

EXPLORING THE PERCEPTIONS OF THE VOLUNTEERS FOR THE 2011 EUROPEAN YOUTH OLYMPICS THROUGH METAPHORS¹²

Fatih BEKTAŞ¹

Gamze BEYAZOĞLU¹

İbrahim YILDIRAN²

İdris YILMAZ¹

ABSTRACT

This research stemmed from the need to determine the volunteers' points of view on the Olympics before Trabzon 2011 European Youth Olympics. The overall objective of the study was to explore the perceptions of volunteers who participated in the Olympic Games, by studying the metaphors they used. 480 participants randomly selected among volunteers of the European Youth Olympics held in Trabzon in 2011 took part in this study. Metaphors, used in relation to the concept of Olympics, were examined with content analysis method, metaphors' frequencies were specified and the categories were created. In this context, the analysis and interpretation of the metaphors was carried out in four phases: determination of the metaphors, classification of the metaphors, development of categories, ensuring the reliability and validity. Volunteers in this study used 131 metaphors for the concept of Olympics. In this study, following Olympic categories were established: the Olympics as an interaction, the Olympics as communication, the Olympics as an organization, the Olympics as informative and educational, the Olympics as periodic or continuous events, the Olympics as harmony, the Olympics as reflective and the Olympics as a guide.

Key words: The Olympics, Metaphor, Perception

2011 AVRUPA GENÇLİK OLİMPİYATLARI GÖNÜLLÜLERİNİN OLİMPİYAT ALGILARININ METAFOR YOLUYLA ÖĞRENİLMESİ

ÖZET

Bu araştırma Trabzon 2011 Avrupa Gençlik Olimpiyatlarına katılan gönüllülerin olimpiyat kavramına olan bakış açılarını belirleme gereksiniminden kaynaklanmıştır. Araştırmanın genel amacı, olimpiyatlara katılan gönüllülerin olimpiyat kavramına olan bakış açılarını metaforlar yoluyla belirlemektir. Araştırmaya 2011 yılında Trabzon ilinden, rastgele seçilen Avrupa Gençlik Olimpiyatları gönüllülerinden toplam 480 kişi katılmıştır. Gönüllülerin Olimpiyat kavramına ilişkin olarak ürettikleri metaforlar içerik analizi yöntemi ile incelenmiş, oluşturulan metaforların frekansları belirtilmiş ve kategoriler oluşturulmuştur. Bu kapsamda, metaforların analiz edilmesi ve yorumlama süreci metaforların belirlenmesi, metaforların sınıflandırılması, kategori geliştirme, geçerlik ve güvenilirliği sağlama olmak üzere dört aşamada gerçekleştirilmiştir. Araştırmada gönüllüler Olimpiyat kavramına yönelik olarak 131 metafor üretmişlerdir. Olimpiyat algılarına yönelik, etkileşim olarak Olimpiyat, iletişim olarak Olimpiyat, organizasyon olarak Olimpiyat, öğretici ve eğitici olarak Olimpiyat, süreli ve sürekli olarak Olimpiyat, uyum olarak Olimpiyat, yansıtıcı olarak Olimpiyat ve yol gösterici olarak Olimpiyat kategorileri oluşturulmuştur.

Anahtar kavramlar: Olimpiyat, metafor, algı

1 Karadeniz Technical University Department of Physical Education and Sports
2 Gazi University Department of Physical Education and Sports

INTRODUCTION

Human beings have always been trying to express themselves, sometimes by relating to other beings sometimes by imitating them. One of these forms of expressions was metaphors. Metaphor can be defined as a figure of speech in which one concept or situation is used to describe another concept or situation (Abrams, 1999). Metaphor is a way of thinking and perceiving (Morgan, 1998). Metaphors are not only figures of speech and ways of perception but also figures of thought (Lakoff and Johnson, 2005). They establish relations between old information and new information by finding their similarities, thus helping to explain new information in a tangible way (Senemoğlu, 2007). Metaphor is a powerful cognitive tool for grasping and explaining highly abstract, complex or theoretical phenomena (Saban, Koçbeker & Saban, 2006). As it can be seen from the definitions, it is a figurative way of describing concepts. According to Forceville (2002), three questions have to be answered before accepting something as a metaphor: 1-Which is the metaphor's target domain? 2-Which is the metaphor's source domain? 3- Which features are mapped from the source domain to the target domain? We can exemplify this relation as follows: *Metaphor's target* (like the Olympics in the metaphor of "The Olympics are like the Sun"), *Metaphor's source* (the Sun) and *features that are mapped from the source to the target* (The Olympics are periodic like the Sun that rises and sets every day). This example illustrates the fact that metaphor's source acts like a filter or a screen that helps to explain metaphor's target in a different way. Metaphors have increasingly become the objects of studies in both local and

international literatures over the last few years as more scholars were interested in the subject. The studies of following scholars can be given as examples of this trend: Inbar (1996), Guerro and Villamil (2002), Botha (2009), Alger (2009), Shaw, Barry & Mahlios (2008), Forceville (2002), Saban (2004, 2008, 2009), Saban, Koçbeker & Saban (2006), Töremen and Döş (2009), Girmen (2007), Aydoğdu (2008), Arslan and Bayrakçı (2006), Öztürk (2007) and Cerit (2008). In general, these studies revealed their participants' metaphors for subjects and phenomena like "teacher", "student", "manager", "inspector", "knowledge", "school" and "culture". In Turkey, no research has been undertaken to explore the metaphors of Olympic volunteers for the Olympic Games. In this respect, this study will be the first one in this field and it will set an example for future studies that will focus on explaining the sports terms by studying metaphors. The main purpose of the study is to determine the viewpoints of the volunteers who participated in the Olympic games towards the concept of "Olympic games" through their own metaphors and their explanations concerning these metaphors.

METHOD

In this study, phenomenological research method was utilized and the data was analyzed through content analysis technique. 480 people participated in the study. They were randomly selected from the volunteers of European 2011 Youth Olympics in Trabzon.

Collection and Analysis of Data

An open-ended questionnaire form was prepared for exploring the volunteers' perceptions of the Olympic Games. The questionnaire form was finalized after it was reviewed by two experts for the

content and the use of the Turkish language. In the form, the volunteers were asked to complete the following: "Olympics are like..... Because..... ." Participants' metaphors were analyzed by using content analysis. At the same time, frequency values were calculated for the metaphors that were used. The analysis and interpretation of the metaphors were carried out in four phases: "determination of the metaphors", "classification of the metaphors", "developing categories", "ensuring the validity and reliability". When determining the metaphors, we took following factors into consideration: Volunteers' specific reference to the metaphor, a relation with the metaphor, no definition allowed in the metaphors. While classifying the metaphors, they were sorted temporarily by considering the relation between metaphor's source and target. After the analysis, the metaphors of 432 volunteers were taken into consideration, while 48 volunteers' responses were excluded from data since they were not complete. While some of the metaphors were used only by one

volunteer, some of them were uttered more than once. While some of the metaphors mentioned more than once were in the same category, some of them were in different categories due to the differing point of views. Thus, in total, 131 metaphors were specified. Frequency values for these specified metaphors were calculated. The metaphors were categorized according to the relation between the target and source, and 8 categories were created in total. These categories and metaphors were submitted to two experts (except the researchers) for review in order to ensure trustworthiness and credibility of the research findings. The two experts mentioned above examined the related metaphors and explanations, and confirmed the appropriateness of the created categories. The frequencies of metaphors for Olympic perceptions were indicated in the table, categories and some of the metaphors within these categories were shown in the Figures, and they were interpreted by quoting the volunteers directly.

FINDINGS

In this part, we interpreted the metaphors, which were found within the scope of the research and shown in the

Table 1, and explained the categories given in the Figure 1. The metaphors used by the volunteers were listed alphabetically and their frequencies were shown in the Table 1 below:

Table 1. The Metaphors used by the Olympic Volunteers

M. Number	Metaphor	f	M. Number	Metaphor	f	M. Number	Metaphor	f
1	World	33	47	Treasure	2	93	Spring	1
2	Culture	18	48	Globalization	2	94	Manager	1
3	Life	16	49	Mixture	2	95	Istanbul	1
4	Family	11	50	Mosaic	2	96	Ant's nest	1
5	Rainbow	9	51	Fruit Cake	2	97	Hero	1
6	Sun	8	52	Ocean	2	98	Kiwi	1
7	Torch	8	53	Forest	2	99	Book	1
8	Google	7	54	Color harmony	2	100	Km	1
9	Light	7	55	Novel	2	101	Library	1
10	Bridge	7	56	Time	2	102	Ribbon	1
11	School	7	57	Stage	2	103	High School	1
12	Festival	6	58	Telescope	2	104	Neighborhood	1
13	Human	5	59	Fan	2	105	Match	1
14	Brotherhood	5	60	Chain	2	106	Mesopotamia	1
15	A Feast of Color	5	61	Tool	1	107	Fruit juice	1
16	Social Interaction	5	62	Key	1	108	Medal	1
17	Mirror	4	63	Spring	1	109	Breath	1
18	Friendship	4	64	Honey	1	110	Orchestrate	1
19	Unity	4	65	Spike	1	111	Teaching	1
20	Sea	4	66	Town	1	112	Money	1
21	Education	4	67	Building	1	113	Daisy	1
22	Football	4	68	The United Nations	1	114	Picture	1
23	Communication	4	69	Geography	1	115	Advertisement	1
24	Puzzle	4	70	Environment	1	116	Competition	1
25	Salad	4	71	Child	1	117	Soul	1
26	Noah's Pudding	3	72	Children's Park	1	118	Guide	1
27	Peace	3	73	Mountain	1	119	Respect	1
28	Flower Garden	3	74	Drum	1	120	Love	1
29	Soup	3	75	Giant	1	121	Eraser	1
30	Bird	3	76	Lesson	1	122	Water	1
31	Music	3	77	Nature	1	123	Bayonet	1
32	War	3	78	Circulation System	1	124	Social Activity	1
33	Field	3	79	Experience	1	125	Exam	1
34	Promotion	3	80	Fellowship	1	126	Luck	1
35	University	3	81	Dance	1	127	History	1
36	Tree	3	82	Invitation	1	128	Team	1
37	Fire	2	83	Discipline	1	129	Turkey	1
38	Love	2	84	Legend	1	130	Life	1
39	European Union	2	85	Virtue	1	131	Way	1
40	Circle	2	86	Universe	1	132		
41	Wedding	2	87	Lantern	1	133		
42	Language	2	88	Sky	1	134		
43	House	2	89	Dove	1	135		
44	Facebook	2	90	Ring	1	136		
45	Galaxy	2	91	Pool	1	137		
46	Map	2	92	Drink	1	138		
<i>Total</i>								432

As it can be seen from Table 1, 131 metaphors were used in relation to the perception of Olympics. The volunteers revealed their point of views on Olympics by using these metaphors and associated these metaphors with various aspects of 2011 European Youth Olympic Festival. Most used metaphors were as follows: world, life, torch, family, festival, school, salad, puzzle, mirror, friendship, unity, sea, education, football, rainbow, Google, sun, light, communication, human, bridge, brotherhood, culture, a feast of color and social interaction. Following metaphors were used only by one student: tool, key, spring, honey, spike, town, building, the United Nations, geography, environment, children, children's park, mountain, drum, lesson, nature, circulation system, giant, experience, fellowship, dance, invitation,

legend, virtue, lantern, sky, dove, ring, pool, spring, drink, manager, Istanbul, ant's nest, hero, kiwi, book, km, ribbon, high school, neighborhood, match, Mesopotamia, fruit juice, torch, orchestrate, teaching, money, daisy, picture, advertisement, competition, soul, guide, respect, love, eraser, water, bayonet, social activity, exam, luck, history, team, Turkey, life, way, discipline, breath, medal, rain. Most of these metaphors referred to inanimate things. It can be said that the volunteers referred to these things as metaphors due to the Olympic activities and their attitude towards the Olympics. The categories that were created from the metaphors of volunteers were shown in the Figure 1 below.

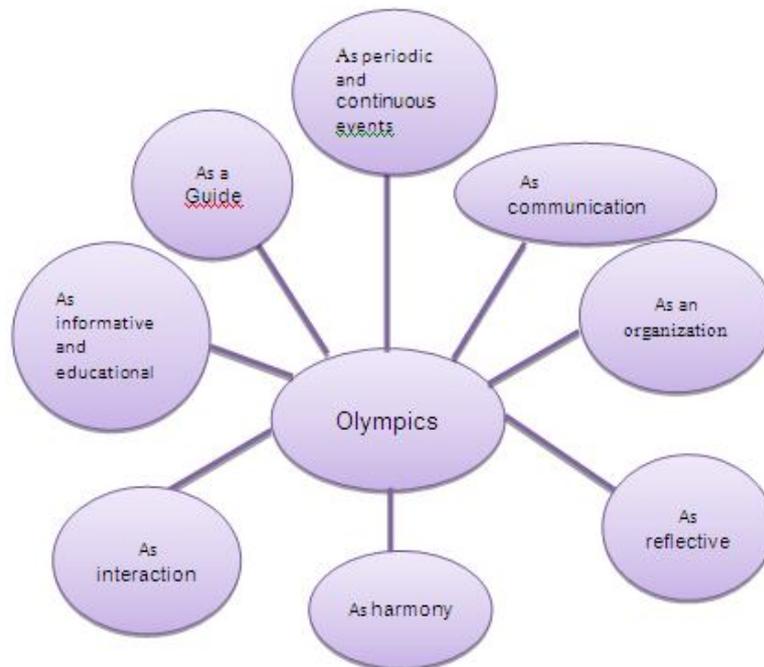


Figure 1. The Categories for volunteers' perceptions of the Olympics

As it can be seen from Figure 1, following categories were developed: "Olympics as periodic and continuous events", "Olympics as communication",

"Olympics as an organization", "Olympics as reflective", "Olympics as harmony", "Olympics as an interaction", "Olympics as educational and informative" and

“Olympics as a guide”. Categories were formed with respect to the volunteers’ correlations between the metaphor and Olympics. Metaphors that fell into the

category of “Olympics as periodic and continuous” are shown in the Figure 2 below:

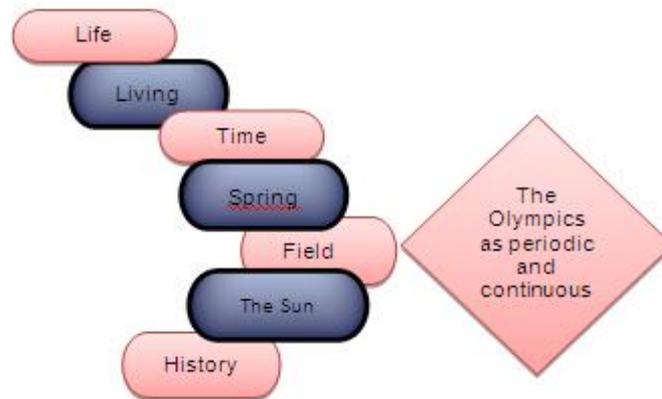


Figure 2. The Olympics as Periodic and Continuous Events

As it can be seen from the Figure 2, the category of “Olympics as periodic and continuous events” was comprised of following metaphors: “field, history, sun, life, living, time and spring”. A volunteer, who defined the Olympics as a field explained his views as follows: “*Since a land cannot be plowed continuously, it must be left fallow for some time. Olympics are also periodic events, they are held every four years*”. Another volunteer, who defined it as history noted that “*History was continuously written in the Olympics*”. One of the volunteers who compared the Olympics to the Sun clarified his comparison by saying

“*Sunrise is also a periodic event*”, while another one said that “*Continuity is fundamental*”. The volunteer who compared the Olympics to life explained his view with this sentence: “*The Olympics are also finite like life*”. The volunteer, who defined it as time said that “*Time is important for the Olympics*”. The volunteer who compared the Olympics to spring noted that “*it is also short*”. Based on these explanations, it can be said that the Olympics are periodic and interdisciplinary events that evolve continuously. The category of Olympics as communication is illustrated in the Figure 3 below:

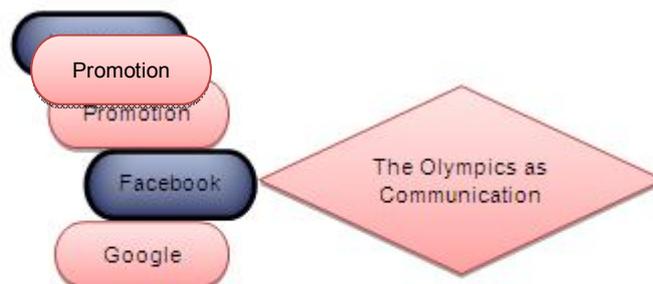


Figure 3. The Olympics as Communication

As it can be seen from the Figure 3, the category of Olympics as communication was comprised of following metaphors: language, promotion, Facebook and Google. The volunteers, who compared the Olympics to the language, explained their views as follows: *"It's a cultural communication. We learn new languages"*. A volunteer who referred to the Olympic Games as a way of promotion noted that *"The athletes talk about the places they visited when they turn back to their countries."* The ones who compared the Olympics to Google explained their views by saying *"We communicate with the world. We find what we are looking for"* and the volunteer who compared the

Olympic Games to Facebook mentioned that *"The Olympics help people to get together"*, while they stressed the function of Olympics as a social space that brings people together. It can be said that the volunteers used these metaphors because of the activities took place during the Olympic Games. Based on their explanations, it can also be said that they evaluate the Olympics according to the activities while the Olympics taught them to communicate with foreigners without knowing their languages. The metaphors that fell into the category of Olympics as an organization are shown below in the Figure 4:

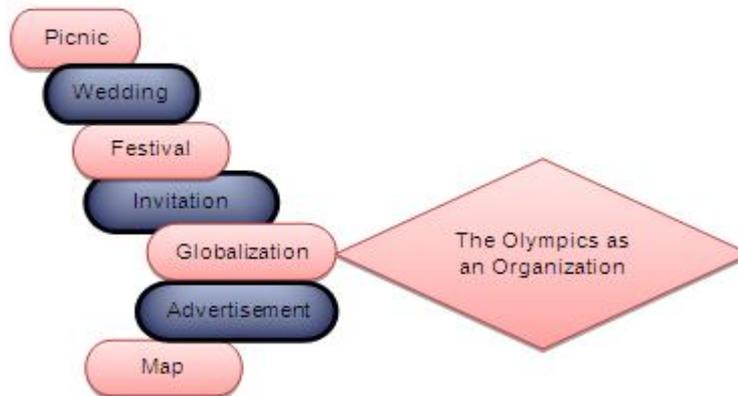


Figure 4. The Olympics as an Organization

As it can be seen from the Figure 4, the category of Olympics as an organization was comprised of following metaphors: picnic, wedding, festival, invitation, globalization, advertisement and map. The volunteers who associated the Olympics with an invitation stated that *"The Olympics bring people together for the same reason"*. The volunteer who compared the Olympics to a wedding explained his view by saying that *"It's a big organization like wedding"*, the one who associated it with a festival noted that *"It's*

a colored and fun event too". The volunteer, who likened it to a picnic, explained his view by saying *"A lot of people attend the Olympics for fun like those who go on a picnic for fun"*. The ones who compared the games to globalization clarified their views by saying *"(...) bring people together without discrimination"*, the volunteers who considered them as commercials stated that *"people promote the country they visited"* and one of the volunteers who associated it with a map noted that *"The*

Olympics give knowledge about life, symbolize the past and help us to contemplate and search for many things that we have never wondered before. In short, the Olympic Games make us think.” Based on these findings, it can be said

that the volunteers associated the Olympics with these metaphors due to the magnificence of this organization. The category of Olympics as Reflective is given below in the Figure 5:

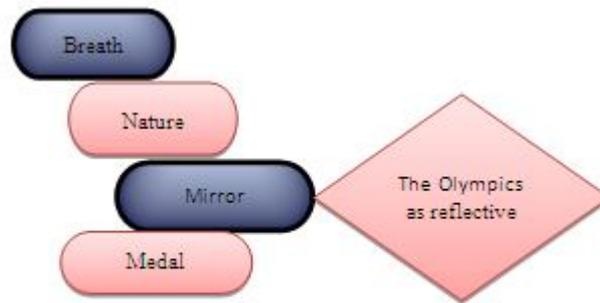


Figure 5. The Olympics as Reflective

As it can be seen from the Figure 5, the category of Olympics as reflective was composed of following metaphors: breath, nature, mirror and medal. The volunteers who defined the Olympics as mirror justified their definition by saying “The Olympic games reflect our city”, “They reflect the culture of the city they took place”; while those who compared the Olympics to nature stated that “they reflect the natural phenomena”. The one who

described it as a breath noted that “the Olympics reflect power” and the volunteer who equated them with the medals said that “The Olympic Games reflect success”. The volunteers might have seen the Olympics as a reflective phenomenon since they took part within the organization directly. The metaphors that fell into the category of “Olympics as harmony” are shown below in the Figure 6:

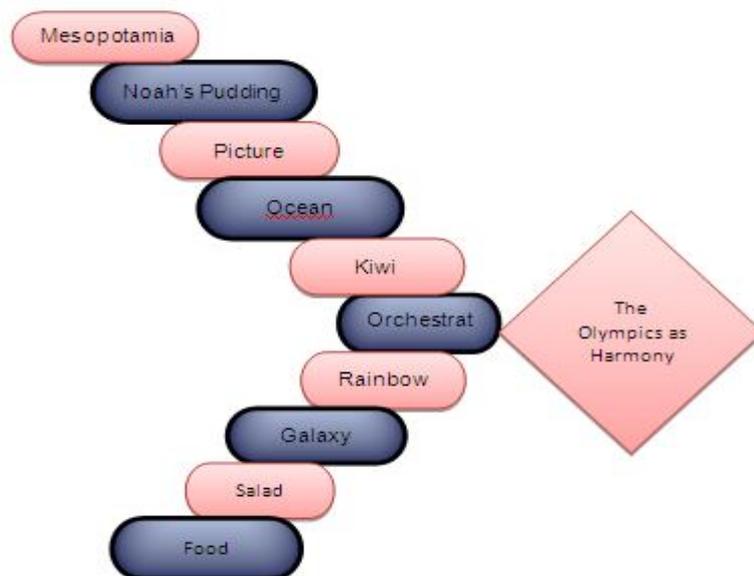


Figure 6. The Olympics as Harmony

As it can be seen from the Figure 6, the category of the Olympics as harmony was comprised of following metaphors: Mesopotamia, Noah's pudding, picture, ocean, kiwi, orchestrate, rainbow, galaxy, salad and food. The volunteers, who associated the Olympics with Mesopotamia, said that *"The differences are harmoniously together in both"*. The one who compared the Olympics to food justified his view by saying *"while the ingredients are harmonious in the dishes being cooked, the people are harmonious in the Olympics"*, the other volunteer who associated them with Noah's Pudding explained his metaphor by saying *"They both had a little bit of everything"* and the volunteers who compared them to salads noted that *"People from different cultures are together in harmony"*. Those who likened the games to a picture said that *"They are made up of millions of different people"*, the volunteers who compared

them to a galaxy stated that *"they are both complex and harmonious"*, one of the volunteers who associated them with oceans explained this perception by saying *"they contain a drop from every cloud"*, one volunteer who described the games as an orchestrate stated that *"all instruments are different, yet they are harmonious together"*. The volunteer who defined the Olympics as a rainbow explained this view by saying *"all colors are in harmony with each other"* and the person who defined them as a kiwi said that *"just like kiwis have tastes of every fruit; the Olympics are also platforms that contain many different flavors"*. Based on these findings, it can be said that the volunteers associated the Olympics with above mentioned metaphors due to both heterogeneity and harmony of the Olympics. The metaphors that fell into the category of Olympics as an interaction were shown in the Figure 7 below:

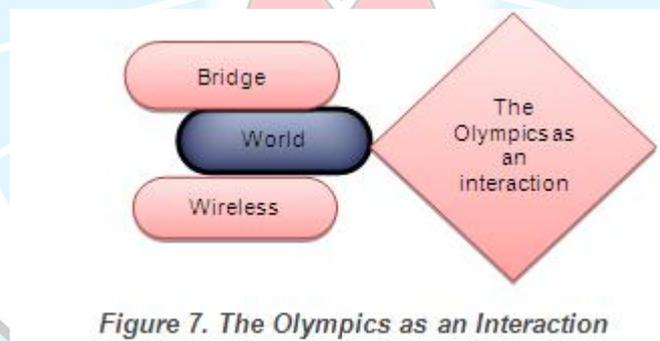


Figure 7. The Olympics as an Interaction

As it can be seen from the Figure 7, the category of the Olympics as an interaction was comprised of following metaphors: bridge, world and wireless. The volunteers who took the Olympics as a cultural bridge expressed their opinions by saying *"the Olympic games establish peaceful and positive relations, while connecting the societies"*. The volunteer who defined the games as world noted

that *"The Olympics connect people from all around the world"*. The one who compared the Olympics to the wireless stated that *"It connects people wirelessly"*. It can be said that the volunteers used these Olympic metaphors due to the content of the Olympics. The metaphors under the category of Olympics as informative and educational are illustrated in the Figure 8.

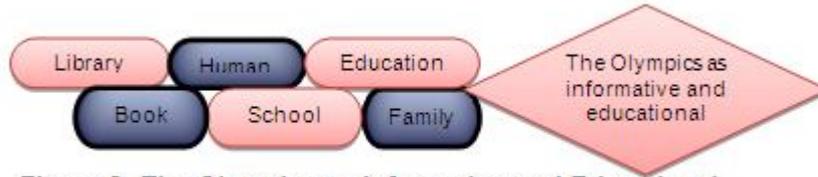


Figure 8. *The Olympics as Informative and Educational*

As it can be seen from the Figure 8, the category of the Olympics as informative and educational was comprised of following metaphors: library, human, education, family and school. The volunteers, who took the Olympics as library, expressed their opinions by saying “*we can find any information that we are searching for*”. The volunteer, who defined the Olympics as a human being, stated that “*The more you care the more useful they become*”.

Those who described the Olympics as a family noted that “*The Olympics can give any kind of education*”; while the one, who compared the games to a school, revealed that “*the Olympics teach us a lot*” and highlighted the educational aspect of games. Based on these metaphors, it can be said that the Olympics teach while entertaining. The metaphors under the category of Olympics as a guide are shown in the Figure 9.

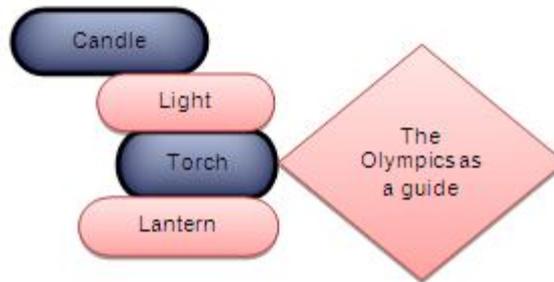


Figure 9. *The Olympics as a Guide*

As it can be seen from the Figure 9, the category of the Olympics as a guide was comprised of following metaphors: candle, light, torch and lantern. The volunteers, who defined the Olympics as a candle, expressed their opinions by saying “*Like a candle that lightens as it burns, the Olympics enlighten the societies as they took place*”; those, who defined the games as a light argued that “*they will guide our country*”; and the ones, who defined them

as a torch, noted that “*they both illuminate their surroundings*”. One of the volunteers, who associated the Olympics with a lantern, justified his view by saying “*A lantern shows the way. The Olympics also show the way for the countries*”. It can be concluded that the volunteers saw the Olympics as a guide since they considered the games as an important organization for the promotion and development of the countries involved.

CONCLUSION AND SUGGESTIONS

After the analysis of data, 131 metaphors were found with this research, which aimed to explore the volunteers' perception of the Olympics prior to 2011 European Youth Olympic Festival. Based on the metaphors that were associated with the different aspects of the Olympics, it can be concluded that the volunteers' perception of the Olympics was mainly positive. In this respect, this research provided useful information on using metaphors as a research tool for exploring the perceptions of the Olympic volunteers. The study revealed the fact that the volunteers highlighted different facets of the Olympics by associating the games with several metaphors like library, human being, education, family, breath, nature, mirror, medal, bridge, wireless...In Turkey, no study was done on the Olympic volunteers' metaphors for the Olympic games before. For this reason, this study neither confirms nor refutes any other metaphor studies. In this study, the categories were created based on the metaphors used by the volunteers. These categories were as follows: Olympics as interaction, Olympics as communication, Olympics as an organization, Olympics as informative and educational, Olympics as

periodic and continuous events, Olympics as reflective, and Olympics as a guide. When the volunteers' metaphors for the Olympics were examined specifically for this study, it was found that the most used metaphors were as follows: *world* (f=33), *life* (f=16), *sun* (f=8), *Google* (f=7), *torch* (f=8), *festival* (f=6). This revealed that the volunteers perceived the Olympics as an organization that depict the world and nature and associate it with human beings.

Based on these conclusions, following suggestions can be made:

- This study gave some clues on how the Olympic volunteers' perceived the Olympics.
- The metaphors found in this study can be used as a source by the researchers who will prepare lists of metaphors or a scale.
- Similarly, scholars, university students or students from different types of high schools can also be included to the study group a research.
- Metaphors can be used as a powerful *research tool* for exploring, revealing and explaining the Olympic volunteers' perceptions of "the Olympics".

REFERENCES

1. Abrams M H. (1999). A Glossary of Literary Terms. USA: Harcourt Brace Collage Publisher.
2. Arslan MM, Bayrakçı M. (2006). Metaforik düşünme ve öğrenme yaklaşımının eğitim-öğretim açısından incelenmesi [A Study of the attitude towards metaphoric thinking and learning with respect to Education]. *Millî Eğitim*, 35(171), 100-108. [In Turkish]
3. Alger C. (2009). Secondary teachers' conceptual metaphors of teaching and learning: changes over the career span. *Teaching and Teacher Education: An International Journal of Research and Studies*, 25 (5), 743-751.
4. Aydoğdu E. (2008). *İlköğretim okullarındaki öğrenci ve öğretmenlerin sahip oldukları okul algıları ile ideal okul algılarının metaforlar yardımıyla analizi* [The analysis of the high school students' and teachers' perceptions of school by studying their metaphors]. Unpublished Master's Thesis, Eskişehir Osmangazi University, Institute of Science, Eskişehir. [In Turkish]
5. Botha E. (2009). Why metaphor matters in education. *South African of Education*, 29, 431-444.
6. Cerit Y. (2008). Öğretmen kavramı ile ilgili metaforlara ilişkin öğrenci, öğretmen ve yöneticilerin görüşleri [Students', teachers' and administrators' opinions on the metaphors for teachers]. *Türk Eğitim Bilimleri Dergisi*, 6(4), 693-712. [In Turkish]
7. Forceville C. (2002). The identification of target and source in pictorial metaphors. *Journal of Pragmatics*, 34, 1-14.
8. Guerrero MCM, Villamil OS. (2002). Metaphorical conceptualizations of ELS teaching and learning. *Language Teaching Research*, 6(2), 95-120.
9. Girmen P. (2007). *İlköğretim öğrencilerinin konuşma ve yazma sürecinde metaforlardan yararlanma durumları* [Primary school students' usage of metaphors in the process of speaking and writing].

- Unpublished PhD thesis, Anadolu University, Institute of Educational Sciences, Eskişehir. [In Turkish]
10. Inbar D. (1996). The free educational prison: metaphors and images. *Educational Research*, 38(1), 77-92.
 11. Lakoff G, Johnson M. (2005). *Metaphors We Live by* (Metaforlar: Hayat, Anlam ve Dil. Trans. G.Y. Demir). İstanbul: Paradigma. [In Turkish]
 12. Morgan G. (1998). Yönetim ve örgüt teorilerinde metafor. İstanbul: Mess Yayınları. [In Turkish]
 13. Öztürk Ç. (2007). Sosyal bilgiler, sınıf ve fen bilgisi öğretmen adaylarının "coğrafya" kavramına yönelik metafor durumları [Prospective science, social science and classroom teachers' metaphors for the concept of "geography"]. *Ahi Evran University, Kırşehir Eğitim Fakültesi Dergisi*, 8(2), 55-69. [In Turkish]
 14. Saban A, Koçbeker BN, Saban A. (2006). Öğretmen adaylarının öğretmen kavramına ilişkin algılarının metafor analizi yoluyla incelenmesi [Exploring the prospective teachers' perceptions of the concept of teacher by metaphor analysis]. *Kuram ve Uygulamada Eğitim Bilimleri*, 6(2), 461-522. [In Turkish]
 15. Shaw D, Massengill B, Mahlios M.(2008). Preservice teachers' metaphors of teaching in relation to literacy beliefs. *Teachers and Teaching: Theory and Practice*, 14 (1), 35-50.
 16. Saban A. (2004). Giriş düzeyindeki sınıf öğretmeni adaylarının "öğretmen" kavramına ilişkin ileri sürdükleri metaforlar [Junior prospective classroom teachers' metaphors for the concept of teacher]. *Türk Eğitim Bilimleri Dergisi*, 2(2), 131-155. [In Turkish]
 17. Saban A. (2008). İlköğretim I. kademe öğretmen ve öğrencilerinin bilgi kavramına ilişkin sahip oldukları zihinsel imgeler [First stage primary school students' and teachers' mental images in relation to the concept of knowledge]. *İlköğretim Online*, 7(2), 421-455. [In Turkish]
 18. Saban A. (2009). Öğretmen adaylarının öğrenci kavramına ilişkin sahip olduğu zihinsel imgeler [Prospective teachers' mental images with respect to the concept of student] . *Türk Eğitim Bilimleri Dergisi*, 7(2), 281-326. [In Turkish]
 19. Senemoğlu N. (2007). Gelişim öğrenme ve öğretim: Kuramdan uygulamaya. Ankara: Gönül Yayıncılık. [In Turkish]
 20. Töremen F, Döş İ. (2009). İlköğretim öğretmenlerinin müfettişlik kavramına ilişkin metaforik algıları [Primary school teachers' metaphoric perceptions on the concept of inspection]. *Educational Sciences: Theory & Practice*, 9(4), 1973-2012. [In Turkish]

