefanowitsch, 2004, 2006b; Ding, 2011; Ogarkova, 2007). Chapter 7 also revealed similarity for the distinctive metaphors between translation near-equivalents, especially for *kebahagiaan* ‘happiness’ (most strongly attracted to HAPPINESS IS A DESIRED GOAL) and *kegembiraan* ‘joy’ (most strongly attracted to HAPPINESS IS A LIQUID IN A CONTAINER). This finding entails that these two Indonesian words are most strongly distinguished along similar distinctive metaphors that distinguish *happiness* and *joy* in English (Stefanowitsch, 2004, 2006b). This reflects cross-cultural convergence in the representation of the distinctive metaphorical niches in an emotion lexical field such as HAPPINESS.

However, analysing a larger number of HAPPINESS synonyms compared to the previous study on HAPPINESS in English, leads to the identification of more distinctive metaphors within the lexical field of HAPPINESS in Indonesian. Take for instance, the negative valence of *kesenangan* ‘pleasure’ as revealed by its distinctive metaphors (HAPPINESS IS A DECEIVER, HAPPINESS IS A SUBJUGATOR, HAPPINESS IS AN ADVERSARY, and HAPPINESS IS IMPEDIMENT TO MOTION). Words translated as *cheerfulness*, such as *keceriaan*, attracts metaphors focusing on its expressivity, vibrance (e.g., HAPPINESS IS A COLOUR and HAPPINESS IS EMBELLISHMENT) as well as intensity (HAPPINESS IS A CONTAINED ENTITY). No previous

metaphor studies for HAPPINESS, such as Stefanowitsch (2004), include the study of *cheerfulness* or *pleasure*.

8.2 Implications and contributions

8.2.1 On the corpus-based and lexeme-specific approach to metaphors

Findings from adopting the lexeme-specific approach to emotion metaphors have at least two implications. The first is to gain more expanded account on the metaphorical characterisation of an emotion domain (cf. Soriano, 2013b, p. 70) by reducing potential bias of the metaphors to one of the words for the emotion. Chapter 7 demonstrates that there is a statistical bias in the usage frequencies of metaphors towards certain words. The exclusion of certain words that have strong association with certain metaphor may relegate the prominence of the metaphors in question when characterising the broader emotion domain based on only a single term of the emotion. Consider the DESIRED GOAL metaphor that only occurs six times with *kegembiraan* ‘joy’ but 125 times with *kebahagiaan* ‘happiness’.

The expanded account of the metaphors found in the broader domain of an emotion is not only about identifying a greater number of metaphor types by analysing more emotion terms, but also about describing the importance of the identified metaphors along different perspectives as reflected in the focused three frequency profiles. Assessing the entrenchment of a metaphor according to its token frequency (i.e. the frequency tallied from the occurrences of the linguistic instantiations of the metaphor) may overlook insights of the other frequency profiles, such as *type frequency* and *type-per-token ratio* (TTR). The high token frequency of a metaphor may be influenced by the high token frequency of only some of its linguistic instantiations, rather than different range of instantiations that are equally frequent. The illustrative examples include HAPPINESS IS A LOCATION (§5.4.3), HAPPINESS IS

A CONTAINED ENTITY (§5.4.5), and HAPPINESS IS FOOD (§5.4.10). Therefore, token frequency is not the only determinant for the entrenchment of a metaphor as a conceptual schema.

The type frequency of a metaphor takes into account the range of linguistic manifestations of a metaphor to highlight the entrenchment, productivity, and conventionality of a metaphor as a conceptual schema (Clausner & Croft, 1997; cf. Taylor, 2012, pp. 174–175, 285). The TTR measure brings the type frequency of a metaphor in relationship to its token frequency. The normalised TTR index per 100 tokens indicates the relative diversity for the linguistic manifestations of a metaphor given its token frequency. The higher the TTR, the higher the rate of the varied instantiations of a metaphor per 100 tokens; the lower the TTR, the more conventionalised a metaphor is instantiated linguistically (i.e., manifested by a few yet highly frequent linguistic expressions).

Chapter 6 has also shown that the semantic spectrums revealed by top-10 metaphors based on their TTR profiles may not be apparent should one consider only metaphors along their token frequency, without considering the measures related to their lexical realisations. Furthermore, the TTR ranking reveals metaphors that are diverse in their lexical realisation, but, at the same time, are much less frequent in their token frequencies. Thus, TTR allows us to appreciate the insights conveyed by metaphors that are infrequent in their tokens, while highlighting their prominence in lexical realisation (e.g., HAPPINESS IS A DECEIVER and HAPPINESS IS BEING SOAKED; cf. §6.4).

I argue that only ranking the metaphors based on each of these frequency profiles does justice to the varied insights they offer and, more importantly, to the richness of quantitative data we can exploit from adopting a corpus-based approach (cf. Stefanowitsch, 2006a, p. 7). One of these insights suggests that the entrenchment of a metaphor as a conceptual schema

is multifaceted when estimated from a corpus-based perspective. My approach for analysing the data in Chapter 5 and Chapter 6 is arguably an exception rather than the norm for the corpus-based studies of emotion metaphors (but see Stefanowitsch, 2006b, p. 97; Oster, 2010; Türker, 2013; Ogarkova & Soriano, 2014), let alone those existing for Indonesian to date. This thesis thus contributes one of the many ways one can turn quantitative corpus data into more nuanced, yet theoretically relevant, understandings of metaphor usages.

The second implication for lexeme-specific approaches such as MPA is the possibility to zoom in on differences between a set of near-synonymous emotion terms in terms of their distinctive metaphors. The results allow us to determine (i) the degree of intra-domain, metaphor-variation and, more broadly, (ii) the interaction between lexical near-synonyms and metaphors, which is another desideratum in the field of (emotion) metaphors (Stefanowitsch, 2006b; cf. Soriano, 2013b, p. 72). This thesis is the first for Indonesian to address these two points. One follow-up from this thesis is to test the corpus-based findings for the distinctive metaphors for certain HAPPINESS synonyms against native speaker intuition. This follows the recent trend in Cognitive Linguistics that seeks for *converging evidence* from both corpora and experimental results. Without recourse to sophisticated experimental tools, one may conduct sentence completion task, for instance, for determining whether metaphorical patterns associated with certain words in the corpora maintain their association in the speakers' intuition about the language. Another possibility is to replicate experiment conducted by Tseng et al's (2005) (§2.7), which is related to the idea of embodied simulation in metaphor understanding (cf. Bergen, 2012).

Replicating synonym-metaphor interface for emotion concepts into Indonesian also offer further theoretical knowledge that may be absent from previous similar studies in English.

Chapter 7 demonstrated that a root-nominal (e.g., *bahagia*) and its nominal derivative in the *ke- -an* form (*kebahagiaan*), which are intuitively similar in meaning, may show similar as well as different association with a given metaphor. *Gembira* and *kegembiraan*, for instance, are both strongly associated with the (UN)VEILED OBJECT metaphor. Meanwhile, both *kebahagiaan* and *kesenangan* strongly repel the SUBSTANCE-related metaphors, but not for their root-nominals of *bahagia* and *senang*, which are specifically associated with the (UN)MIXED SUBSTANCE metaphor. This variation is indeed based on language-specific feature of Indonesian lexicalisation of emotions. Nevertheless, this feature of Indonesian shows the cross-linguistic relevance of the thesis to the usage-based assumption central to Cognitive Linguistics (§1.2.2).

The usage-based assumption states that different forms, which can be related morphologically and intuitively similar semantically (e.g., between *bahagia* and *kebahagiaan*), in fact exhibit different usage tendency in corpus data, thus showing their semantic differences. This thesis has shown that such form-meaning relationship in the context of metaphorical meaning of emotion near-synonyms can be captured by merging two corpus-based techniques in Cognitive Linguistics, namely *Multiple Distinctive Collexeme Analysis* and *Linguistic Profile*, into the so-called *Metaphorical Profile* approach. I have also argued in §7.2.2 why *Metaphorical Profile* can be subsumed under the *Linguistic Profile* that may be central for addressing theoretical questions in CMT, such as the *principal metaphor hypothesis* as I have done in Chapter 7.

8.2.2 On the *MetaNet* approach to metaphors

Another contribution of this thesis for the broader field of CMT is that it becomes the first extension into Indonesian for the latest advance of CMT, namely the *MetaNet* (MN)

approach. MN brings together Frame Semantics and Constructional approaches to language to formalise key theoretical notions in CMT. Chapter 4 is devoted to introducing this symbiosis and highlights the methodological and theoretical relevance of the MN view to the study of metaphors in general and in relation to MPA. I consider the potential implications of MN's view concerning conceptual metaphors as mappings between semantic (source and target) frames, including the (source and target) frame-roles, which are mediated via grammatical construction hosting the metaphorical expressions. The following three points summarise my arguments and proposals for the implications of this view.

The first implication touches on a phenomenon that may occur for metaphor study from the target-domain perspective, such as MPA. I have shown that the target-domain words may exhibit what I call *metaphorical role-mapping variation* (MRV) within the metaphorical construction (§4.3.5). The idea of MRV is as follows. The target-domain word can syntactically collocate with the source-domain word in a set of metaphoric constructions evoking the *same source frame* but may fill different constructional slot associated with *different role* of the evoked frame. In this case, there is different syntactic-semantic frame-role-mapping for the target domain. The implication of this variation is, I argue, not trivial. It triggers *different conceptualisation*, or *conceptual metaphor*, to be postulated for the given target domain. In other words, there is a variation in how a source frame and its role(s) are used to evoke a given metaphor for a given target domain in a metaphoric construction. One of the examples that I presented is the distinction between HAPPINESS IS AN IMPERILLED ENTITY and HAPPINESS IS A HARMFUL AGENT; both metaphors are based on the collocation of the HAPPINESS words with source-frame words evoking the HARM source-frames family, but with different role-mapping in the frame (cf. §6.3).

The idea of *role-mapping variation* and how it interacts with lexical semantics of the target-domain is worth further investigation. One may focus on a frame family (e.g. HARM). Then, one proceeds with determining the extent to which target-domain near-synonyms map onto a certain frame role (than the other roles) in the synonyms' use in the metaphorical construction evoking this frame. This may elucidate the preference for a target-domain to be mapped onto a given role. Moreover, it helps identify the difference between the target-domain words in how they are construed based on the frame-role mapping within the focused frame.

The second interrelated implication of MN is the increased explicitness in postulating conceptual metaphors through identifying the syntactic-semantic frame-role-mapping of the target-domain words in the metaphorical constructions (cf., e.g., §4.3.4). The reason is that it is the role-associated slot filled with the target-domain word in metaphorical construction that may help one distinguish why the collocation of the target domain with words evoking the *same source frame* would result in different conceptual metaphors. Some examples include the HAPPINESS IS A LOCATION (§5.4.3) and HAPPINESS IS A LOCATED OBJECT (§5.4.4) that are based on the lexical units evoking the same BEING AT A LOCATION frame. Given such central role of construction in metaphor study, identifying the association of a metaphor for a target domain and (syntactic or morphological) constructions deserves further study. This allows us to examine the fusion of constructional meaning and the meaning focus of the metaphor (cf., e.g., §6.4.2.2 on the discussion of the DECEIVER metaphor and Indonesian stative-passive morphology, which can convey 'unintentionality').

The third implication, which I echo from Sullivan (2013, *inter alia*), is the relevance of Cognitive Grammar notions, namely conceptual autonomy and conceptual dependence, as

the constructional foundation for the identification of *metaphorical patterns* central to MPA (§4.3.2). I have argued in §4.3.2.3 how the identification of the source-domain element in relation to the use of the target-domain word in a grammatical construction can be assisted by identifying which element is conceptually dependent in relation to the typically autonomous element filled with the target domain word (cf. Sullivan, 2016).

I argue that awareness of such implications in the CMT study of metaphor is not inconsequential, either methodologically or theoretically. The reason is that studies in CMT, be it corpus-based or introspective, begin from (metaphorical) *linguistic data* to postulate the potential *conceptual metaphors*. I have argued that the syntax-semantics frame-role mapping of the target-domain word in the metaphoric construction plays an important role for how the target domain is conceptualised. In that way, I contend that MN approach explicitly foregrounds the central role of grammatical constructions in metaphorical language and the relationship to the evoked (source and target) frames, and the role-mapping within, for the identification of the conceptual metaphors.

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