Emergence of figurative usages of color terms in Thai

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ABSTRACT

In Thai, color terms have been used figuratively since ancient times. This study aims to investigate the development of figurative usages of color terms in Thai from the Sukhothai period, the first Thai era in which written documents have been found, until the Rattanakosin period (the current period, which commenced in 1782 A.D.; records up until 2019 A.D.), the semantic processes involved, including the semantic domains of the figurative usages. The data was retrieved from selected literary works of the Sukhothai, Ayutthaya, and Rattanakosin periods, as well as from the Thai National Corpus. The findings reveal that among twelve color terms used in Thai language, the color term /dɛ:ŋ/ (RED) was used figuratively in the Sukhothai period while the color terms /kʰǎ:w/ (WHITE), /dam/ (BLACK), /lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN) which emerged in the same period, were used figuratively in the Ayutthaya period. Of the other seven color terms, /tɕʰom.pʰu:/ (PINK), /sôm/ (ORANGE), /fá:/ (LIGHT BLUE), and /mûaŋ/ (PURPLE), which were found in the Ayutthaya period, and /tʰaw/ (GREY), /ná:m.ŋən/ (DARK BLUE), and /ná:m.ta:n/ (BROWN), which were discovered during the Rattanakosin period, were used figuratively. The semantic processes involved in the usages of figurative meanings are metonymy and metaphor. The semantic domains that color terms refer to figuratively include characteristics, anomalies, items from daily life, emotions and feelings, the human life cycle, race, number, place, gender, class, time, nature, political regime, temperature, cooperation group, person, and food.

Keywords: Color terms; figurative meanings; order of emergence; semantic domains; semantic processes

INTRODUCTION

Color terms are used literally to describe colors of entities, e.g., 'red' in 'a red car' describes the color of the car. They can also be used figuratively to refer to other things besides colors. The term /pʰǐw.lǐaŋ/ (skin-yellow) 'yellow skin' in Thai means 'Mongoloid,' which refers to yellowish-colored skin being one of the characteristics of Mongoloids (Toole & Toole 1997, p. 153). The term /tʰú.ra.kìt.sǐ:.tʰaw/ (business-color-grey) 'grey business' refers to a semi-illegal business. Grey is the midpoint between black and white (FaqeAbdulla, 2023). Therefore, grey is used to refer to uncertainty when judging whether a business is legal. In terms

of semantic process, the meaning of /pʰǐw.lǐaŋ/ 'yellow skin' is motivated by metonymy because one property of an entity is used to refer to that entity. In this case, a term meaning 'yellow skin' is used to refer to people who have yellow skin (Easterners). By contrast, /tʰú.ra.kìt.sǐ:.tʰaw/ 'grey business' is motivated by a metaphorical process because one thing (the color grey) is used refer to and understand another (the legitimacy of a business). Prasithrathsint (1995) claims that there are twelve basic color terms in Thai: /kʰǎ:w/ (WHITE), /dam/ (BLACK), /dɛ:ŋ/ (RED), /lǐaŋ/ (YELLOW), /kʰǐaw/ (GREEN), /tɕʰom.pʰu:/ (PINK),

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/sôm/ (ORANGE), /fá:/ (LIGHT BLUE), /mûaŋ/ (PURPLE), /tʰaw/ (GREY), /ná:m.ŋən/ (DARK BLUE), and /ná:m.ta:n/ (BROWN). Prasithrathsint (1995) defines basic color terms as those which are mono-lexemic, e.g., /kʰǎ:w/ (WHITE) and /dɛ:ŋ/ (RED). However, /ná:m.ŋən/ (DARK BLUE), and /ná:m.ta:n/ (BROWN), which do not fall within the parameters of this definition, are also considered to be basic color terms because their meanings are unique -/ŋən/ 'silver' in /ná:m.ŋən/ (DARK BLUE) does not mean the color of silver, and -/ta:n/ 'sugar palm' in /ná:m.ta:n/ (BROWN) does not mean the color of sugar palm (Prasithrathsint, 1995, p. 133).

Various aspects of color terms in Thai were also investigated, such as their historical use in different periods (Engchuan, 2000; Phornthipphayaphanit, 2014; Tipkongka, 2010), similarities and differences between the use of color terms in Thai and those in other languages (Prasithrathsint, 1995), and the figurative meanings of color terms (Kanchina, 2016; Saralamba, 2019). However, a diachronic perspective on the figurative meanings of color terms in Thai has not been found. It is very interesting to investigate the development of figurative uses of basic color terms in Thai through historical periods, as well as the semantic processes involved in those figurative meanings. The order of emergence of color terms used figuratively is also worth studying to see whether it involves the same order as that of basic color terms in Thai. Together with findings from the previous studies, it is hoped that the results of this study will shed light on which figurative meanings of color

terms are found universally, and which are influenced by changes in social values and the introduction of new concepts.

This study, therefore, aims to investigate the figurative uses of basic color terms in Thai from the Sukhothai period (the first Thai reign for which written documents were found) until the Rattanakosin period (the current period; records were examined up until 2019 A.D.), analyzing the semantic processes involved. The findings reveal the emergence of metonymical and metaphorical usages for each color term over different periods of time. It should be noted that basic color terms in Thai with figurative meanings always collocate with other words; for example, /pʰĭw.lĭaŋ/ (skin-yellow) 'yellow skin'. However, this study does not aim to analyze the structures and the functions of color terms used with other words.

In the following section, the evolution of basic color terms in Thai, the semantic processes of metaphor and metonymy, and related studies on color terms will be discussed.

Evolution of Basic Color Terms in Thai

Berlin and Kay (1969) studied color terminology and found that there were eleven basic color terms universally used in almost all languages. These eleven terms are WHITE, BLACK, RED, YELLOW, GREEN, BLUE, BROWN, PURPLE, PINK, ORANGE, and GREY. Figure 1 shows the order of the universal basic color terms. Please note that all terms are in capital letters to denote the color categories.

Figure 1

Order of Universal Basic Color Terms (Berlin & Kay, 1969)
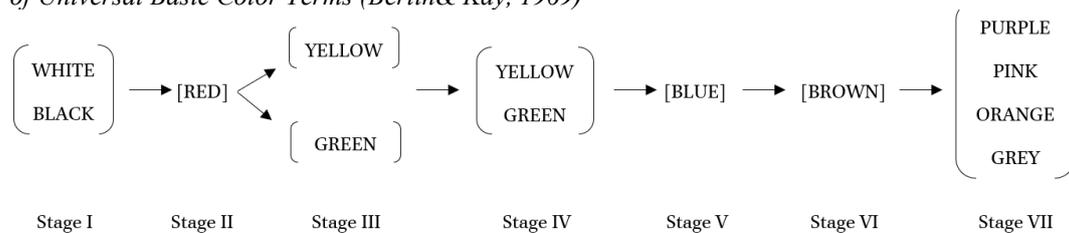
However, in Thai, it was found that there were twelve basic color terms (Prasithrathsint, 1995). An additional color term, /ná:m.ŋən/ (DARK BLUE) does not exist in many other languages.

Phornthipphayaphanit (2014) revealed the order of emergence of basic color terms in Thai, as shown in Figure 2.

Figure 2

Order of Emergence of Basic Color Terms in Thai (Phornthipphayaphanit, 2014)
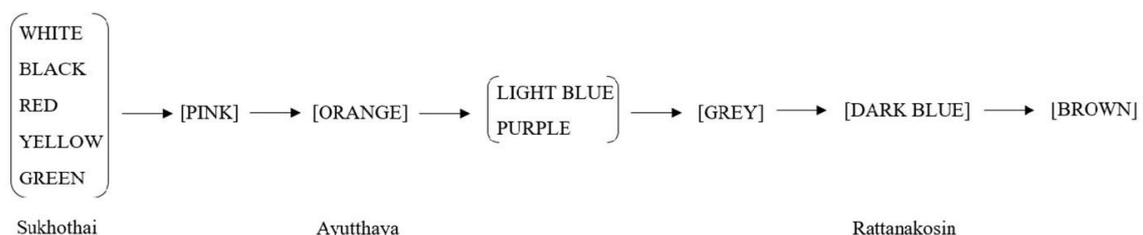
Comparing Figure 2 with Figure 1, it is obvious that the order of basic color terms in Thai is different from the universal one. Figure 2 shows that five color terms, /kʰǎ:w/ (WHITE), /dam/ (BLACK), /dɛ:ŋ/ (RED), /lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN) emerged during the Sukhothai period. Later, in the Ayutthaya period, four color terms were added: /tɕʰom.pʰu:/ (PINK), /sôm/ (ORANGE), /fá:/ (LIGHT BLUE), and /mûaŋ/ (PURPLE). Three additional color terms, /tʰaw/ (GREY), /ná:m.ŋən/ (DARK BLUE), and /ná:m.ta:n/ (BROWN) were discovered during the Rattanakosin period.

This finding shows that the concept of universal basic color terms proposed by Berlin and Kay (1969) cannot be applied to the Thai language. Tipkongka (2010, p. 75) claims that this may be due to limitations of their research, which had to be completed in a specified period. Therefore, it cannot explain the emergence of basic color terms in Thai from ancient times up until the present. However, as one of the objectives of this study, the order of emergence of figurative uses of basic color terms will be compared to that of the emergence of basic color terms to see whether they follow the same order.

Metaphor

As mentioned earlier, color terms can be used to refer to things other than those referred to literally. Understanding one thing in terms of another thing is referred to as metaphor (Lakoff & Johnson, 1980). Kövecses (2010) defines metaphor through an A is B formula, in which the target domain (A) is understood through the source domain (B). The source domain is usually more physical and concrete, and we draw from it a metaphorical expression to help us understand a more conceptual domain. The target domain is more abstract, and we try to understand it through the source domain. For example, /tʰaw/ (GREY) refers to neutrality in the term /tʰú.ra.kìt.sǐ:.tʰaw/ (business-grey) 'grey business,' meaning 'a semi-legal business.' This is because grey is an intermediate color between black and white, in this case, a reference to the ambiguous nature of the business concerned. In the case of the expression /kʰwam.dam.mî:t.naj.tɕaj/ (black-dark-in-heart) 'darkness in one's mind,' /dam/ (BLACK) refers to secrecy and represents darkness, obscurity, and opaqueness. According to this theory, /tʰaw/ (GREY) and /dam/ (BLACK) are source domains because they are more physical and concrete than 'neutrality' and 'secret', which are their target domains and are more abstract.

The study applies the Metaphorical Identification Procedure (MIP) developed by Pragglejazz (2007), which provides a systematic process for identifying metaphorical linguistic expressions, which are as follows:

1. Read the entire text to understand the overall meaning.
2. Determine the lexical units in the text.
3. Determine the basic meaning of each lexical unit in other contexts than the present one (if this is the case). If the lexical unit has basic meanings in other contexts, decide whether the contextual meanings contrast with the basic meaning but can be understood by comparison with it.
4. If the contextual meanings of the lexical unit contrast with the basic meaning but can be understood by comparison with it, the lexical unit would be considered a metaphorical linguistic expression.

Metonymy

Metaphor is not the only semantic process that can extend word meanings. Metonymy also plays a key role in their semantic extension. Radden and Kövecses (1999) define metonymy as a process in which one conceptual entity, the vehicle, provides mental access to another conceptual entity, the target, within the same domain. According to Lakoff and Johnson (1980), metonymy enables us to conceptualize one thing by means of its relation to something else, in terms of a PART FOR THE WHOLE relationship. For example, /kʰo:m.kʰǐaw/ (lamp-green) 'green lamp' can refer to a brothel. This is because green lamps are always hung in front of brothels in Thailand. Kövecses (2010) later develops the idea of metonymy, classifying metonymic relationships into various types, for example: THE PART FOR THE WHOLE, OBJECT FOR MATERIAL CONSTITUTING THAT OBJECT, DEFINING PROPERTY FOR CATEGORY, PRODUCER FOR PRODUCT, CONTROLLED FOR CONTROLLER, and EFFECT FOR CAUSE. Applying these metonymic categories to the figurative meanings of Thai color terms, the example of /ta:.dɛ:ŋ/ (eye-red) 'red eyes,' which means 'being sad,' reveals an EFFECT FOR CAUSE relationship. This is because when you cry due to sadness (cause), your eyes turn red (effect). Another example, /pʰǒm.dɛ:ŋ/ (hair-red) 'red hair', which means 'Caucasoid,' reveals a DEFINING PROPERTY FOR CATEGORY relationship, because red hair is one of the many properties of Caucasoids.

Related Studies

Related studies are divided into two sub-topics: studies on color terms in Thai and other languages, and those on figurative usages of color terms in Thai and other languages.

Studies on Color Terms in Thai and Other Languages

The earliest study that was found relating to color terms in Thai is that of Naksakul (1985). This study, which examined Thai color terms used by Thai native speakers, found that there were four types of

color terms: basic color terms, comparative color terms, loan color terms, and traditional Thai color terms. Later, Engchuan (2000), Tipkongka (2010), and Phornthipphayaphanit (2014) conducted studies on the use of color terms during various periods. A study of Thai color terms in the Sukhothai period and in the year 2000 by Engchuan (2000) found that there were five basic color terms in the Sukhothai period (falling within the fourth stage of the order of universal basic color terms): /kʰǎːw/ (WHITE), /dam/ (BLACK), /dɛːŋ/ (RED), /lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN). Engchuan found that there were seven additional basic color terms in 2000 (falling within the seventh stage of the order of universal basic color terms): /fáː/ (LIGHT BLUE), /náːm.ŋən/ (DARK BLUE), /náːm.taːn/ (BROWN), /mûaŋ/ (PURPLE), /tɕʰom.pʰuː/ (PINK), /sôm/ (ORANGE), and /tʰaw/ (GREY). Tipkongka (2010) focused on the study of Thai color terms in the Ayutthaya period, finding nine basic color terms, with /tɕʰom.pʰuː/ (PINK), /sôm/ (ORANGE), /fáː/ (LIGHT BLUE), and /mûaŋ/ (PURPLE) were not found in the Sukhothai period.

Thai color terms during the Thonburi and Rattanakosin periods were investigated by Phornthipphayaphanit (2014). This study found that the same color terms were used in the Thonburi and Ayutthaya periods, but that three additional color terms emerged in the Rattanakosin period: /tʰaw/ (GREY), /náːm.ŋən/ (DARK BLUE), and /náːm.taːn/ (BROWN). All of the studies mentioned above analyzed data from Thai literature.

Studies exploring color terms in other languages include the following examples: in Mandarin Chinese (Hsieh et al, 2020; Xu et al, 2023), nine color terms were found (hong "red," huang "yellow," lan "blue," lü "green," bai "white," hei "black," zi "purple," fen "pink," and hui "gray"). In Shan (Aroonroek, 2021), eleven color terms were found. /nam5tha:n1/ (brown) and /som5/ (orange) were found in addition to what was found in Mandarin Chinese. Interestingly, in Alangan-Mangyan (Yang, 2022), there were only three color terms, which were maksēngēn "black," mabuksi "white," and malimbaēn "red". In Spanish (Xu et al, 2023), twelve color terms were found. Those were azul "dark blue," rojo "red," verde "green," amarillo "yellow," rosa "pink," morado "purple," negro "black," blanco "white," naranja "orange," gris "gray," marron "brown," and celeste "light blue." The number of color terms and the color terms in Spanish were the same as what were found in Thai. Danladi (2024) studied color terms in Nigerian English and found that the number of color terms in this dialect was eleven. They were used to refer to the same colors as found in Shan**.** Data from the previous studies were collected from native speakers of the respective languages. They were asked to identify color terms from color chips and things surrounding them. The researchers then analyzed the

basic color terms and non-basic color terms based on Berlin and Kay's theory. The results of these studies reflect the natural perceptions, lifestyles, and social values of native speakers of these languages.

Studies of Figurative Usages of Color Terms in Thai and Other Languages
Examples of studies on the figurative uses of Thai color terms include Saralamba (2019), Kanchina (2016), and Wongthai (2025). According to the results of these studies, colors can refer to emotions and feelings: RED referring to anger, sadness, happiness, love, or fear; GREEN to anger or sadness; BLACK and WHITE to sadness or fear; and PINK to anger, love, or happiness. The researchers suggested that the inclusion of color terms could help increase the intensity of the emotions being referred to, such as in the case of 'red face' meaning 'feeling angry', and in the case of 'reddish-purple face' meaning 'feeling very angry.' In addition, the results revealed that RED was used most frequently in relation to various emotions.

Studies on the figurative use of color terms in other languages include: English (Alharbi, 2023; Azeez et al, 2023; Dhayef & Hussein, 2021; FaqeAbdulla, 2023; Li, 2020; Maierova, 2024; Umam & Nirmala, 2020), Chinese (Bogushevskaya, 2023; Dou & Liu, 2023; Dou et al, 2023; Li, 2020; Phornthipphayaphanit et al., 2023; Yan, 2020), Arabic (Alharbi, 2023; Altohami, 2022; Azeez et al, 2023; Dhayef & Hussein, 2021), Kurdish (Anwar & Najeeb, 2021; FaqeAbdulla, 2023), Indonesian (Umam & Nirmala, 2020), Sundanese (Fauzi et al, 2021), Serbian (Gaborovic, 2022), and Hindi (Mishra, 2023). The results revealed that color terms could also have both positive and negative meanings. Examples of positive meanings include: WHITE (goodness, legality, harmlessness, fortune, pureness, wealth, freedom, beauty, belief, and reward), BLACK (beauty, strength, and honor), RED (happiness, worthiness, fortune, beauty, love, passion, energy, warmness, and healthy), YELLOW (success, wealth, warmness, new beginning, happiness, and luckiness), GREEN (continuation, fertility, hope, immortality, safety, optimism, tranquillity, and nature), PINK (healthiness, joy, love, hope, success, and tender), BLUE (kindness, honesty, optimism, honor, calmness, happiness, cheerfulness, and nobility), PURPLE (success), GREY (intelligence, maturity, experience, and sophisticated). Examples of negative meanings include: WHITE (fear, confusion, illness, uselessness, giving up, weakness, foolishness, and inexperience), BLACK (sadness, suffering, shame, anger, confusion, cruelty, illegality, obscurity, poverty, misfortune, disbelief, and distress). RED (anger, danger, incontinence, crime, violence, sin, evil, death, and untrustworthy), YELLOW (sadness, dishonesty, illness, timidity, failure, death,

desolation, depression, and decay), GREEN (inexperience and jealousy), PINK (rejection, unimportance, weakness, and immaturity), BLUE (sadness, illness, weakness, aloofness, and death), PURPLE (dissatisfaction, indignity, and immorality), GREY (sadness, dishonesty, ambiguity, illegality, pressure, fading away, poverty, and death), and BROWN (sadness, annoyance, and feuding).

From the results, we can notice that some metaphorical meanings of color terms seem to be universal. For example, WHITE, which usually means purity, and GREEN, which usually means fertility. Interestingly, some figurative meanings of color terms seem to be influenced by culture. According to Yu (2017), in Chinese, RED tends to have positive connotations. It is always used in festivals and celebrations because the red color plays an important role in China. It represents the color of the sun and fire. Also, the red color is a symbol of luck. YELLOW has positive connotations in Indonesian. It means happiness, success, fame, and wealth. Indonesian people consider yellow a bright and cheerful color. It represents an enlightening and brightening expression. However, in English, YELLOW seems to have negative connotations to refer to unfaithfulness and unethicality.

A review of previous studies found that no research had been conducted to explore the emergence of figurative usage of color terms in Thai. The present study, therefore, helps to fill this gap and shed light on the cognitive processes involved in the figurative usages in the Thai language and the semantic processes involved.

METHOD

This study collected data from Thai literature, as previous studies by Engchuan (2000), Tipkongka (2010), and Phornthipphayaphanit (2014) had also done. However, this study divides literary periods differently from the previous works. Due to different aims, those studies divide Thai literature into four periods when identifying the first appearance of each color term: Sukhothai, Ayutthaya, Thonburi, and Rattanakosin. This study, which focuses on analyzing the figurative uses of color terms, combines the Ayutthaya and Thonburi periods, as there were no differences in literary types during these periods.

Therefore, in this study, Thai literature is divided into the following three periods: Sukhothai, Ayutthaya, and Rattanakosin. The Rattanakosin period is then further divided into three sub-periods due to the differing literary types found in each one: 1) the reigns of Kings Rama I–III, for which no records have been found of the presence in Thailand of graduate students from abroad or bilingual people; 2) the reigns of Kings Rama IV-VI, for which records exist of the presence of graduate students from abroad and bilinguals; and 3) the period from the reign of King Rama VII through until 2019 A.D., when the Office of the Royal Society, a body responsible for the planning and regulation of the Thai language was established.

Among the list of literary works found that had been registered as examples of national literature in each period, four dated from the Sukhothai period, sixty-two from the Ayutthaya period, and 680 from the reigns of Kings Rama I-VIII. To ensure that the number of literary works selected from the reigns of Kings Rama I-VIII was proportionate with the number found in the Ayutthaya period, a technique of simple random sampling was used to select sixty works from the reigns of Kings Rama I–VIII (twenty from each sub-period). For the reign of King Rama IX (1946-2016 A.D.), data was retrieved from the Thai National Corpus II (Chulalongkorn University, 2017), which yielded twelve thousand entries that included figurative use of color terms.

The twelve basic color terms in Thai, according to the studies of Engchuan (**2000)**, Tipkongka (2010), and Phornthipphayaphanit (2014), for which figurative meanings were collected are: /kʰǎːw/ (WHITE), /dam/ (BLACK), /dɛːŋ/ (RED), /lǐaŋ/ (YELLOW), /kʰǐaw/ (GREEN), /tɕʰom.pʰuː/ (PINK), /sôm/ (ORANGE), /fáː/ (LIGHT BLUE), /mûaŋ/ (PURPLE), /tʰaw/ (GREY), /náːm.ŋən/ (DARK BLUE), and /náːm.taːn/ (BROWN).

To analyze the semantic process involved in the figurative meanings, the notion of the conceptual metaphor, as well as that of conceptual metonymy (Kövecses, 2010; Lakoff & Johnson, 1980; Radden & Kövecses, 1999), was applied. Also, the metaphor identification process (MIP) (Pragglejaz, 2007) was used to identify color terms that were used metaphorically. After the identification process, interpretation of figurative meanings was conducted along with consultation involving six experts in the fields of Thai language, linguistics, and literature to avoid the influence of subjectivity and to triangulate the analysis. Those figurative meanings, then, were categorized under the semantic domains. To study the order of emergence of figurative uses of basic color terms in Thai, the periods when the figurative meanings were found were investigated.

FINDINGS AND DISCUSSION

The findings revealed evidence of metonymical and metaphorical usages of all twelve Thai basic color terms: The emergence of the figurative uses of these color terms is as follows.
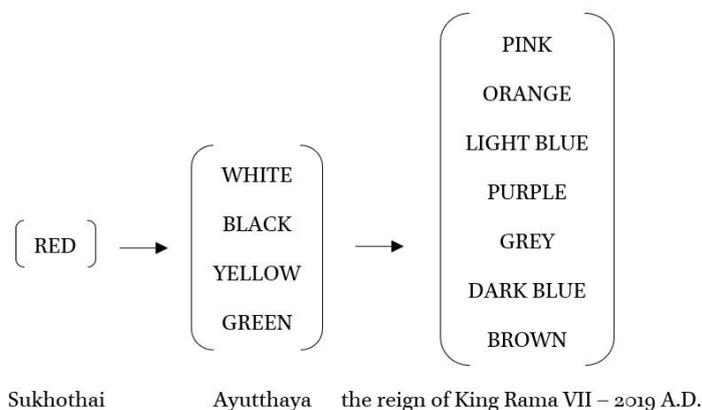
The first color term to be used figuratively was /dɛːŋ/ (RED), with evidence found of such usage during the Sukhothai period. Later, examples of the figurative use of /kʰǎːw/ (WHITE), /dam/ (BLACK), /lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN) were

found for the first time in the Ayutthaya period, while examples of the figurative use of following seven additional color terms were found during the period from the reign of King Rama VII until **2019** A.D.: /tɕʰom.pʰuː/ (PINK), /sôm/ (ORANGE), /fáː/ (LIGHT BLUE), /mûaŋ/ (PURPLE), /tʰaw/ (GREY), /náːm.ŋən/ (DARK BLUE), and /náːm.taːn/ (BROWN). The order of emergence of figurative uses of basic color terms in Thai is shown in Figure 3.

Figure 3
Order of Emergence of the Figurative Uses of Basic Color Terms in Thai

Sukhothai   Ayutthaya   the reign of King Rama VII – 2019 A.D.

The Emergence of the Figurative Meanings of Basic Color Terms in Thai

This section examines the emergence of the figurative meanings of these twelve Thai color terms. /dɛːŋ/ (RED) was found to be used figuratively from the Sukhothai period, as in /lɛk.dɛːŋ/ (steel-red) 'heat,' as well as during the period from the reign of King Rama VII until 2019 A.D., as in /nâː.dɛːŋ/ (face-red) 'being shy' and /fáː.dɛːŋ/ (sky-red) 'evening'. This color term was used figuratively with greater frequency than any of the other eleven terms.

Later, evidence of the figurative use of /kʰǎːw/ (WHITE), /dam/ (BLACK), /lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN) was found from the Ayutthaya period through until 2019 A.D. Examples include /kʰǎːw/ (WHITE) - /pʰǒm.kʰǎːw/ (hair-white) 'aging' and /nâː.kʰǎːw/ (face-white) 'physical anomaly'; /dam/ (BLACK) - /hǔa.dam/ (head-black) 'young' and /tɕaj.dam/ (heart-black) 'mean'; /lǐaŋ/ (YELLOW) - /tua.lǐaŋ/ (body-yellow) 'physical anomaly' and /pʰǐw.lǐaŋ/ (skin-yellow) 'Mongoloid or Easterner'; and /kʰǐaw/ (GREEN) - /nía.kʰǐaw/ (skin-green) 'bruised and hurt' and /nâː.kʰǐaw/ (green face) 'physical anomaly.'

Figurative usage of the following additional color terms was found only during the period from the reign of King Rama VII until 2019 A.D.: /tɕʰom.pʰuː/ (PINK), /sôm/ (ORANGE), /fáː/ (LIGHT BLUE), /mûaŋ/ (PURPLE), /tʰaw/ (GREY), /náːm.ŋən/ (DARK BLUE), and /náːm.taːn/ (BROWN). Examples include /hǔa.tɕaj.sǐ.tɕʰom.pʰuː/ (heart-color-pink) 'feeling of love,' /pʰɨ́ːn.tʰîː.sǐ.tɕʰom.pʰuː/ (area-color-pink) 'moderate risk area,' /soːn.sǐ.sôm/ (zone-color-orange) 'moderate risk level zone,' /sǐ.fáː/ (color-light blue) 'cheap price,' /tɕʰaːw.sǐ.mûaŋ/ (people-color-purple) 'male homosexuality,' /hǔa.tʰaw/ (head-grey) 'aging,' /hǔa.tɕaj.sǐ.tʰaw/ (heart-color-grey) 'suffering,' /pʰuː.kʰǒw.sǐ.náːm.taːn/ (mountain-color-brown) 'being arid,' /sîa.sǐ.náːm.ŋən/ (shirt-color-dark blue) 'a political party,' and /pʰǐw.náːm.taːn/ (skin-brown) 'Polynesian'. Figurative meanings of all color terms were used in seventeen semantic domains under the semantic processes of metonymy and metaphor. The details of the semantiv domains and the semantic processes will be presented in the following section.

The Semantic Domains and the Semantic Processes Involved in the Emergence of the Figurative Meanings of Basic Color Terms in Thai

The study reveals seventeen semantic domains: characteristics, anomalies, items from daily life, emotions and feelings, the human life cycle, race, number, place, gender, class, time, nature, political regime, temperature, cooperation group, person, and food stuff; and two semantic processes: metaphor and metonymy.

Table 1 shows the development of figurative uses of basic color terms in Thai across periods, as well as the semantic processes underlying those figurative meanings. From Table 1, it can be observed that the color terms in Thai used figuratively with various semantic domains during the periods examined in this study were /dɛːŋ/ (RED), /kʰǎːw/ (WHITE), /dam/ (BLACK), /lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN).

Table 1
The Development of Figurative Usages of Basic Color Terms in Thai through Periods and the Semantic Processes Involved

Color terms	Semantic processes	Time periods and semantic domains				
				Rattakosin		
		Sukhothai	Ayutthaya	The reigns of Kings Rama I–III	The reigns of Kings Rama IV-VI	The reign of King Rama VII - 2019 A.D.
RED	Metonymy	Temperature	Emotion and feeling Anomaly	Number Human life cycle Daily life items Class Race Time Nature Emotion and feeling Anomaly	Political regime Human life cycle Daily life items Emotion and feeling Characteristics Temperature	Cooperation group Political regime Human life cycle Daily life items Class Race Emotion and feeling Anomaly Characteristics Temperature
	Metaphor	-	Characteristics	Characteristics	Characteristics	Characteristics
WHITE	Metonymy	-	Emotion and feeling Person	Human life cycle Time Anomaly Emotion and feeling	Race Temperature Human life cycle Time Emotion and feeling Person	Characteristics Food stuff Daily life items Race Human life cycle Anomaly Emotion and feeling Person
	Metaphor	-	-	Characteristics	Political regime Characteristics	Political regime Characteristics
BLACK	Metonymy	-	Emotion and feeling Anomaly Characteristics	Race Human life cycle Emotion and feeling Anomaly Characteristics	Emotion and feeling Anomaly Characteristics	Race Human life cycle Emotion and feeling Anomaly Characteristics
	Metaphor	-	Human life cycle Characteristics	Characteristics	Characteristics	Emotion and feeling Characteristics
YELLOW	Metonymy	-	Anomaly Characteristics	Emotion and feeling Race Time Person Daily life items Anomaly Characteristics	Emotion and feeling Race Time Anomaly Characteristics	Food stuff Emotion and feeling Race Person Daily life items Anomaly
GREEN	Metonymy	-	Nature	Emotion and feeling Anomaly Nature	Place Emotion and feeling Anomaly Nature	Place Emotion and feeling Anomaly Nature
	Metaphor	-	-	-	-	Human life cycle
PINK	Metonymy	-	-	-	-	Daily life items
	Metaphor	-	-	-	-	Emotion and feeling Characteristics
ORANGE	Metaphor	-	-	-	-	Characteristics
LIGHT BLUE	Metonymy	-	-	-	-	Cooperation group
	Metaphor	-	-	-	-	Characteristics
PURPLE	Metonymy	-	-	-	-	Anomaly Daily life items
	Metaphor	-	-	-	-	Gender
GREY	Metonymy	-	-	-	-	Anomaly Human life cycle Daily life items
	Metaphor	-	-	-	-	Emotion and feeling Characteristics
DARK BLUE	Metonymy	-	-	-	-	Cooperation group Class
BROWN	Metonymy	-	-	-	-	Characteristics Race

All of these colors emerged in the Sukhothai period, the first Thai reign for which written documents were found (see Figure 2). Interestingly, seven further color terms, which were found later during the Ayutthaya and Rattanakosin periods, were only observed to be used figuratively during

the period from the reign of King Rama VII through until 2019 A.D., and in fewer numbers of semantic domains.

Among the five color terms used in various semantic domains mentioned above, /dɛːŋ/ (RED) was used in the greatest number of domains (thirteen domains), followed by /kʰăːw/ (WHITE) (eleven domains), /lĭaŋ/ (YELLOW) (eight domains), /dam/ (BLACK) (six domains), and /kʰĭaw/ (GREEN) (five domains). In the case of the seven further color terms, examples of figurative usages were found in fewer than three semantic domains, except for /tʰaw/ (GREY), for which figurative usage was found in five domains. The color term, which was used figuratively in the lowest number of domains, was /sôm/ (ORANGE). Examples were found only in the semantic domain of characteristics.

The semantic processes involved in the figurative usages of color terms in Thai are metonymy and metaphor. Metonymy was found for eleven color terms, whereas metaphor was found for nine color terms. The metonymic process was not found in examples of figurative usage in the case of /sôm/ (ORANGE). The metaphorical process was not found in examples of figurative usage in the case of /lĭaŋ/ (YELLOW), /náːm.ŋən/ (DARK BLUE), and /náːm.taːn/ (BROWN).

In terms of semantic domains, the characteristics domain was the one in which figurative use of the greatest number of color terms was found (eight color terms). In second place was the anomalies domain (seven color terms), followed by the items from the daily life domain (six color terms). In equal fourth place (five color terms) were the domains of emotion and feelings, the human life cycle, and race. Figurative usage of fewer than three color terms was found in the semantic domains of class, time, nature, political regime, temperature, cooperation group, person, and food stuff. The semantic domains in which figurative usage of the smallest number of color terms was found (one) were those of number, place, and gender.

The semantic domains in the case of figurative meanings motivated by both metonymic process and metaphorical process are characteristics, emotions and feelings, the human life cycle, and political regime. In the domain of characteristics, an example involving a metonymic process is /nâː.dɛːŋ/ (face-red) 'healthy'. This example involves a DEFINING PROPERTY FOR CATEGORY relationship – having some redness in your face is a sign of good health and vigor (Watson, 2023). An example involving metaphorical process is /tɕaj.dam/ (heart-black) 'mean'. This involves the metaphor VILLAIN IS BLACK. In the domain of emotion and feelings, /nâː.kʰàj.kʰăːw/ (face-egg-white) 'being scared' is an example involving a metonymic process with the EFFECT FOR CAUSE relationship. An example involving metaphorical

process is /mîːt.dam/ (dark-black) 'unhappy'. This involves the metaphor SADNESS IS BLACK. For the domain of the human life cycle, /hŭa.tʰaw/ (head-grey) 'aging' is an example involving a metonymic process, with a DEFINING PROPERTY FOR CATEGORY relationship. An example involving metaphorical process is /tòk.kʰĭaw/ (buy-green) 'to trick a girl into becoming a prostitute'. This example involves the metaphor YOUTH IS GREEN – girls are associated with this color due to its being the hue of raw or unripe fruit, leading it to carry a connotation of innocence. In the domain of political regime, an example involving metonymic process is /dɛːŋ/ 'red' 'communism'. This example involves a DEFINING PROPERTY FOR CATEGORY relationship – red relates to the blood shed by the working class in their fight for better working conditions and fair wages (Kumar, 2023). An example involving metaphorical process is /kʰăːw/ (white) 'democracy'. This involves the metaphor of DEMOCRACY IS WHITE. In Thai, white is associated with concepts such as brightness and cleanness. This helps explain its use in relation to democracy, which is a transparent and accountable system of government based on a belief in freedom and equality.

The semantic domains in the figurative meanings found to be motivated only by the metonymic process are anomalies, items from daily life, race, number, place, class, time, nature, temperature, cooperation group, and person. The example of /taː.lĭaŋ/ (eyes-yellow) 'physical anomaly' falls under the semantic domain of anomalies. This example involves an EFFECT FOR CAUSE relationship – the skin looks yellow (effect) because the blood contains high levels of bilirubin, which is a yellowish substance in the blood (cause) (Bedinghaus, 2023). /jaː.mét..sĭ.tɕʰom.pʰuː/ (pill-color-pink) 'analgesic/painkiller' is an example in the items from the daily life domain. This example involves a DEFINING PROPERTY FOR CATEGORY relationship – pink is the color of painkillers. Other typical characteristics of this type of pill include being round in shape and not being sugar-coated. An example in the race domain is /pʰĭw.náːm.taːn/ (skin-brown) 'Polynesian'. This example involves a DEFINING PROPERTY FOR CATEGORY relationship – brown skin is one of the features of Australoids (Toole & Toole 1997, p. 153).

/dɛːŋ/ (red) can also mean 'many', which falls under the domain of number. The meaning involves a PART FOR THE WHOLE relationship, in that its red color is one feature of the loincloth, garments which people wore in ancient times. Figurative usage in the domain of place was found in the example of /kʰoːm.kʰĭaw/ (lamp-green) 'a brothel.' This example involves a PART FOR THE WHOLE relationship – in the past, green lamps were always hung in front of brothels, so they became distinctive

features of brothels. An example in the class domain is /pòk.kʰɔː.náːm.ŋən / (collar-dark blue) 'working class'. This involves a PART FOR THE WHOLE relationship, in that blue is the color of clothing worn by members of the working class. The term 'blue-collar worker' is derived from the common color of manual workers' attire: blue jeans, overalls, and boilersuits, for example. Dark colors, such as blue, help hide dirt and other elements that may soil clothes while working (Parietti, 2021).

An example involving a figurative meaning in the domain of time is /fáː.kʰǎːw/ (sky-white) 'morning'. This example involves an EFFECT FOR CAUSE relationship – the sky is white (effect) because of the morning sunlight (cause). /náːm.kʰǐaw/ (water-green) 'sea' is an example in the semantic domain of nature. This example involves a DEFINING PROPERTY FOR CATEGORY relationship – greenness is a property of the sea. An example in the temperature domain is /tʰàːn.dɛːŋ/ (charcoal-red) 'being heated'. This represents an EFFECT FOR CAUSE relationship – the surface of the charcoal turns red (effect) because of the heat (cause). The example of /naːŋ.fáː.sǐː.fáː/ (angel-color-light blue) 'light blue angel' falls in the cooperation group domain. This involves a PART FOR THE WHOLE relationship in the way that light blue is the color of nurses' uniforms. Figurative usage for the domain of person was found in the example of /pʰráʔ.kʰǎːw/ (monk-white) 'male ascetic.' This example involves a DEFINING PROPERTY FOR CATEGORY relationship – white clothes are identified with priests, in addition to concepts such as the holding of precepts and the maintenance of virginity/celibacy. In the domain of food stuff, /náːm.sǐː.lǐaŋ/ (water-color-yellow) 'liquor' is an example. This example involves a DEFINING PROPERTY FOR CATEGORY relationship – yellowness is one feature of liquor, in addition to possession of an ethyl alcohol content of less than 60%.

The semantic domain of gender is found to be motivated only by the metaphorical process. An example is /tɕʰaːw.sǐː.mûaŋ/ (people-color-purple) 'male homosexuality'. This involves the metaphor of MALE HOMOSEXUALITY IS PURPLE – purple is a combination of blue, which has a masculine association, and red, which has a feminine one (Cui et al, 2023).

It is significant that the metonymic process motivates a higher number of semantic domains in the figurative use of color terms in Thai. This cognitive process is highlighted when it motivates the semantic domains in which figurative use of the greatest number of color terms was found: eight color terms for the characteristics domain, seven color terms for the anomalies domain, and six color terms for the items from daily life domain. The findings support Kövecses (2020) and Kövecses et al. (2025), who claim that metonymies

may be more primary than primary metaphors when they propose that primary metaphors emerge through the metonymic process. Applying this idea to explain the linguistic phenomenon of figurative meanings in this study, it is possible to confirm that metonymy is more fundamental than metaphor. Even though these two cognitive processes involve conceptual projections, metaphor is viewed as a mapping from one conceptual domain into another conceptual domain, while metonymy is viewed as a mapping within one cognitive domain (Lakoff & Johnson, 1980; Panther & Radden, 1999; Radden & Kövecses, 1999).

CONCLUSION

The findings show that in Thai, the figurative usage of basic color terms did not develop in the same order as the usage of the basic color terms themselves. Figurative usages of all twelve basic color terms in Thai were found dating from the Sukhothai period until 2019 A.D. These color terms were used to describe seventeen semantic domains. The first color term that was used figuratively is /dɛːŋ/ (RED), which was found to be used in thirteen out of seventeen domains.

It is very interesting to note that the color terms used figuratively in the various semantic domains, which were /dɛːŋ/ (RED), /kʰǎːw/ (WHITE), /dam/ (BLACK), /lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN), were those which emerged during the Sukhothai period, the first Thai reign for which written documents were found, while a further seven colors, which were /tɕʰom.pʰuː/ (PINK), /sôm/ (ORANGE), /fáː/ (LIGHT BLUE), /mûaŋ/ (PURPLE), /tʰaw/ (GREY), /náːm.ŋən/ (DARK BLUE), and /náːm.taːn/ (BROWN), found later during the Ayutthaya and Rattanakosin periods, were used figuratively only during the period from the reign of King Rama VII through until 2019 A.D., and in a lower number of semantic domains.

The findings in this study highlight the salience of /dɛːŋ/ (RED) in Thai, which has been used figuratively in every period since Sukhothai and in greatest number of semantic domains. It was also found in previous studies to be used most frequently in relation to various emotions. The salience of red color can be explained in terms of neuroscience and psychology. Stauch et al. (2022) found that the red color is attributed to a signaling and warning effect and reflected in the brain wave. Hong et al. (2024) studied the red-attractive effect and found that red can enhance perceived attractiveness when evaluating the opposite sex. Also, the red color was studied to explore its effect when used on food packages. Lunardo et al. (2021) revealed that it leads consumers to feel some guilt about their consumption.

Examples of figurative usage of four additional color terms, /kʰǎːw/ (WHITE), /dam/ (BLACK),

/lǐaŋ/ (YELLOW), and /kʰǐaw/ (GREEN) were found later, during the Ayutthaya period, as well as in subsequent periods. A possible explanation for this phenomenon is the notion of entrenchment - the establishment of a linguistic unit as a cognitive pattern or routine in the mind of an individual language user (Schmid, 2020)**.** To be more specific, when language users need to use color terms to refer to other domains, they tend to choose color terms that are already firmly established in their minds.

The results revealed some examples of historic metonymical and metaphorical meanings are not found in the present day, such as /nía.lǐaŋ/ or /pʰǐw.lǐaŋ/ (skin-yellow) which means 'beautiful.' The disappearance of some meanings might be due to changes in social values. For example, nowadays Thai people no longer consider people with yellow skin to be beautiful (Huang, 2022). On the other hand, examples also exist of contemporary metonymical and metaphorical meanings not found in the past, such as /tɕʰa:.w.sǐ:.mûaŋ/ (people-color-purple) meaning 'male homosexual.' Today, people tend to be more open-minded about gender and sexuality (Pongruengphant, 2025). Examples such as these show that social values have an effect on the metonymical and metaphorical uses of color terms in Thai.

It was also found that some figurative meanings were found for the first time during the reigns of Kings Rama IV-VI, when there was the education reform in Thailand and the first time to send Thai people to study abroad (Fry & Bi, 2013). Examples include 'healthy' from /nâ:.dɛ:ŋ/ (face-red), 'communism' from /dɛ:ŋ/ 'red', and 'democracy' from /kʰǎ:w/ (white). Some figurative meanings were found for the first time during the period from the reign of King Rama VII through until 2019 A.D., for example, 'analgesic/painkiller' from /ja:.mét..sǐ.tɕʰom.pʰu:/ (pill-color-pink), '1,000-baht banknote' from /bɛ́ŋ.sǐ:.tʰaw/ (banknote-color-grey), and 'male homosexuality' from /tɕʰa:.w.sǐ:.mûaŋ/ (people-color-purple). All of the examples involve new concepts that have emerged in recent times.

As this paper has highlighted the emergence of figurative usage of basic color terms in Thai, the semantic domains, and the semantic processes involved in figurative meanings, future research might analyze the figurative usage of non-basic color terms in Thai, for instance, /woŋ.ka:n.sǐ:.ka:.ki:/ (circle-khaki) which means 'police circle'; or color shade in Thai, such as /mî:t/ 'dark' in /ta.là:t.mî:t/ (market-dark), which means 'black market,' /mɔ̌:ŋ/ 'dull' in /mɔ̌:ŋ.tɕʰaj/ (heart-dull), which means 'gloomy,' and /kʰùn/ 'turbid' in /kʰùn.tɕʰaj/ (turbid-heart), which means 'moody.'

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