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# THE SEMANTIC ASPECTS OF TURKISH DIMENSION ADJECTIVES "BÜYÜK (BIG)" AND "KÜÇÜK (SMALL)"

TÜRKÇE BOYUT SIFATLARININ ANLAMSAL GÖRÜNÜMLERİ: "BÜYÜK" VE "KÜÇÜK"

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#### Abstract

Literal and figurative meanings are two ends of a continuum and we can not talk about a sharp distinction between these two meaning types. Such a continuum exhibits different degrees of figurativity. Radden (2002) considers this as literal-metonymy-metaphor continuum; where Dirven (2002) focuses on conceptual closeness and conceptual distance on the continuum. This study aims to analyse the semantic aspects of Turkish adjectives büyük (big) and küçük (small) by referring to Turkish National Corpus (TNC) in the light of the gradation of literal-figurative meaning proposed by Dirven (2002). In order to reach this aim; first the noun types and experiential domains modified by the adjectives are analysed and then the semantic categories on the continuum are identified. The results of the study show that for büyük the most frequently used adj+noun constructions are animate entities and the most common experiential domain is EVALUATION. For küçük the most frequently used adj+noun constructions are animate entities and the most common experiential domain is pHYSICAL DIMENSION. The semantic categories for both adjectives display a continuum from literal to figurative with literal, pre-metonymic, metonymic, post-metonymic and metaphoric meanings.

#### Öz

Literal ve imgesel anlamlar bir sürekliliğin iki ucunu oluşturmaktadır ve bu iki anlam türü arasında keskin bir ayrımdan söz etmek mümkün değildir. Böylesi bir sürerlilik, farklı imgesellik düzeylerini de içermektedir. Radden (2002) bu sürerliliği literal-metonimimetafor sürerliliği olarak adlandırırken; Dirven (2002) sürerliliği kavramsal yakınlık ve kavramsal uzaklık kavramlarına vurgu yaparak açıklamıştır. Bu çalışma, Türkçe büyük ve küçük sıfatlarının anlamsal görünümlerini Türk Ulusal Derlemini (TUD) kullanarak, Dirven'ın (2002) önerdiği literal-imgesel anlam derecelenmesine dayalı olarak incelemeyi amaçlamaktadır. Bu amaca ulaşmak için, öncelikle sıfatların nitelediği ad türleri ve deneyimsel alanlar belirlenmiş; ardından literal-imgesel anlam sürerliliği üzerindeki anlamsal kategoriler sunulmuştur. Çalışmanın sonuçları, büyük+ad kurulumlarının sıklıkla soyut adları nitelediğini ve DEĞERLENDIRME deneyimsel alanıyla kullanıldığını; küçük+ad kurulumlarının ise en fazla canlı varlıkları nitelediğini ve FIZIKSEL BOYUT deneyimsel alanıyla kullanıldığını göstermiştir. Her iki sıfata ait anlamsal kategoriler de literal-imgesel sürerliliği üzerinde literal, metonimi öncesi, metonimi, metonimi sonrası ve metaforik anlamlar olmak üzere beş başlık altında toplanımştır.

## **1. INTRODUCTION**

Meaning is an abstract concept and can be defined as a conceptualization (Langacker, 1991). It is a whole with the two components form and content (Saussure, 1998; Leech, 1975; Frawley, 1992). This whole displays various aspects when daily language use is considered and these aspects cause various word meanings to occur. Considering the view that meaning is a product of thought,

different conceptualizations of a linguistic symbol is quite expected. These conceptualizations result in figurative meanings as thought is figurative. The figurative nature of thought plays an important role on the variation of the meaning of a linguistic unit (Kövecses, 2010; Lakoff & Johnson, 1980). These variations provide a basis for a continuum from literal to figurative meaning (Gibbs & Colston, 2012). Besides, each meaning type on the continuum shows varieties in conceptualization. Experiences and domains, which are products of human mind, form a basis to these variations (Lakoff, 1987; Langacker, 1991, 2008). The meaning types and semantic categories on literal-figurative continuum can be best described with the principles and theories of cognitive linguistics (Dirven, 2002; Gibbs, 1994; Gibbs & Colston, 2012; Kövecses, 2010; Radden, 2002).

This study aims to investigate the semantic aspects of Turkish dimension adjectives *büyük* (big) and *küçük* (small) by referring to Turkish National Corpus (TNC) (Aksan et al., 2016) within a cognitive linguistics view. Within this framework, the semantic categories and the role of cognitive mechanisms motivating *büyük+noun* and *küçük+noun* constructions in different figurativity levels are presented. For this, the study searches answers to the following research questions:

- What are the noun types that Turkish adjectives *büyük* and *küçük* modify in adj+noun constructions in TNC?
- What are experiential domains that Turkish adjectives *büyük* and *küçük* belong in adj+noun constructions in TNC?
- How are the semantic distributions of Turkish pre-modifier adjectives *büyük* and *küçük* in adj+noun constructions in TNC?

In the study, first the conceptual framework on adjective constructions and meaning types will be introduced; after that, the method and findings of the study will be presented. Lastly, the results of the study will be discussed.

## 1.1. Literature Review

In this section the conceptual framework that plays role in the emergence of the meaning of adj+noun constructions are explained in the light of related concepts of cognitive linguistics.

## 1.1.1. Adjective Constructions and Their Semantic Aspect

According to cognitive linguistics view, semantic structures can be conceptualized by frames, scripts, domains or idealized cognitive domains (ICM) (Evans & Green, 2006). These cognitive tools help understanding the way a concept

gains its meaning. Fillmore (1982) calls the unit that a word is understood a *frame*, where Langacker (1987) suggests that the meaning structures can be conceptualized by *cognitive domains*. A concept, perceptual experience or knowledge can show itself as a domain. Accordingly, understanding a concept can be possible with one or more than one domain. Adjectives have to constitute a construction by combining with an entity that emerges and elaborates their meaning. This helps them gain different meanings according to their interaction with the type of the nouns modified. For this reason, Langacker (2008) categorizes adj+noun constructions under relational expressions class. In a construction, there are conceptually autonomous and independent structures, which are named as profile and base. The autonomous structure is called profile, where the independent structure is called a base. In a construction, base represents a domain; where profile represents the substructures in a base (Langacker, 1991). These structures display different degrees of saliency. In adj+noun constructions, the autonomous structure becomes prominent as a noun, and the dependent structure shows itself as an adjective, since in such a construction, the noun gains its meaning independently from the adjective. For example in big house, the entity house is autonomous, because we can conceptualize a house without taking its size into account; on the other hand *big* is dependent since its meaning is not clear until an entity exhibits the quality of being big (Syrpa, 2017, 92). For this reason, the noun types modified by an adjective are crucial in displaying the meaning the adjective gain. In adjective constructions, the levels of saliency are represented by the participants, which are called trajectory and landmark. According to this, trajectory is accepted as the focal participant of the construction where, landmark is the participant with secondary importance (Langacker, 1991). These constructions exhibit an extension from literal meaning to figurative meaning. At this point a need to define these meaning types occur. In our study, the meaning types will be discussed as literal, non-literal and figurative within cognitive framework by referring to the literature on the semantic aspects of adjectives (Dirven, 2002; Radden, 2002; Gibbs & Colston, 2012).

Research on adjectives with cognitive framework reveals that adjectives display different meaning aspects on a continuum (Dirven, 2002; Radden, 2002; Syrpa, 2017). Radden (2002) discusses the meaning of English dimension adjective *high* in terms of its metonymic and metaphoric meanings. Dirven (2002) enhances this continuum and grounds the meaning types on conceptual distance and conceptual closeness. The researcher proposes that conceptual closeness and distance can

cause different degrees in each meaning category, which are literal, non-literal and figurative. Literal meaning is accepted as the primary meaning where non-literal meanings are defined as secondary meanings (Gibbs, 1994). A non-literal linguistic use is not always figurative, since figurative meaning refers to a more complex conceptual content that is beyond what the language users intend to convey in a context (Gibbs & Colston, 2012). Figurative linguistic units have various figures of speech such as metaphor, metonymy, irony and sarcasm. These figures of speech have various features and gradations among them. Some of these figures can include more figurative, less figurative or familiar meanings. It is difficult to talk about clear-cut distinctions between these figurative uses. This difficulty lets us evaluate the meaning types on a meaning continuum.

Syrpa (2017) analyses English adjective *big* by referring to Dirven's (2002) literal-figurative continuum and shows the meaning categories as *literal, premetonymy, metonymy and metaphor.* According to Syrpa (2017), *big* demonstrates four other meaning categories, two of which are metaphors, besides its dimension meaning. These categories are motivated by cognitive mechanisms such as metaphor and metonymy as in Radden (2002) and Dirven (2002).

#### 1.1.2. Metaphor and Metonymy

Two cognitive mechanisms play a role on determining the meaning categories on literal-figurative continuum: metaphor and metonymy. Metaphor is defined as understanding one conceptual domain in terms of another conceptual domain; and is motivated by the relation between these two distinct conceptual domains (Kövecses, 2010). This relation depends on either experience or similarity (Lakoff & Johnson, 1980; Kövecses, 2010). On the other hand, metonymy is a cognitive mechanism where a conceptual entity has conceptual access to another conceptual entity in the same domain or cognitive model (Radden & Kövecses, 1999). Thus, metonymy emerges depending on an access relationship in the same domain grounding on a contiguity relationship. Conceptual closeness and conceptual distance play role in the conceptualization of metaphoric and metonymic expressions.

In this study the semantic aspects of Turkish adjectives *büyük* and *küçük* will be identified in terms of the gradation of metonymic and metaphoric conceptualizations on literal-figurative continuum in the light of the conceptual framework above. According to this, the meaning types are going to be classified under five basic categories. The figurative uses will be categorized under metonymic

and metaphoric uses. These meaning types are; literal, pre-metonymy, metonymy, post-metonymy and metonymy.

## 2. METHOD

The semantic aspects of adj+noun constructions are analysed by referring to Turkish National Corpus (TNC). TNC is a balanced and representative corpus of Contemporary Turkish, with a size of 50 million words. This corpus consists of samples of textual data across a wide variety of genres covering the years 1990-2013, which is a period of 24 years (Aksan et al., 2016). This study uses the corpus as a source in order to discuss the semantic aspects of the adjectives. Corpus queries were made on the web site of TNC and then the corpus data was analysed by transferring it to a spreadsheet. Data driven from the corpus was limited with adj+noun constructions; adjective pronouns, proper names, verbs and idiomatic expressions were excluded from the data. No limitations were applied on the time period and text type. All the examples were analyzed in context. Categorization of meaning types was applied in terms of the meaning the adjectives gained in context. The procedure below was followed in the analysis process:

- The paragraphs including Turkish adjectives *büyük* and *küçük* in written texts were extracted from TNC.
- These paragraphs were copied to a spreadsheet.
- All the adj+noun constructions were analysed within the context the adjectives were used.
- Adjective pronouns, verbs, proper names such as *Büyük Menderes, Büyük Ada, Küçük Ada* and *Küçük Prens*; names of institutions and councils such as *Türkiye Büyük Millet Meclisi, Küçük Sanayi Sitesi* and *Küçük Tiyatro*; fully fixed constructions and nouns that are used as technical terms, such as *küçük harf (lit.lower case letter), büyük tansiyon (lit.systole) küçük tansiyon (lit.diastole)* and *büyük rakı (lit.big raki)* were excluded form the database.
- Next, the nouns in *büyük/küçük+noun* constructions are classified under 10 types; frequencies and percentiles were calculated.
- The nouns were classified under the experiential domains they belong to and their frequencies and percentiles were calculated.
- The adjectives *büyük* and *küçük* were grouped under five meaning categories regarding the modified noun types and experiential domains.
- The frequencies of the meaning types and their frequencies were calculated.

The adjectives were analyzed and categorized intuitively by two experts on figurative language (Kövecses, 2005, 2010; Lakoff, 1987). Krippendorff's alpha reliability test is applied to measure agreement between raters, and an agreement of 0.76 was calculated.

Table 1 presents the total numbers of adjectives gathered for the analysis in line with the steps followed.

Adjectives	Total	Tokens	Types
Büyük	4069	2326	959
Küçük	3419	2164	987

 Table 1. Data gathered from the TNC

According to the data driven from the corpus; 2326 *büyük+noun* constructions and 2164 *küçük+noun* constructions are analysed. The occurrences gave 959 types for *büyük* and 987 types for *küçük*.

## **3. FINDINGS**

In this section, firstly, the noun types modified by the adjectives are introduced; then the experiential domains the adjectives belong to are demonstrated. Lastly, the meaning types the adj+noun constructions gain are discussed. These data will be presented successively for the adjectives  $b\ddot{u}y\ddot{u}k$  and  $k\ddot{u}c\ddot{u}k$  in the following sub-sections.

## 3.1. Noun Types Modified in Büyük/Küçük+Noun Constructions

The noun types modified in *büyük+noun* constructions are classified under 10 categories. These categories are presented in Table 2 with examples.

Types of nouns	Example			
Abstract nouns	sorun (problem), başarı (success), mutluluk			
	(happiness)			
Spatial extension	alan (field), deniz (sea), şehir (city)			
Physical entities	bina (building), kapı (door), masa (table)			
Animate entities	çocuk (children), adam (man), kedi (cat)			
Gradation nouns	ölçü (extent), ölçek (scale), oran (proportion)			
Segmentation nouns	bölüm (part), parça (piece), kısım (section)			
Collective nouns	aile (family), çoğunluk (crowd), grup (group)			
Financial concepts	gelir (income), para (money), sermaye (fund)			
Institutions	kuruluş (institutiın), firma (firm),			
	şirket(company)			
Quantity	miktar (amount), adet (number), sayı			
	(number)			

**Table 2.** Types of nouns in *big+noun* constructions

As shown in Table 2, *büyük* modifies abstract nouns such as *victory*, *attention*, *success*, *happiness*, *sadness* and *problem*; animate entities and part of their bodies such as *man*, *hand*, *cat* and *brother*; physical entities such as *wall*, *bed*, *building* and *window*; physical entities with spatial extension such as *city*, *river*, *field* and *area*; financial concepts such as *income*, *money*, *budget* and *profit*; institutions such as *company*, *institution* and *corporation*; gradation nouns such as *scale*, *proportion* and *extent*; segmentation nouns such as *part*, *section* and *piece*; collective nouns such as *group*, *family* and *crowd*; and nouns expressing quantity such as *amount* and *number*. The distribution and the percentage of these categories are presented in Table 3.

Types of nouns	Frequency	%
Abstract nouns	1328	57,1
Spatial extension	169	7,3
Physical entities	165	7,1
Animate entities	163	7,0
Gradable	149	6,4
Segmentation nouns	111	4,8
Collective nouns	83	3,6
Financial concepts	73	3,1
Institutions	65	2,8
Quantity	20	0,9
Total	2326	100

**Table 3.** Distributions of nouns modified in *büyük+noun* constructions

As seen in Table 3, the most frequently modified nouns types are *abstract* nouns, *physical entities with spatial extension*, *physical entities with overall dimension* and *animate entities* successively.

When *küçük+noun* constructions were analysed, the same 10 noun types modified in *büyük+noun* constructions were found out. However, *küçük* shows some differences in the elaboration of the nouns and the distribution of the nouns modified. These categories are presented in Table 4 with examples.

**Table 4.** Types of nouns in küçük+noun constructions

Types of nouns	Example			
Animate entities	kız (girl), çocuk (child), köpek (dog)			
Physical entities	pencere (window), ev (house), kitap (book)			
Abstract nouns	zafer (victory), ümit (hope), acı (pain)			
Spatial extension	alan (field), semt (district), göl (lake)			
Institutions	işletme (business), firma (firm), şirket (company)			
Collective nouns	aile (family), grup (group), topluluk			

	(comm	unity)			
Gradation nouns	ölçek	( //	yüzde	(percentage),	oran
Gradation nouns	(proportion)				
Financial concepts	ücret (fee), para (money), tasarruf (investment)				ent)
Segmentation nouns	bölge (region), pay (piece), bölüm (part)				
Quantity	miktar (quantity), sayı (number), doz (dose)				

Parallel to büyük, küçük also modifies animate entities and part of their bodies such as girl, uncle, shoulder and dog; physical entities such as window, house, radio and stone; abstract nouns such as victory, pain, hope, joke, pain and sin; physical entities with spatial extension such as city, district, lake, field and area; institutions such as business, firm and corporation; financial concepts such as money, fee, investment and budget; segmentation nouns such as region, part, portion and section; nouns expressing quantity such as quantity, number, volume and dose. The distribution and the percentage of these categories are presented in Table 5.

Table 5. Distributions of nouns modified in küçük+noun constructions

Types of nouns	Frequency	%
Animate entities	633	29,3
Physical entities	585	27,0
Abstract nouns	378	17,5
Spatial extension	195	9,0
Institutions	94	4,3
Collective nouns	77	3,6
Gradation nouns	69	3,2
Financial concepts	57	2,6
Segmentation nouns	43	2,0
Quantity	33	1,5
Total	2164	100

The findings show that the most frequently modified noun types are *animate entities*, *physical entities*, *abstract entities* and *physical entities with spatial extension* successively.

## 3.2. Experiential Domains for Büyük/Küçük+Noun Constructions

The noun types modified by *büyük/küçük+noun* constructions are grouped under five experiential domains, which are PHYSICAL DIMENSION, QUANTITY/ AMOUNT/NUMBER, MEASURE/EXTENT, FINANCE/ECONOMY/INSTITUTION and EVALUATION. When these experiential domains are classified according to the types of nouns and profiled features; it is observed that some domains comprise various noun types. For instance, PHYSICAL DIMENSION involves three distinct types of experiential domains and these domains profile various features. Similar to this, AMOUNT also shows different profiled features. In terms of the categorization of the noun types,

*büyük* and *küçük* show different elaborations. Table 6 and Table 7 summarize the features of the profiled nouns in the experiential domains for modifiers *büyük* and *küçük*.

Experiential domain	Features	Examples	Frequency
PHYSICAL DIMENSION (I)	Animate entities; humans, animals or parts of human body	body, foot, fish	25
PHYSICAL DIMENSION (II)	Concrete physical objects	notebook, knife, cloth	164
	the length	sofa, bed, armchair	
	the containing capacity	glass, box, container	
	the width	stone, rock, sphere	
	Structures	building, house, room	
PHYSICAL DIMENSION (III)	Spatial extensions	field, city, place	169
QUANTITY, AMOUNT, NUMBER	Amount	Number, amount	214
	Collective nouns	family, crowd, flock	
	Segmentation	part, share, section	
MEASURE/EXTENT	Gradation	scale, extent, proportion	
FINANCE/ECONOMY/ INSTITUTION	Finance	budget, income, money	138
	Institution, organization	company, corporation, institution	
AGE	Old	man, aunt, brother	46
EVALUATION	More, instant	surprise, problem, possibility	1421
	Important, familiar	painter, master, philosopher match, graduation, team	

Table 6. The experiential domains for but	ïyük
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According to Table 6, the most frequent experiential domain for  $b\ddot{u}y\ddot{u}k$  is EVALUATION (f=1421), which yields to some metaphorical meanings. The second frequent domain is PHYSICAL DIMENSION (f=258), where the third is QUANTITY/AMOUNT (f=214). These distributions and the frequent use of the EVALUATION domain indicate that  $b\ddot{u}y\ddot{u}k$  is mostly used figuratively in Turkish. Table 7 demonstrates the experiential domains for  $k\ddot{u}c\ddot{u}k$ .

Experiential domain	Features	Examples	Frequency	
PHYSICAL DIMENSION (I)	Animate entities; humans, animals or parts of human body	body, shoulder, animal, cat, dog	132	
PHYSICAL DIMENSION (II)	Concrete physical objects	mirror, book, phone	582	
	the length	table, bed, boat		
	the containing capacity	box, container, bucket		
	the width	block, stone, rock		
	Structures	room, stationery, house		
PHYSICAL DIMENSION (III)	Spatial extensions	village, field, place, city	198	
QUANTITY, AMOUNT, NUMBER	Amount	number, amount, value	170	
	Collective nouns	group, family, community		
	Segmentation	part, section, zone		
MEASURE/EXTENT	Gradation	scale, extent, ratio	69	
FINANCE/ECONOMY/I NSTITUTION	Finance	profit, economy, money	152	
	Institution, organization	business, corporation, institution		
AGE	Young	uncle, girl, mother	464	
EVALUATION	Less	Pain, fear, hope	397	

**Table 7.** The experiential domains for *küçük* 

Unimportant, unfamiliar	villager, artist, musician lie, negativity, error
Short	novel, text, letter, story

Table 7 depicts that the most frequently used experiential domain for  $k\ddot{u}c\ddot{u}k$  is PHYSICAL DIMENSION (f=912). These uses are classified under three meaning categories, most of which are used literally and with pre-metonymic meaning. The next two are AGE (f=464) and EVALUATION (f=397) domains, which both yield to metaphorical meanings. As stated above, these experiential domains help us to identify the semantic aspects of the adjectives on literal-figurative continuum. According to the categorizations in Tables 6 and 7; six meaning categories were identified for  $b\ddot{u}y\ddot{u}k$  and  $k\ddot{u}c\ddot{u}k$  in the light of Radden (2002), Dirven (2002) and Syrpa (2017).

In 3.3. these meaning categories are discussed by referring to the examples in the corpus data.

## 3.3. The Meaning Categories for Büyük/Küçük+Noun Constructions

The five meaning categories gathered from the corpus data are presented in Table 8.

			8 51		
1	2	3	4	5	
	Non-literal	Non-literal	Non-literal	Non-literal	Non-literal
T. 1	+	+	+	+	+
Literal	Non-figurative	Figurative	Figurative	Figurative	Figurative
	Pre-metonymy	Metonymy	Post-metonymy	Metaphor I	Metaphor II

Table 8. Meaning types

As seen in the table, the adjectives *büyük* and *küçük* gain their meanings in five stages on the literal-figurative continuum. On the continuum, the adjectives lose their literal meanings gradually depending on the types of nouns modified and experiential domains these nouns belong to.

The distribution of the semantic categories for *büyük+noun* constructions are presented in Figure 1.

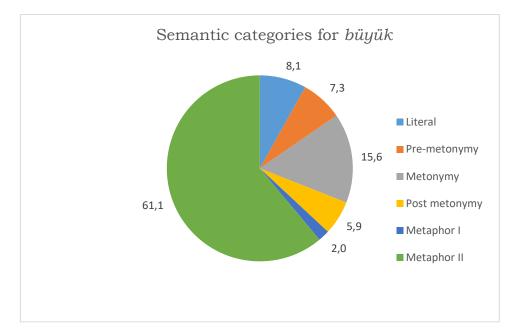


Figure 1. Distribution of semantic categories for büyük

According to Figure 1, the most frequently used meaning type on the continuum is metaphor (63.1%); it is followed with metonymic (15.6%) and literal (8.1%) occurrences. Thus, it is possible to deduce that the adjective  $b\ddot{u}y\ddot{u}k$  is mostly used figuratively.

The distribution of the semantic categories for *küçük+noun* constructions are presented in Figure 2.

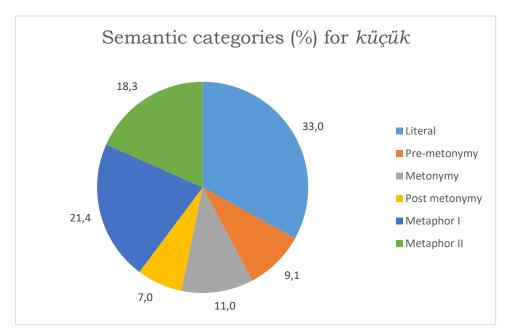


Figure 2. Distribution of semantic categories for küçük

The frequency of the semantic categories show some difference when the distribution of these categories for  $k\ddot{u}c\ddot{u}k$  is analysed. The most frequently used meaning type in the corpus data is comprised with literal examples (33%). This category is followed with metaphoric (21.4% and 18.3%) and metonymic (11%) examples.

The semantic categories on the literal-figurative continuum are discussed below successively.

#### Literal

In the first step of the continuum, the adjectives *büyük* and *küçük* modify physical entities and animate entities and keep their literal meanings. The literal meaning of the adjective *büyük* is "a concrete object whose dimension is more than norm, macro, opposite of small"; and the literal meaning of the adjective *küçük* is "a concrete object whose dimension is less than norm, macro, opposite of big" in Dictionary of Turkish Language Institution. In literal meaning, the adjectives profile the overall dimension of an entity, thus all dimensions of the noun is in the active zone as shown in Figure 3.



Figure 3. Literal meaning: *büyük* and *küçük* 

Following the information above, in this meaning type *büyük* refers to the extent which is more than the norm of a physical object. 8.1% of the occurrences are categorized under this meaning type. In these examples *büyük* modifies body parts of animate entities such as *hand*, *foot* and *nose*; animals such as *fish* and *cat*, the overall dimension of concrete physical objects such as *notebook*, *knife* and *cloth*; the width and length of concrete physical objects *sofa*, *bed* and *armchair*, containers such as *glass*, *box* and *container*; concrete physical objects with a high volume such as *stone*, *rock* and *sphere* and structures and buildings such as *building*, *house* and *room*.

Contrary to *büyük*, *küçük* refers to the extent which is less than the norm of a physical object. 33% of the occurrences obtained from the corpus data are categorized as literal. *Küçük* modifies body parts of animate entities such as *body*, *head* and *eyes*; animals such as *insect*, *cat* and *dog*; the overall dimension of concrete physical objects such as *book*, *paper* and *eraser*; the width and length of concrete physical objects such as *table*, *bed* and *chair*; containers such as *glass*, *box* and *bucket*; concrete physical objects with a high volume such as *stone*, *brick* and *block* and structures and buildings such as *apartment*, *building* and *house*.

As seen in the examples both *büyük* and *küçük* profile the overall size of the entity in the active zone when used in literal meaning. In other words, all dimensions of the entity are in the active zone.

#### Non-literal/Pre-metonymyic

In the second step, the adjectives begin to lose their literal meaning and become non-literal, since they begin to lose their overall dimension reference and modify one-dimension of the entity. This time, only one dimension of the entity is in the active zone as depicted in Figure 4.

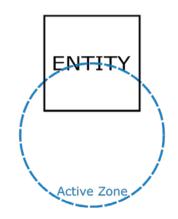


Figure 4. Pre-metonymic meaning: büyük and küçük

In this category, the region in the active zone exceeds (for  $b\ddot{u}y\ddot{u}k$ ) or falls behind (for  $k\ddot{u}c\ddot{u}k$ ) the average size value. This time the trajectory should be an entity that exceeds or falls behind the norm in the scale of three-dimensional size (Syrpa, 2017). These examples are referred as partially or weakly metonymic occurrences by Dirven (2002) and Radden (2002).

The occurrences are motivated by BIG+MORE FOR BIG conceptualization for *büyük*. In the corpus findings, 7.3% of the occurrences are categorized as premetonymic. In these occurrences, big modifies physical objects with spatial

extension such as *land, city*, and *place*. On the other side, SMALL+LESS FOR SMALL motivates the occurrences for *küçük*. This meaning type comprises 9.1% of the occurrences. Examples show spatial extension such as *city*, *village*, and *field*.

## Figurative/metonymic

In this category, the adjectives begin to lose their dimension meanings and acquire figurative meaning. Figurative expressions are motivated by two cognitive mechanisms, which are metonymy and metaphor (Kövecses, 2010; Lakoff; 1987). The occurrences under this category are metonymic since they ground on the contiguity relationship between PHYSICAL DIMENSION and QUANTITY or EXTENT concepts in the same domain. In this category, a vehicle entity PHYSICAL DIMENSION has conceptual access to a target concept QUANTITY or EXTENT in the same conceptual domain as shown in Figure 5.

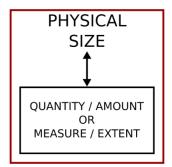


Figure 5. Metonymic meaning: büyük and küçük

These occurrences are motivated with MORE FOR BIG metonymy for *büyük*. *Büyük* represents a norm in terms of amount, instead of dimension. 15.6 % of the occurrences are categorized under this category, and *büyük* profiles trajectories that belong to experiential domains QUANTITY/AMOUNT/NUMBER or MEASURE/EXTENT. Hence, the adjective profiles collective nouns such as *family, crowd* and *flock*; nouns which represent amount such as *number* and *amount*; segmentation nouns such as *part, share* and *section* and gradation nouns such as *scale, extent* and *proportion*.

*Küçük* also shares the same conceptualization with LESS FOR SMALL metonymy. 11% of the occurrences are categorized under this category. The trajectories küçük of profiles are in two experiential domains the first which is QUANTITY/AMOUNT/NUMBER. Under this experiential domain; küçük profiles collective nouns such as group, family and team; nouns which represents amount such as number, value and amount; segmentation nouns such as section, ratio and part. As

for the domain MEASURE/EXTENT; the adjective profiles gradation nouns such as *scale, extent* and *ratio*.

Figurative/Post-metonymic

Some figurative examples on the literal-figurative continuum vacillate between metaphorical and metonymical meaning. At this stage of the continuum, the examples have both metonymic and metaphoric motivations. These examples are motivated by QUANTITY FOR SIZE metonymy on one hand, and QUANTITY IS SIZE metaphor on the other as shown in Figure 6.

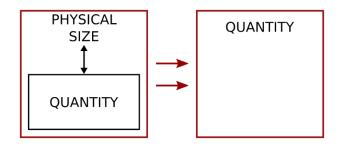


Figure 6. Post-metonymic meaning: büyük and küçük

Under this category, the occurrences obtained for *büyük* are motivated by MORE FOR BIG metonymy since they denote a scale, gradation and extent in the same domain. On the other hand, they are motivated by MORE IS BIG metaphor since they denote a mapping between the domains PHYSICAL DIMENSION and QUANTITY. These examples constitute 5.9 % of the occurrences. *Büyük+noun* constructions under this category modify financial terms such as *money*, *salary*, *budget* and *income*; or institutions such as *organization*, *company* and *corporation*.

Parallel to the examples for *büyük*, *küçük* is also motivated by LESS FOR SMALL metonymy and LESS IS SMALL metaphors. 7% of these occurrences exemplify this category. *Küçük+noun* constructions modify financial terms such as *fee, income* and *cost*; or institutions such as *business, company* and *firm*.

## Figurative/metaphor

On the metaphor pole of the literal-figurative part of the continuum, the adjectives lose their dimension meanings and gain abstract meaning. These occurrences represent conceptualizations between two distinct experiential domains. Metaphoric occurrences show three different conceptual metaphors under two experiential domains that are AGE and EVALUATION. These are AGE IS BIG, MORE IS BIG and IMPORTANT/FAMILIAR IS BIG for *büyük* and AGE IS SMALL, LESS IS SMALL, UNIMPORTANT IS SMALL and SHORT IS SMALL for *küçük*.

#### Age

The occurrences under this category ground on a similarity relationship between the physical size of an object and the age of a person. These occurrences are motivated by AGE IS SIZE metaphor; and this conceptualization grounds on a mapping between AGE and SIZE domains. The domains under this conceptualization is as illustrated in Figure 7.

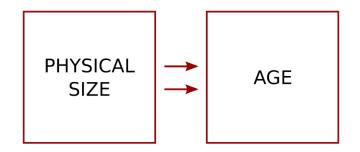


Figure 7. Metaphoric meaning AGE IS SIZE: büyük and küçük

As illustrated in the figure, the mapping exemplifies OLD IS BIG conceptual metaphor for *büyük* and YOUNG IS SMALL conceptual metaphor for *küçük*. 2 % of the occurrences exemplifying *büyük* belong to this category. *Büyük* modifies nouns such as *man*, *boy* and *uncle*. On the other hand, 21.4 % of the occurrences for *küçük* belong to this category. The adjective yields examples such as *small girl*, *small boy*, *small age* and *small grandchild*.

## Evaluation

The examples under this conceptualization ground on the mapping between the size of a physical object and the evaluation of an abstract entity. The metaphor motivating these occurrences are IMPORTANCE IS SIZE conceptual metaphor. The mappings between these domains are illustrated in Figure 8.

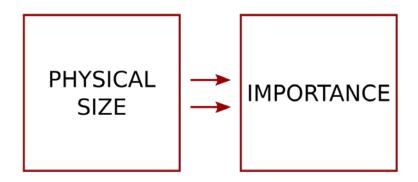


Figure 8. Metaphoric meaning IMPORTANCE IS SIZE: büyük and küçük

61.1% of the occurrences for *büyük* in the corpus data are motivated by these metaphors. The occurrences denote a mapping between the physical size and the goodness, superiority or the importance of an abstract entity. These metaphors are based on MORE IS BIG and IMPORTANT/FAMILIAR IS BIG conceptual metaphors. These occurrences show themselves with animate entities such as *painter, master* and *philosopher*; important events such as *match, concert* and *graduation* or abstract entities such as *surprise, problem* and *anger*. 18.3% of the occurrences for *küçük* are categorized under this category. These occurrences are conceptualized by the conceptual metaphors LESS IS SMALL, SHORT IS SMALL and UNIMPORTANT/UNFAMILIAR IS SMALL. The examples from the corpus data show that *küçük* modifies the unimportance of animate entities such as *man, human being* and *artist*; abstract entities such as *happiness, compliment* and *danger*; events such as *match, event* and *ceremony*; and the length of texts such as *letter, novel* and *story*.

## 4. DISCUSSION AND CONCLUSION

The results of our study in which we aimed to investigate the semantic aspects of Turkish dimension adjectives  $b\ddot{u}y\ddot{u}k$  and  $k\ddot{u}c\ddot{u}k$ , demonstrated that both adjectives show a distribution of various meaning types on literal-figurative continuum. One end of the axis of the continuum indicates the literal meaning, while the opposite end refers to the metaphoric meaning.

Before finding the distribution of the semantic aspects of the adjectives, we firstly needed to identify the noun types that the adj+noun constructions modify; and secondly the experiential domains that these adjective constructions belong to. According to the results of the study, the most frequently modified noun types for *büyük* were *abstract nouns* (57.1%) and nouns modifying *spatial extension* of physical entities (7.3%). As for experiential domains, the most frequent ones were EVALUATION and PHYSICAL DIMENSION. On the other hand, the most frequently modified noun types for *küçük* were *animate entities* (29.3%) and *physical entities* (27%). The most frequent experiential domains were PHYSICAL DIMENSION and EVALUATION. These results played a role on determining the semantic categories. Six meaning categories that *are literal, pre-metonymy, metonymy, post-metonymy, metaphor* (1) and metaphor (2) were identified for both *büyük* and *küçük* on literal-figurative continuum. These meaning categories are depicted in Figures 9 and 10.

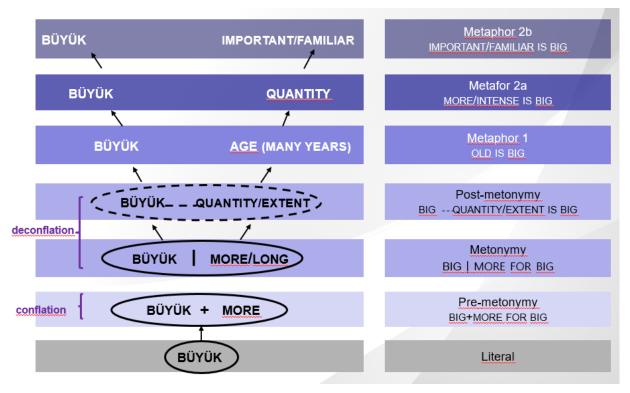


Figure 9. The stages of the literal-metonymy-metaphor continuum for büyük

The figures demonstrate the steps büyük and küçük move by from their literal physical dimension meaning to metaphoric meaning on the literal-figurative meaning continuum. At the first step, the adjectives are literal with their physical size meaning with overall dimensional interpretation. At the second step, the adjectives still keep their physical size meanings, however this time they profile entities within the same domain with one dimensional interpretation. At the third step, the adjectives begin to become figurative as they begin to have conceptual access to another entity in the same domain and gain metonymic meaning. As the meaning of the adjectives extend and begin to have the meaning MORE or LESS, the domains begin to deconflate. At the fourth stage, the semantic domains go on deconflating since they involve both metonymic and metaphoric motivation. The adjectives are conceptualized both metonymically (MORE FOR BIG/LESS FOR SMALL) and metaphorically (MORE IS BIG/LESS IS BIG) at this stage. At the last stage of the continuum, the domains begin to fall apart and the adjectives denote a conceptualization between two separate conceptual domains such as AGE, IMPORTANCE, AMOUNT on one side and PHYSICAL SIZE on the other. This step shows metaphoric relationship with a mapping between two distinct conceptual domains and the domains totally separate from each other as shown in Figure 10.

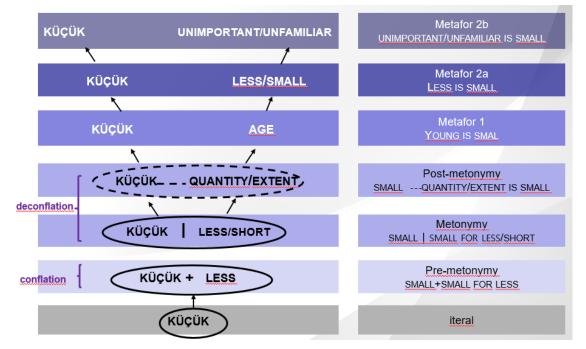


Figure 10. The stages of the literal-metonymy-metaphor continuum for küçük

The semantic categories stated above support Syrpa's (2017) categorization on the English modifier *big*. Differing from Syrpa's categorization, we needed to add the stage post-metonymy in the light of Dirven (2002) and Radden (2002) for financial concepts and institutions since the uses under this category vacillate between metaphor and metonymy.

When we evaluate the quantitative results obtained from the corpus data in terms of the semantic categories, we can reach the following implications. Büyük is generally used with its figurative meaning either metaphorically or metonymically. One reason for this is that büyük mostly modifies abstract entities. Thus IMPORTANCE IS SIZE seems to be the dominant metaphor (61.1%) motivating the  $b\ddot{u}y\ddot{u}k$ +noun constructions. The second frequent conceptualization for  $b\ddot{u}y\ddot{u}k$  is MORE FOR BIG metonymy (15.6 %). Thirdly, it is used with literal meaning (8.1%). These distributions demonstrate that more than half of the occurrences for büyük are used figuratively. Its use with its literal, in other words dictionary meaning is very limited. Contrary to büyük, a different order of semantic categories is identified for küçük. Küçük is mostly used with its literal meaning (33%) and next with its two metaphorical meanings, which are AGE IS SIZE (21.4) and LESS/UNIMPORTANT IS SIZE (18.3%). According to these results, we can conclude that  $b\ddot{u}y\ddot{u}k$  modifies abstract nouns and is mostly used figuratively; however, there is a more balanced distribution for küçük when the noun types, experiential domains and semantic categories are considered.

For a future study, these differences can be observed and compared within different data bases such as a spoken corpus. Another question that remains unanswered is the gradations in figurative expressions. The figurativity levels, and the gradation of figurative expressions can be analysed in a distinct study.

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#### Summary

This study aims to investigate the semantic aspects of Turkish dimension adjectives  $b\ddot{u}y\ddot{u}k$  (big) and  $k\ddot{u}c\ddot{u}k$  (small) by referring to Turkish National Corpus (TNC) (Aksan et al., 2016) within a cognitive linguistics view. Within this framework, the semantic categories and the role of cognitive mechanisms motivating  $b\ddot{u}y\ddot{u}k$ +noun and  $k\ddot{u}c\ddot{u}k$ +noun constructions in different figurativity levels are presented. For this, the study searches answers to the following research questions:

- What are the noun types that Turkish adjectives *büyük* and *küçük* modify in adj+noun constructions in TNC?
- What are experiential domains that Turkish adjectives *büyük* and *küçük* belong in adj+noun constructions in TNC?
- How are the semantic distributions of Turkish premodifier adjectives *büyük* and *küçük* in adj+noun constructions in TNC?

In order to answer these research questions, first literature on adjective constructions and meaning types are reviewed; and then the corpus data is analysed to reach the conclusions.

Adjectives have to constitute a construction by combining with an entity that emerges and elaborates their meaning. This helps them gain different meanings according to their interaction with type of the nouns modified. For this reason, Langacker (2008) categorizes adj+noun constructions under relational expressions class. The noun types modified by the adjective are crucial in displaying the meaning the adjective gain. These constructions exhibit an extension from literal meaning to figurative meaning. At this point a need to define these meaning types occur. In our study, the meaning types will be discussed as literal, non-literal and figurative within cognitive framework by referring to the literature on the semantic aspects of adjectives (Dirven, 2002; Radden, 2002; Gibbs & Colston, 2012).

Research on adjectives with cognitive framework, reveals that adjectives display different meaning aspects on a continuum (Dirven, 2002; Radden, 2002; Syrpa, 2017).

In this study the semantic aspects of Turkish adjectives *büyük* and *küçük* will be identified in terms of the gradation of metonymic and metaphoric conceptualizations on literal-figurative continuum in the light of Dirven, 2002; Radden, 2002; Syrpa, 2017.

The semantic aspects of adj+noun constructions are analysed by referring to Turkish National Corpus (TNC). This study uses the corpus as a source in order to discuss the semantic aspects of the adjectives. According to the data driven from the corpus; 2326  $b\ddot{u}y\ddot{u}k$ +noun constructions and 2164  $k\ddot{u}c\ddot{u}k$ +noun constructions are analysed. All the occurences are analysed in the context, and categorized according to the meaning they gained within their given context. he results of our study in which we aimed to investigate the semantic aspects of Turkish dimension adjectives  $b\ddot{u}y\ddot{u}k$  and  $k\ddot{u}c\ddot{u}k$ , demonstrated that both adjectives show a distribution of various meaning types on literal-figurative continuum. One end of the axis of the continuum indicates the literal meaning, while the opposite end refers to the metaphoric meaning.

According to the results of the study, the most frequently modified noun types for  $b\ddot{u}y\ddot{u}k$  are abstract nouns and nouns modifying spatial extension of physical entities. As for experiential domains, the most frequent ones are EVALUATION and PHYSICAL DIMENSION. On the other hand, the most frequently modified noun types for  $k\ddot{u}c\ddot{u}k$  are animate entities (29.3%) and physical entities (27%). The most frequent experiential domains are PHYSICAL DIMENSION and EVALUATION. These results played role on determining the semantic categories and six meaning categories that are literal, pre-metonymy, metonymy, postmetonymy, metaphor (1) and metaphor (2) were identified for both  $b\ddot{u}y\ddot{u}k$  and  $k\ddot{u}c\ddot{u}k$  on literal-figurative continuum.

When we evaluate the quantitative results obtained from the corpus data in terms of the semantic categories, we can reach the following implications. *Büyük* is generally used with its figurative meaning either metaphorically or metonymically. One reason for this is that büyük mostly modifies abstract entities. Thus IMPORTANCE IS SIZE seems to be the dominant metaphor (61.1%) motivating the *büyük*+noun constructions. The second frequent conceptualization for *büyük* is MORE FOR BIG metonymy (15.6%). Thirdly, it is used with literal meaning (8.1%). These distributions demonstrate that more than half of the occurrences for *büyük* are used figuratively. Contrary to *büyük*, a different order of semantic categories is identified for *küçük*. In opposition to the results gathered for *büyük*, *küçük* is mostly used with its literal meaning (33%) and next with its two metaphorical meanings, which are AGE IS SIZE (21.4) and LESS/UNIMPORTANT IS SIZE (18.3%). According to these results, we can conclude that *büyük* modifies abstract nouns and is mostly used figuratively; however, there is a more balanced distribution for  $k\ddot{u}c\ddot{u}k$  when the noun types, experiential domains and semantic categories are considered.