



# INNOVATION AND GLOBAL ISSUES IN SOCIAL SCIENCES

## CONGRESS BOOK

**Patara Antique City Parliament Building,  
ANTALYA, APRIL 27-29, 2017**

### EDITORS

Prof. Dr. Nurettin BİLİCİ  
Ragıp PEHLİVANLI  
Karlygash ASHIRKHANOVA



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April 27-29, 2017

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**Kaş / Antalya / TURKEY**

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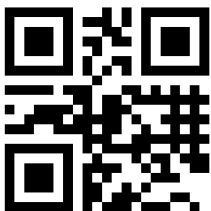
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## FOREWORD

Üç günlük *"Innovation and Global Issues in Social Sciences 2017"* başlıklı kongremizi Antalya'nın Kaş kazasına bağlı **Patara (Şimdi Gelemiş)**'de gerçekleştirdik.

Patara, Likya Devleti'nin başkentliğini yapmış antik şehirlerden biri.

Kongremizi yurt dışı ortak üniversiteler ve katılımcılarla birlikte gerçekleştirdik. Kazakistan ve Kırgızistan'dan iki üniversite Kongrenin katılımcıları ve ortakları arasında yer aldı. Kuzey Kazakistan Devlet Üniversitesi rektörü Prof. Dr. Serik Omirbayev ve Kırgızistan Kaşgarlı Mahmud Üniversitesi rektörü Prof. Dr. Almaz İbraev bizzat kongreye katılarak misafirimiz oldular. Ayrıca ortak üniversiteler bünyesinde de paralel oturumlar düzenlendi.

Kongrenin açılışı, Antik Kent'teki 2.000 yıl önce Likya Devleti'nin Parlamentosu olarak kullanılan **Patara Meclis Binasında** yapıldı. Tebliğ sunumları da orada gerçekleştirildi. Kongrenin burada yapılması için Kültür ve Turizm Bakanlığından özel izinler alındı.

30 yıldır Patara Antik Şehri'nin kazılarını yapan, Meclis binasının restorasyonunu gerçekleştiren arkeolog Prof. Dr. Fahri Işık Kongrenin açılış konuşmasında *"Likya'nın sorunlarının tartışıldığı, kanunlarının yapıldığı bu bina şimdi bir bilim alanı, bilim meydanı haline dönüşüyor. Bu bana heyecan ve mutluluk veriyor"* demiştir.

Benim açılış konuşmasında söylediklerim arasında şunlar da vardı:

*"Heyecan verici bir ortamdayız. Kongremizi klasik 5 yıldızlı otellerin dışına çıkardık... Alışılmışın dışında bir kongre alanındayız. 2.000 yıl önce, bizim gibi Doğu'dan gelen toplulukların kurduğu Likya Devleti'nin başkentine, büyük limanına geldik.*

*Mitoloji; tüm sanatların, müziğin, güneşin, şiiirin ve ateşin tanrısı Apollon'un burada doğduğunu söylüyor. Noel Baba (Aziz St. Nikolas) burada doğdu."*

Kongremizde 300 civarında tebliğ sunuldu.<sup>1</sup> Tebliğlerin sunumu 3 ayrı salona paylaştırılarak yapıldı: Demokrasi Salonu, Tarih Salonu, Kültür Salonu. Üç gün boyunca bu salonlarda *"sosyal bilimlerde küresel sorunlar ve çözüm yolları"*na ilişkin farklı konular konuşuldu, tartışıldı.

Katılımcılar birbirleriyle fikir alışverişinde bulundular. Yeni dostluklar kurdular.

Kırgızistan'dan gelen Rektör İbraev'le yaptığımız sohbette onun bana anlattıkları hâlâ aklımda. Köklerimizle ilgili konuşurken dedesinin söylediklerini aktarmıştı bana sayın Rektör. Şunları söylemiş dedesi: *"Oğlum, o Türkiyedekiler bizim öz kardeşlerimiz. 500-600'lü yıllarda burada yaşadığımız kıtlık-yokluk yüzünden göç zorunlu hale gelmiş. Aramızda cesur, gözü pek, macera sever olanlar atlamışlar atlarına gitmişler o tarafa. Bizim dedelerimiz ise güçlüklerle rağmen burada kalmayı tercih etmişler. Yeri geldiğinde atlarını kesip yemek zorunda kalmışlar ama ayrılamamışlar ana vatanlarından..."*

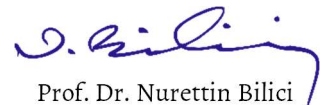
Dostluklar kurmanın, öğrenmenin yanı sıra katılımcılar Patara'da enerji depoladılar. Ve güzelim Likya Ülkesini tanıma fırsatı buldular: Letoon-Xanthos antik şehir kalıntıları, Saklıkent Kanyonu, Fethiye Ölü Deniz, Kalkan, Kaş (karşısında Meis Adası), Kekova, Demre (Noel Baba şehri), Myra Antik Kenti ve güzel koylar... hepsi çok yakınımızda idi.

Kongrenin gerçekleştirilmesinde en büyük emek Yürütme Kurulu Başkanımız Ragıp Pehlivanlı'ya aittir. O ve ekibi burada olmamız için büyük çaba gösterdiler. Sayın Pehlivanlı ile birlikte çalışan Betül Hayrulloğlu'nun, Karlıgash Ashırkhanova'nın, Selçuk Demirkılınc'ın katkıları da çok önemlidir. Onlara ayrı ayrı teşekkür ediyorum.

Meclis binasında bu aktiviteyi gerçekleştirmemize izin veren Kültür ve Turizm Bakanımız Sayın Nabi Avcı'ya ve Bakanlık çalışanlarına teşekkür ediyorum.

Ayrıca bize ev sahipliği yapan ve belediye imkânlarını Kongrenin gerçekleşmesi için seferber eden Kaş Belediye Başkanı Sayın Halil Kocaer'e, Kongremize katılan Demre Kaymakamı (ve Kaş Kaymakam vekili) Sayın Murat Uz'a, Gelemiş köyü muhtarı Sayın Arif Otlu'ya ve bizleri güler yüzle karşılayıp, güler yüzle ağırlayan ve yine güler yüzle uğurlayan Gelemiş (Patara)nın güzel insanlarına teşekkür ediyorum.

Bilim dünyasına ve ülkemizin sorunlarının çözümüne katkı sağlamasını arzu ettiğimiz Kongre etkinliklerimizin yeni bir sayfasında buluşmak dileğiyle, katılımcılarımız dâhil tüm katkı sunanlara tekrar saygı, sevgi ve selamlarımı sunuyorum.



Prof. Dr. Nurettin Bilici

**Kongre Başkanı**

<sup>1</sup>Kongremize Türkiye'den yapılan 360 civarındaki tebliğ başvurusundan 300'e yakını sunuma değer bulunmuştur. Sunulan tebliğlerin farklı dergilerde yayım prosedürü devam etmektedir.

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## The Mimicry Peculiarities as a Mechanism for Successful Adaptation in the Society

**A.R. RIZULLA<sup>1</sup>, M.P. KABAKOVA<sup>2</sup>**

### **Abstract**

This paper shed a light into recently investigated phenomena, mimicry and its genesis. Mimicking, that is showing the same nonverbal and verbal behavior as one's interaction partner. This phenomena is a real working mechanism that allows people to become successful in all kind of relationships, such as: family (kids-parents and spouses relations), friends, work team and business. The causes that leading to occurrence of mimicry are described, among which the nature of human beings which develops in society, and the need to maintain relationships as a fundamental basic for them. The article provides an analysis of theoretical and experimental studies of mimicry starting with Western thinker, such as S.Freud, who considered mimicry as an important element in communication of affective states, to modern scientists, whose experiments showed the various facets of mimicry including neuroscience data. The paper describes designs of several experiments that were conducted close to ecological (natural) situations with naive participants, who did not suspect that they had been taken part in experiment. This emphasize the validity of results, as laboratory conditions might influence the validity of outcomes. The experiments took place in Western countries, the domestic science, especially Kazakhstan, did not conduct such kind of experiments.

The article shows peculiarities of experiment designs that might encourage our domestic scientists to developing researches and switch from theoretical to empirical development of domestic psychology science. The literature review contains both pioneers, who started mimicry researches and modern scientists' studies where the reader can take ideas and implement the findings into the practice as a student, teacher and scientist.

In the conclusion, authors emphasized the important role of mimicry in productive social adaptation or another words, the role in successful life maintaining, in the aspect of relationships with others. Furthermore, authors hypothesize that mimicry might be one of the predictors of people's well-being.

**Keywords:** mimicry, chameleon effect, echo effect, social perception, productive social adaptation.

### **Introduction**

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R. Waldinger (2014) emphasized that the quality of interpersonal relationships is very important for human well-being [1]. Why are people so strongly motivated to have relationships? According to scientists R. Baumeister and M. Leary (1995) it's because of a fundamental need to belong. The "belongingness hypothesis" states that people have a basic psychological need to feel closely connected to others, and that caring, affectionate bonds from close relationships are a major part of human behavior. The domain direction of human beings activity is toward the belongingness [2]. The belongingness is the heart to relationships, and the relationships is fundamental basis of human being and developing as they provide a person social support. Social support is defined as those "social interactions or relationships that provide individuals with actual assistance or with a feeling of attachment to a person or group that is perceived as caring or loving" (Hobfoll & Stokes, 1988) [3, p. 499]. Social support is crucial element of a person's productive activity. Thus, maintaining and developing interpersonal relationships is significant aspect of social adaptation. The mechanism, which makes this process works, is phenomenon of mimicry. One of the most striking features of this phenomenon is that it is being a social glue in all stages of relationships development (e.g., Chartrand & Bargh, 1999; LaFrance, 1979) [4, 5].

### **Mimicry genesis.**

Let us take a look into the place of mimicry origin, this phenomena started its functioning in the nature environment. The nature is the best teacher, everything in nature exists in a very logical concept. Animals live and survive if they have been adopted in the environment. One should not forget such way of adaptation as imitating the environment like, for instance, chameleon does, by taking the color of environment in order to be perceived as a part of this environment. Another example is imitating the behavior of another animal in order to survive like do some kind of fishes. This phenomena called as a mimicry in biology. The term was invented and described by W. Beits in 1862 [6].

Close to mimicry the imitation was described in the concepts of a great philosopher Aristotle, who emphasized the important role of imitation in development of human beings [7].

S. Freud has been suggested that mimicry, the imitation of others' non-verbal displays by an observer plays an important role in the communication of affective states [8]. C. Rogers (1957) saw the imitation of a client's non-verbal behavior as a means to communicate empathy, some schools of therapy one of which represented Siegel, advocated imitation as a means of understanding the client's internal state [9].

Later on, researchers mentioned synchrony, or another words behavior matching during the interaction between the interactants, such as, similarity of body postures. A. Schefflen (1964), M. LaFrance (1979) started to investigate this congruency [10, 5, 11]. Researchers focused on whether their posture was congruent in a predetermined time window throughout the time series. The investigation showed that postural congruence has been observed in interactants who share a common viewpoint (A. Schefflen) and found to lead to rapport (M. LaFrance). In the recent literature, behavioral matching is known and described as behavioral mimicry or chameleon effect. T. Chartrand and J. Bargh (1999), M. Hove and J. Risen (2009), J. Lakin (2013) studied behavioral mimicry and described it an automatic tendency to imitate another's behavior at a particular moment in time. The target of behavioral mimicry is broad; it includes posture as well as gestures, mannerisms, facial expressions, and other motor movements [5, 12, 13]. Behavioral mimicry is typically assessed by examining whether the same or a similar behavior occurs at a given point in time or whether the presented behavior is mimicked by an interactional partner within a short window of time, from 1 to 3 seconds.

Besides behavioral mimicry, which is non-verbal, there is another form of congruency, which is called echo effect, since the verbal mimicry resembles the natural phenomenon of

the echo, and in fact operates the same way. The term was proposed by Polish scientists, W. Kulesza and his colleagues in 2014 [14].

### **Mimicry phenomena.**

As was mentioned above mimicry occurs automatically and unconsciously. This means that it can be associated with personality traits. This question has been studied by E. Kurzius and P. Borkenau, in 2015 [15]. In their study, personality was assessed in terms of the Big Five. Participants played a role in dyads, several of their behaviors had been coded every 10 s. Moreover, the interactants were instructed either to cooperate or to compete, and their performance and liking were measured. The results showed positive correlation of mimicry with extraversion and agreeableness. Thus, extraverts are more likely to mimic people during the interaction. The agreeableness characterizes a person who is able to be empathetic, the bright example of such a person is Mother Teresa. The interesting finding was that mimicry occurs in the groups with cooperative meaning rather than competitive, which means that the goal of interaction plays a significant role in the occurrence of mimicry.

Talking about the goal, according to J. Lakin et al., [16] the need to affiliate, might be a higher-level trait that fosters the occurrence of mimicry. We all live with the need to be affiliated with someone another who is important for us. Thus, mimicry is a natural phenomenon which exists in all fields of our interaction. Nevertheless, there is no phenomenon without its positive and negative sides.

The first feature is that human beings are developing through the mimicry, for example, experiments of H. Fukuyama and M. Myowa-Yamakoshi [17]; J. Xavier et al., [18] revealed that imitation between parent and child plays an important role in learning social skills, language, how to obtain food, to avoid danger, and even how to perform aggressive behaviors.

Secondly, T. Chartrand and J. Bargh's experiments in 1999 [4] showed that mimicry is beneficial for the mimicker (person, who is imitating the partner) by enhancing liking by the mimicked (who is being mimicked). Moreover, another experiment of M. Stel and R. Vonk revealed that liking appears toward each other, another words characterized for both mimicker and mimicked [19]. A number of key issues arise from this statement. For instance, people can fix a row of problems such as adaptation in new team of colleagues, improve relationships in family, or increase the quantity of friends, etc.

Next feature is that mimicry gains by evoking trust in mimicked toward the mimicker [20, 21] as well as assistance, which is being offered by mimicked [25]. Doubtless, trust gives interactants the sense of unity and perception of themselves as parts of a whole, resulting in a productive interaction and evoking mutual comprehension. As a matter of fact, that mimicry provides the assistance, let us refer to the research made by J. van Baaren et al., (2004). The authors demonstrated that a confederate who mimicked the posture (position of arm, legs, etc.) of participants elicited the willingness of participants to help the confederate pick up pens she "accidentally" dropped on the floor and to donate significantly more money to charity, than in the cases, where they did not mimic the participants [22]. Interestingly, in another study (M. Stel, J. van Baaren, R. Vonk, 2008) with other way around roles [23]. Now it was a participant who mimicked (or not) the person who was representing the charity organization, and talking about the necessity of helping animals. As a result, participants donated significantly more



money (1.06 Euro), when they were asked to mimic than in the non-mimicry condition (0.30 Euro).

Another good thing about mimicry is that mimickers earn more money than their counterparts do. To approve this statement let turn our attention to the experiment made by J. van Baaren and his colleagues (van Baaren, Holland, Steenaert, & van Knippenberg, 2003). This study was conducted in a naturalistic setting (restaurant), where a trained waitress interacted with naive clients to see if there was a difference in tip percentages between tables where she either did, or did not, verbally repeat orders back to customers (verbal mimicry). In the first experiment, the waitress either repeated everything the customers said to her, or, in the control condition, she responded with brief statements like “okay!” or “coming up!” The results revealed an increased tip average for customers who were mimicked [24].

Another study providing evidence for the power of verbal mimicry was carried out in a real-world retail setting by C. Jacob et al., (2011). In this case, sales clerks in a large store specializing in the sale of household appliances either engaged in verbal and nonverbal mimicry of customers who approached them for advice or did not. It was found that imitation was associated with higher sales percentages and greater compliance with the seller’s suggestion. An exit interview revealed also that mimicry led to a more positive evaluation of the mimicker and the store where they were employed [25].

Interestingly, the input of mimicry into perception of mimicker’s physical attraction. The next experiment by N. Guéguen (2009) conducted during speed-dating parties in the local pubs, a female confederate was asked to mimic some of an opposite-sex participant’s verbal expressions (i.e., “It’s great,” “It’s fun,” or when the participant asked, “You really do this?” she replied: “Yes, I really do this”), together with his gestures. In the non-mimicry condition, the confederate was instructed to not mimic the verbal expressions (remain silent what makes this condition incomparable in the light

of aforementioned studies) of the men. Analysis revealed that participants liked the interaction with the verbally mimicking confederate, and evaluated her sexual attractiveness more highly than in the non-mimicry condition [26]. Neuropsychology researchers studied the role of active mimic in the interaction. Neuroimaging data suggest that observation of the emotional facial expressions of others activates not only motor pathways [27], but also brain structures (e.g. amygdala, insula) regarded as part of the extended mirror neuron system (MNS) [28,29] and thought to be responsible for emotional information processing. Moreover, emotional brain structures were more active when subjects perceived dynamic emotional stimuli compared to static stimuli [30–32]. It is also possible that heightened activity of the brain regions related to mirror neurons underlie the relationship between facial mimicry and emotional experience involved in processing dynamic facial expressions. Dynamic facial expressions are more natural and powerful than static ones.

Another striking feature is that mimicry is one of the predictors of marital satisfaction. This fact was revealed in the experiment conducted by R. Zajonc, A. Pamela and other scientists in 1987 [33]. The study explored spouses’ photographs in the beginning of their marriage and after 25 years of marriage. Those couples who were mimicked each other during their marriage became physical congruent to each other, as facial mimicry facilitates the same facial muscles which results in facial congruency. Moreover, the level of marriage satisfaction was higher in couples with mimicry.

It is noticeable that mimicry can facilitate negotiations as was demonstrated by W. Maddux et al., (2008). Mimickers are achieving most or all of their goals and hopes [20]. Thus, it leads to idea that mimickers might be more successful.

In addition, according to T. Lipps (1907) and E. Hatfield et al., (1993) imitation of facial expressions leads to emotional contagious [34, 35], what is crucial for emotions recognition [36, 37]. What is more interesting is that negative signals such as threat, shrugging, lack of agreeableness [38], anger and disgust eliminate and/or minimize the occurrence of mimicry [39].

The other side of the coin is, however, that according to C.E. Ashton-James and T. Chartrand (2009) behavioral mimicry has been shown to improve the capacity of individuals to perceive similarities or patterns, called convergent thinking, but compromise their ability to uncover novel perspectives, called divergent thinking (creativity) [40]. Another interesting result was obtained during the recent experiment made by W. Kulesza and S. Kot in 2016 [41]. Surprising finding was revealed that mimickers' self-esteem became lower, compared to people who had not been mimicked. Thus, mimicry according to their finding decrease self-esteem of the mimicker. Nevertheless, researchers emphasized that this finding is needed to be explored in depth referring the question of the effects of mimicry on the mimicker.

We suggest that this finding is controversial, as self-esteem forms early in the course of development, remains fairly constant over time, and is relatively immune to change [42]. Thus, the question of mimicry effects on self-esteem requires further investigation.

### **Conclusion.**

We live in a world where everybody is trying to fit the standards or requirements in order to survive in a competitive life conditions. This brings a lot of stress to human beings, social support, qualitative relationships are crucial to resist the stress. The one of the mechanisms that fosters social relationships, increases empathy, and afterward leads to mutual comprehension is mimicry. This phenomena has been actively investigated by science, vast majority of findings show positive influence on a person itself and interpersonal relationships. Further studies are needed to be conducted from the aspect of person's well-being and mimicry taking into consideration the fact that productive social adaptation make a positive input into people's well-being. Moreover, mimicry is a social glue, which provides social support, and there is an evidence that social support is one of the dominants composing life satisfaction (well-being) [43]. Thus, mimicry might play a role in increasing people's well-being.

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