

AKBANK GÜNÜMÜZ SANATÇILARI ÖDÜLÜ SERGİSİ AKBANK CONTEMPORARY ARTISTS PRIZE EXHIBITION

AKBANK

GÜNÜMÜZ
SANATÇILARI

ÖDÜLÜ
SERGİSİ

AKBANK CONTEMPORARY
ARTISTS PRIZE EXHIBITION

03 Haziran
31 Temmuz 2015
June 3rd
July 31st 2015

KÜRATÖR / CURATOR
Philippe Van Cauteren



AKBANK
SANAT

Sanatçılar / Artists

Alp Şeker
Ayşe İri
Bestami Gerekli
Betül Sertkaya
Burak Dikilitaş
Elif Erker
Elif Köse
Ferhat Akay
Furkan Öztekin
Gizem Dinç
Gürkan Mıhçı
H. Burak Yel
Hazal Ünsal
Mehmet Öğüt
Soner Ulu
Şafak Gürboğa
Volkan Kızıltunç

Küratör / Curator

Philippe Van Cauteren

35 yıla yakın bir süredir çağdaş sanat alanındaki gelişmeleri desteklemek ve aynı zamanda henüz görünürlük kazanmamış genç sanatçılara destek olmak amacıyla 1980 yılında başlattığımız Günümüz Sanatçıları Sergileri’ni son on iki yıldır Akbank Sanat’ın sponsorluğu ve işbirliğiyle ve geçtiğimiz üç yıldır da *Akbank Günümüz Sanatçıları Ödülü* başlığı altında sürdürüyoruz.

Philippe Van Cauteren’in küratörlüğünü yaptığı üçüncü *Akbank Günümüz Sanatçıları Ödülü* sergisi, içinde yaşadığımız çağın değişimler çağı olduğu olgusuna gönderme yapan ve “Arada olmak: her zaman - hiçbir zaman” başlığı altında 3 Haziran - 31 Temmuz 2015 tarihleri arasında gerçekleştirildi. Yarışma bu yıl ilk defa Türkiye’de bulunan Güzel Sanatlar Fakültesi, İletişim Fakültesi, Sanat ve Sosyal Bilimler Fakültesi ve Sanat ve Tasarım Fakültesi 3. ve 4. Sınıf, yüksek lisans ve doktora öğrencilerinin katılımına açık olarak düzenlendi.

Bu sergiye emeği geçen herkese, katkılarından dolayı Akbank Sanat’a teşekkür ediyor ve işleri sergilenen 17 genç sanatçımıza başarılar diliyoruz.

Leyla Belli
Resim ve Heykel Müzeleri Derneği Başkanı

The Contemporary Artists Exhibition, that was initiated 35 years ago in 1980 to support developments in the field of contemporary art and to provide support for up and coming young artists, is being realised with the sponsorship and collaboration of Akbank Art Center in the last twelve years and was renamed *Akbank Contemporary Artists Prize* for the past three years.

The third *Akbank Contemporary Artists Prize* exhibition, curated by Philippe Van Cauteren, titled “In-between: always - never” denoting the fact that we are going through an era of change, was on show during June 3rd - July 31st 2015. For the first time, the competition was open for entries from 3rd and 4th year students, and graduate and doctoral students from the Faculties of Fine Arts, Faculties of Communications, Faculties of Arts and Social Sciences and Faculties of Art and Design, in Turkey.

I would like to thank everyone who had contributed to the realisation of this exhibition, and Akbank Art Center for their continuing support, and wish all the best for the 17 young artists whose works were exhibited.

Leyla Belli
Chairman of Painting and Sculpture Museums Association

Güncel Türk Sanatı'nın sanatseverlere ulaşması amacıyla düzenlenen ve kendi alanında klasikleşmiş olan *Günümüz Sanatçıları Sergisi*; özellikle genç sanatçıların üretim ve söylemlerini izleyicilerle en doğru şekilde buluşturmaları ve güncel sanat ortamına katılmaları için bir köprü vazifesi görmektedir. *Günümüz Sanatçıları Sergisi* ülkemizde görsel sanatlar alanında gerçekleşen değişimleri ve gelişmeleri yansıtmakta ve bir bellek görevi üstlenmektedir. Güncel Türk Sanatı tarihinin son otuz dört yıllık döneminde önemli kilometre taşı olan sanatçılar yer almıştır.

Bu yıl, *Akbank Günümüz Sanatçıları Ödülü*'ne resim, fotoğraf, video, heykel, seramik, baskı, yerleştirme, yeni medya ve karışık teknik gibi çağdaş sanatın tüm ifade biçimlerine açık olan yarışmaya 360 sanatçı katıldı.

Arada olmak: her zaman - hiçbir zaman teması ile 28 Ocak - 03 Nisan 2015 tarihleri arasında düzenlenen yarışmaya bu sene, Güzel Sanatlar Fakültesi, İletişim Fakültesi, Sosyal Bilimler Fakültesi ile Sanat ve Tasarım Fakültesi 3. ve 4. sınıf, yüksek lisans ve doktora öğrencilerinin başvuruları kabul edildi.

Aralarında SMAK müzesi direktörü Philippe Van Cauteren'in de bulunduğu uluslararası jüri tarafından titizlikle yapılan değerlendirmeler sonucunda; on yedi sanatçının eserlerinin yer alacağı bir seçki oluşturuldu. Güncel Türk Sanatı adına; gelecek vadeden nitelikli ve özgün katılımcı kitlesinin değerlendirilmiş olduğunu görmek bizleri bir hayli mutlu ediyor.

Güncel sanat alanındaki gelişmeleri teşvik etmek ve genç sanatçıları cesaretlendirmek, onlar adına yeni fırsatlar yaratarak toplumun daha geniş kesimleriyle buluşmalarını ve uluslararası platformlarda yer almalarını sağlamak gibi etkin kazanımlar sağladığını düşündüğümüz *Akbank Günümüz Sanatçıları Ödülü*'nün önümüzdeki yıllarda da aynı sanatsal çizgide devam etmesini amaçlıyoruz.

Akbank Günümüz Sanatçıları Ödülü yarışmasına başvuran tüm sanatçılarımıza bizimle eserlerini paylaştıkları için teşekkür ediyorum ve kazanan sanatçıları da tekrar tebrik ediyorum.

Seneye yeni sergimizde görüşmek üzere...

Derya Bigalı
Akbank Sanat Müdürü

Already a classic in its field, *Contemporary Artists Exhibition* aims to present Contemporary Turkish Art to art-lovers, and act as a bridge conveying the productions and discourses of emerging artists to viewers, while encouraging them to participate in the contemporary art scene. *Contemporary Artists Exhibition* reflects the changes that have taken place in the field of visual arts in Turkey, and assumes the role of a source. In its thirty-four years, groundbreaking artists of the Contemporary Turkish Art scene have been a part of it.

A competition open to all expressions of contemporary art such as painting, photography, video, sculpture, ceramic, print, installation, and new media, *Akbank Contemporary Artists Prize* received over 360 submissions from artists this year.

Applications of 3rd & 4th grade, masters, and doctorate students from Fine Arts, Design, Communications, and Social Science Faculties have been accepted under the theme *In-between: always – never* among dates January 28th - April 3rd, 2015.

As a result of the meticulous evaluations by an international jury, among whom the director of SMAK Museum Philippe Van Cauteren was also present, a selection consisting of works by seventeen artists has been made. In the name of Contemporary Turkish Art, we have been more than glad to see such promising, qualified, and original participants taken into evaluation.

In the future, we aim to preserve the artistic line of the *Contemporary Artists Prize*, which we think will have solid gains such as promoting the developments in the field of contemporary art, encouraging emerging artists and creating new opportunities for them to reach out to larger sections of society and to actively take part in the international art platform.

I thank all artists who have submitted their proposals to the *Akbank Contemporary Artists Prize* for sharing their works with us and once again congratulate the winning artists.

Looking forward to seeing you in the exhibition of the coming year...

Derya Bigalı
Director of Akbank Sanat

Bu metin sergiyi yerleştirme deneyiminden çıktı. *Akbank Günümüz Sanatçıları Ödülü* sergisini kurmak için en fazla üç günlük bir süre vardı. Sanatçılara bu yılın yarışma teması olan “Arada olmak: her zaman - hiçbir zaman” ile ilgili sanat eserleri göndermeleri için çağrıda bulunulmuştu. Bu, bana sergi ziyaretçileri için kaleme aldığım bir metindeki düşüncelerimi hatırlattı: “Şeylerin eşzamanlılığı beni tekrar ve tekrar büyülüyor. Sizler bu metni okurken, hemen caddenin karşısında birisi kahve içiyor ya da başka biri şehrin başka bir yerinde duş alıyor. Nepal halkı depremin ardından ülkelerini yeniden inşa etmeye çalışırken ve Palmyra kenti çatışmalara ev sahipliği etmekte ve yıkımlara maruz iken ve binlerce Afrikalı en insanlık dışı koşullar içinde kendi kıtalarından kaçmaya çalışırken, sanatçılar hala kendilerini eserlerini üretmeye adanıyorlar. Görünen o ki, dünyamızın kargaşası ve karmaşıklığı sanatçıları yaratmaktan alıkoymuyor. Bir zamanlar kimilerinin mümkün olduğunu düşündüğü gibi sanatın dünyayı değiştirmesinin mümkün olmayacağı açık olsa da, anlaşılan, sanat sanatçıyı ve bizleri çevreleyen dünyayı sorgulamak ve onunla mücadele etmek için geçerli bir önermedir.”

“Arada olmak”, yaşam ve ölüm, burası ve orası, şimdiki zaman ve geçmiş zaman, analog ve sanal olan arasındaki geçiş ile ilgili bir durumu ortaya koyar. Bu, felsefi bir durumdur ve bir sanatçının üretmesi için ideal bir ortam sunar. “Arada olmak” kesin olanı değil, göçebe olanı ve olası olanın gücünü vurgular. Bunun araştırma ve düşünme için bir metafor olduğu söylenebilir. Sanatçıların çoğu imgenin durumu üzerine düşünürken bu geçiş anlarını ele almaktadır. Zaman ve mekan içinde yer değiştirmeler ve yerinden oynatmalar bu sergi kapsamında sıklıkla kullanılan stratejileridir. Hatta bu sanatçılara ilişkili olarak politik kelimesini bile kullanabilirim. Geleneksel anlamda olmasa da, algı ve bakma politikalarının değerlendirilmesi kapsamında bakıldığında politiktirler.

This text comes out of the experience of the mounting of the exhibition. Not more than three days was the timeframe to set up the exhibition of the *Akbank Contemporary Artist Prize*. Artists were invited to send in artwork related to the theme of the competition of this year: “In between: always - never”. This reminds me on some thoughts I wrote for the text for the visitor of the exhibition: “Again and again I am fascinated by the synchronicity of things. As you are reading this text, just across the street someone is drinking coffee or elsewhere in the city someone is taking a shower. While the inhabitants of Nepal are still trying to rebuild their country after the earthquake, while the city of Palmyra is the place of fights and subject to destruction, and thousands of African human beings try to escape their continent in the most inhuman conditions, artists still commit to make their work. The turmoil and complexity of our world visibly does not stop artists to create. Although it is clear that art will never be able to change the world - one day some people thought it was possible - art is apparently a valid proposition in order to question and tackle the world which surrounds the artist and ourselves.”

“In between” indicates a condition that relates to the transition between life and death, here and there, the present and the past, the analogue and the virtual. It is a philosophical condition that might be the ideal space for an artist to create. “In between” emphasizes the power of the possible, not of the definite, the nomadic. It might be called a metaphor for research and reflection. Most of the artists did look for moments of transition in a reflection on the condition of the image. Displacement and dislocation in time and space are strategies that are frequently used in this exhibition. I would even use the word political in relation to these artists. Not in the traditional sense, but in the sense that the politics of perception and looking are being evaluated.

Ama asıl zorluk on yedi sanatçının çalışmalarını Akbank Sanat sergi mekanının iki katında sunabilmekteydi. Anlamlı bir sergi yapabilmek için yol gösterici ilke ne olabilirdi? Bir yarışma mantığı uyarınca, yani başka bir düşünce yapısına bağlı olarak seçilmiş eserler bir sergi kapsamında bir araya getirilirken nasıl bir ortak ana hat bulunabilirdi? Bu sergide yer alan eserler şans eseri ve tesadüfen bir araya gelmekteydiler. Tek ortak yanları sahip oldukları kalite ve *Akbank Günümüz Sanatçıları Ödülü* jürisinin bu işlerin geçerli birer sanatsal önerme olduğu yönündeki inançlarıydı. Yine de bir ortak payda aranacaksa, bu, tüm bu sanatçıların “gerçekçi” olmalarıdır. Bunu on dokuzuncu yüzyıldaki tarihsel sanat akımına işaret etme anlamında kullanmıyorum, onun yerine sanatçıların hepsinin yaşadıkları ortamı yansıttıkları anlamında kullanıyorum. Bu sergideki sanatçıların çoğunluğu sanatı içinde yaşadığımız gerçekliği tekrardan gözden geçirmekte ve yeniden kurmakta geçerli bir araç olarak görüyor. Onlar, film görüntüleri, bilimsel kitaplar, borular, hikayeler, biyografik duruşlar, bilimsel teorileri alıp tekrardan kullanıyorlar ve bunlardan bakış açımızı yeni bir şekilde düzenleyen birer sanatsal önerme kurguluyorlar. Tıpkı zarif ve tanımlanamaz bir el hareketiyle bir güvercin meydana çıkaran bir sihirbaz, ya da insan vücuduna hassas bir kesik atan bir cerrah gibi. Sözel iletişimin sahip olmadığı imkanlara sahip, bir iletişim biçimi olarak sanat.

Geri dönüp belirli bir mesafeden baktığımda sergi salonunu bunun bir ödül sergisi olmadığı duygusu ile terk ettiğimi, eserlerin bir küratör tarafından kasıtlı olarak seçildiğini düşündüğümü hatırlıyorum. Acaba bunun sebebi sergideki sanatçıların benzer deneyimleri paylaşması ya da onların yeni bir sanatçı nesli olması olabilir mi? Yoksa bu, sanat eserlerinde daha kavramsal bir yaklaşımı önemseyen jürinin seçimlerindeki tercihlerinden mi kaynaklanmaktadır? Benim kişisel izlenimim, bu sergideki sanatçıların birer “mucit” olarak değerlendirilemeyeceği yönünde, onlar daha çok bizi çevreleyen malzemeleri, araçları, hikayeleri ve görüntüleri ince ince gözden geçiren bir tür araştırmacı olarak görülebilir. Zaten yazılmış hikayeler ve zaten görülmüş görüntüler, yerel olana methiyeler düzerek yeniden düzenlenmiştir.

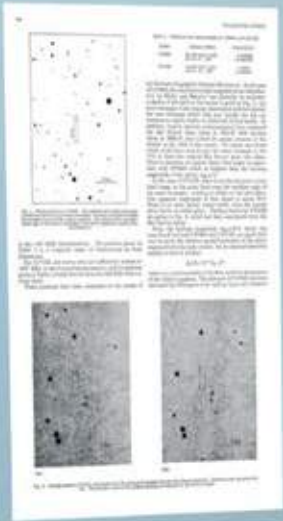
Philippe Van Cauteren
Sanat Yönetmeni
SMAK Müzesi, Ghent, Belçika

But the main challenge was to present the work of 17 artists in the two floors of the Akbank Sanat exhibition space. What could be a guiding principle in order to make an exhibition that makes sense? How could one find a guideline between works that have been selected following another idea, namely the logic of a competition? The works in this exhibition came together by chance and coincidence, the only thing they do share is their quality and the conviction of the jury of the *Akbank Contemporary Artists Prize* that these works are valid artistic propositions. If I nevertheless have to look for a common denominator then it is that these artists are ‘realists’. And I do not mean this in the sense of the historical art movement in the 19th century, but I do understand this in the sense that the artists all do reflect the environment they live in. The majority of the artists in this exhibition do understand art as a valid tool to reconsider and reboot the reality we live in. They sample and reuse film footage, scientific books, pipes, stories, biographical stances, scientific theory into an artistic proposition that restages the way we look. As a magician who can show a dove with an elegant and undefinable hand gesture, or as a surgeon who makes the precise incision in the human body. Art as a form of communication but with a capacity that verbal communication does not have.

Thinking back on the exhibition from a distance I remember that I left the show with a feeling that this exhibition was not a prize exhibition, but that the works have been deliberately selected by a curator. Might the reason be that one can say that the artists in the exhibition are sharing the same experiences or form a new generation of artists? Or is it more due to the taste of the jury in their selection that has a keen interest in art works with a more conceptual sense? My personal impression is that the artists in this exhibition cannot be considered as ‘inventors’, but more as some sort of researchers who dissect the materials, tools, stories and images which surround us. The stories that have been already written and the images that have already been seen, are re-organized in praise of the vernacular.

Philippe Van Cauteren
Artistic Director
SMAK Museum, Ghent, Belgium





Sanatçılar / Artists

Alp Şeker
Ayşe İri
Bestami Gerekli
Betül Sertkaya
Burak Dikilitaş
Elif Erker
Elif Köse
Ferhat Akay
Furkan Öztekin
Gizem Dinç
Gürkan Mıhçı
H. Burak Yel
Hazal Ünsal
Mehmet Öğüt
Soner Ulu
Şafak Gürboğa
Volkan Kızıltunç

ALP ŞEKER

1991, İzmir

Eğitim

Dokuz Eylül Üniversitesi, Güzel Sanatlar Fakültesi, Film Tasarımı Bölümü

Education

Dokuz Eylül University, Faculty of Fine Arts, Film Design and Directing Department

Sergiler

2014 PORTIZMIR3 Uluslararası Güncel Sanat Trienali

2013 "Sınırları Aşmak", İzmir İş Sanat Galerisi

2012 Contemporary Istanbul

"Deneyimin Ötesi", Pera Müzesi, İstanbul

"İçinden", K2 Güncel Sanat Merkezi, İzmir

Exhibitions

2014 PORTIZMIR3 International Triennial of Contemporary Art

2013 "Crossing the Boundaries", İzmir İş Sanat Gallery

2012 Contemporary Istanbul

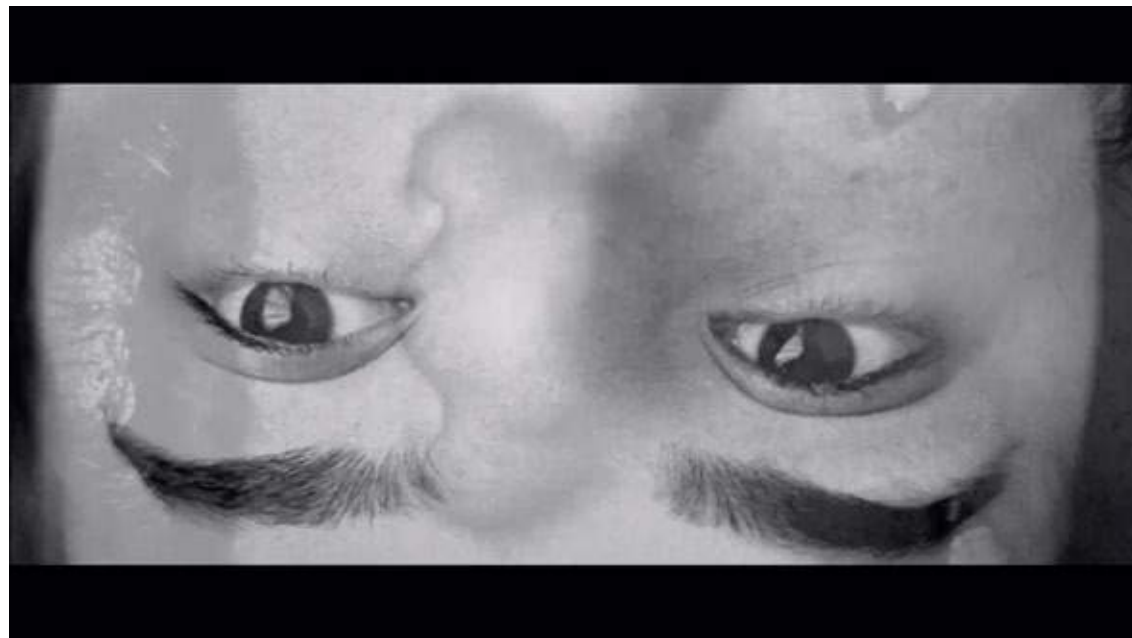
"Beyond Experience", Pera Museum, Istanbul

"Through", K2 Contemporary Art Center, Izmir

Last Whisper

2'06" HD Renkli - Siyah Beyaz / 2'06" HD Colour - B&W, 2014





AYŞE İRİ

1992, Şanlıurfa

Eğitim

Yeditepe Üniversitesi, Sosyal Bilimler Enstitüsü, Grafik Tasarım Bölümü (Yüksek Lisans)

Marmara Üniversitesi, Güzel Sanatlar Fakültesi, Grafik Tasarım Bölümü

Education

Yeditepe University, Institute of Social Sciences, Graphic Design Department (MA)

Marmara University, Faculty of Fine Arts, Graphic Design Department

Ödüller

2013 GÜSEK Fotoğraf Yarışması - Final

Genç Kırmızı Afiş Tasarım Yarışması - Yarı Final

Anadolu Cam Afiş Tasarım Yarışması - Üçüncülük Ödülü

2008 Şanlıurfa İli Amblem Logo ve Fotoğraf Yarışması - Birincilik Ödülü

Awards

2013 GÜSEK Photography Contest - Final

Genç Kırmızı Poster Design Competition - Semi Final

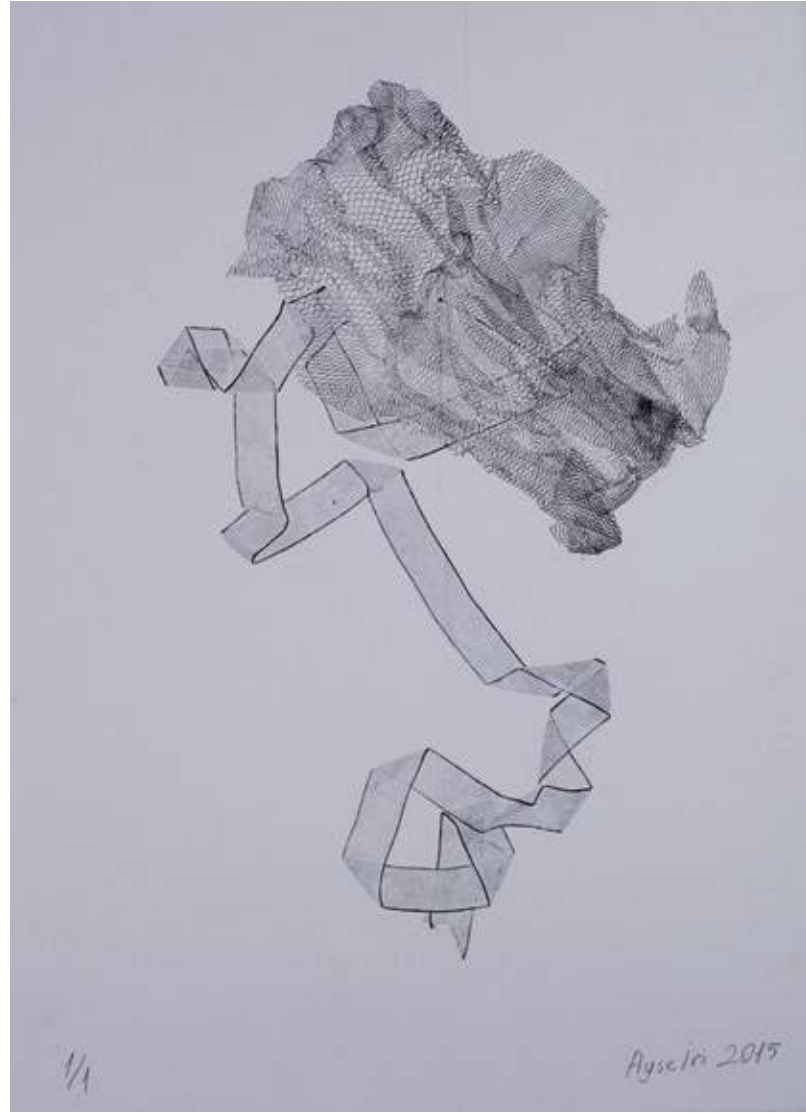
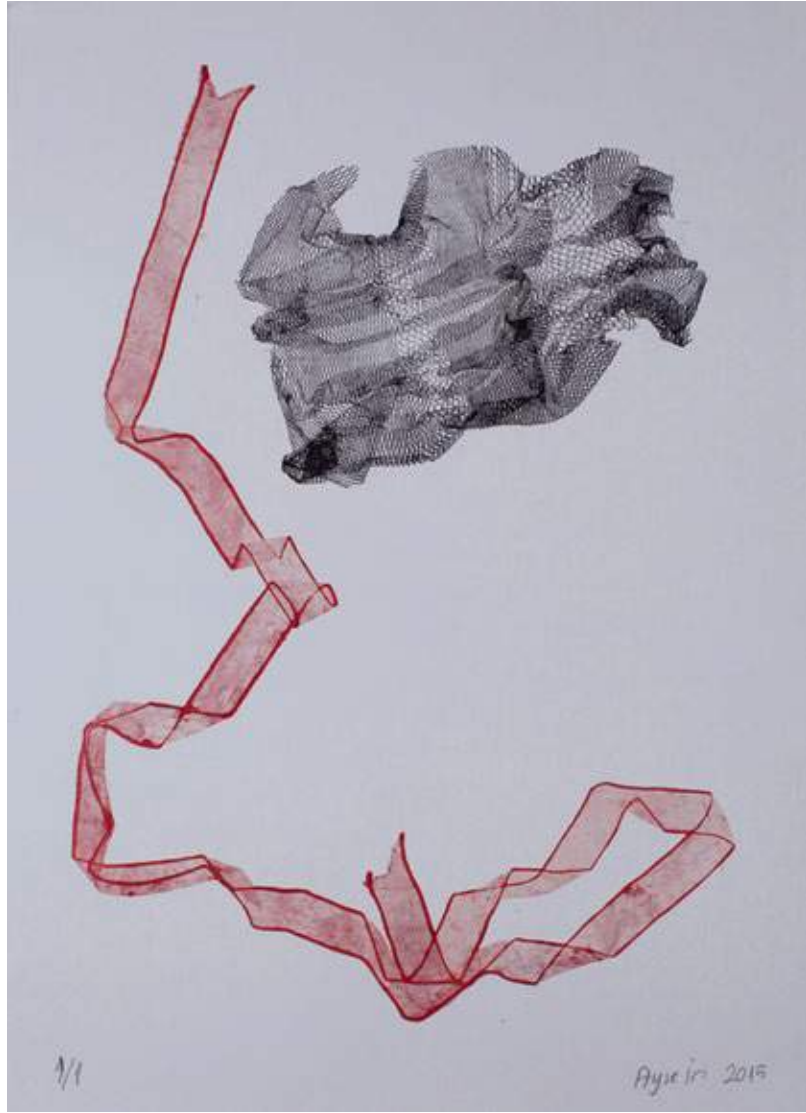
Anadolu Cam Poster Design Competition - Third Place

2008 Şanlıurfa Province Logo and Photography Competition - First Place

Çelişki / Contradiction

Mono-type baskı / Mono - type print, 50x73 cm, 2015





BESTAMİ GEREKLİ

1985, Antakya

Eğitim

Gazi Üniversitesi, Güzel Sanatlar Enstitüsü, Heykel Bölümü

Marmara Üniversitesi, Güzel Sanatlar Eğitimi Bölümü, Resim - İş Öğretmenliği

Education

Gazi University, Institute of Fine Arts, Sculpture Department

Marmara University, Ataturk Faculty of Education, Art and Crafts Teacher Education

Sergiler

2014 "Sınırlar ve Yörüngeler", Siemens Sanat, İstanbul

"Teras Sergileri", Proje4L Elgiz Çağdaş Sanat Müzesi, İstanbul

2013 "22+1", Resim ve Heykel Müzesi, Ankara

2010 Karma sergi, Marmara Üniversitesi, İstanbul

Karma sergi, Cadde Bostan Kültür Merkezi, İstanbul

Exhibitions

2014 "Borders Orbits", Siemens Art, İstanbul

"Terrace Exhibitions", Proje4L Elgiz Contemporary Art Museum, İstanbul

2013 "22+1", Painting and Sculpture Museum, Ankara

2010 Group Exhibition, Marmara University, İstanbul

Group Exhibition, Caddebostan Cultural Center, İstanbul

Ödüller

2015 Genç Güncel Sanat Proje Yarışması, Kültür ve Turizm Bakanlığı, Ankara

Awards

2015 Young Contemporary Art Project Competition, Ministry of Culture and Tourism, Ankara

Sonsuz Borular / Endless Pipes

Yerleştirme, boyanmış plastik borular

Installation, painted pipes, 2013





BETÜL SERTKAYA

1991, Ankara

Eğitim

Mimar Sinan Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü

Education

Mimar Sinan University, Faculty of Fine Arts, Painting Department

Sergiler

2014 Genç Etkinlik 6, İstanbul
Bazaart, İstanbul

Exhibition

2014 Young Event 6, İstanbul
Bazaart, İstanbul



Hayvan Aşkı / **Animal Love**

Tuval üzerine karışık teknik / **Mixed media on canvas**, 150x150 cm, 2015



BURAK DİKİLİTAŞ

1988, Malatya

Eğitim

WdKA, Güzel Sanatlar, Rotterdam

Mimar Sinan Üniversitesi, Güzel Sanatlar Fakültesi, Fotoğraf Bölümü

Education

WdKA, Fine Arts, Rotterdam

Mimar Sinan University, Faculty of Fine Arts, Photography Department

Sergiler

2013 "Pump Up the Value", Atelier Zaandam, Hollanda

2012 Omweg Zuidplein, Rotterdam

2011 "No More Luggage", Tophane-i Amire, Istanbul
"The Liquid Continent", Yeni İskenderiye Kütüphanesi, Mısır

2010 10. Akdeniz Sanat Okulları Buluşması, Tophane-i Amire, İstanbul

Exhibitions

2013 Pump Up the Value, Atelier Zaandam, Netherlands

2012 Omweg Zuidplein, Rotterdam

2011 "No More Luggage", Tophane-i Amire, Istanbul
"The Liquid Continent", Bibliotheca Alexandrina, Egypt

2010 10th Encounter of The Mediterranean Art Schools, Tophane-i Amire, Istanbul

Disleksik / Dyslexic

2 kanallı video döngüsü, tekrar kurgulanmış buluntu kitap

2 channel video loop, reconstructed found book, 2014



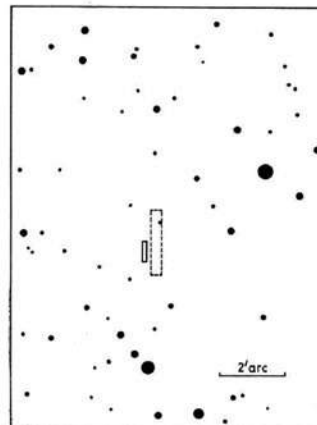
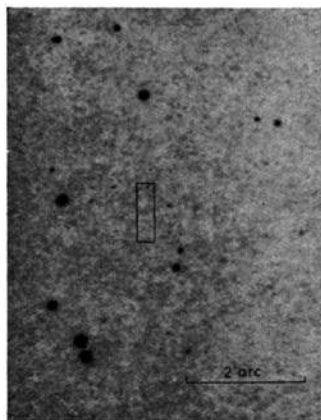


Fig. 1. Finding chart for CP0950. The position and errors previously quoted are shown by the dotted rectangle; the solid rectangle indicates the probable errors of the present position. The object in the top right-hand edge of the dotted rectangle is the object suggested earlier as the identification¹.

in the 1407 MHz determination. The position given in Table 1 is a weighted mean of observations at both frequencies.

For CP1133, the source was not sufficiently intense at 1407 MHz to allow a good determination, and the position given in Table 1 is that derived from the 408 MHz observations alone.

These positions have been examined on the prints of



Red

Source	Position (1950.0)	Period (UT s)
CP0950	09 ^h 50 ^m 30.4 ^s ± 0.25 ^s 08° 09' 47" ± 50"	0.2530646 ± 0.0000002
CP1133	11 ^h 33 ^m 23.1 ^s ± 0.6 ^s 16° 07' 15" ± 30"	1.187911 ± 0.0000002

the National Geographic-Palomar Sky Survey. In the case of CP0950, the object previously suggested as an identification by Bailey and Mackay⁴ can probably be excluded. A sketch of the field of this source is given in Fig. 1; the error rectangle of the original observation is shown dotted; the new rectangle which falls just outside the old one contains no object visible on either red or blue prints. In addition, Luyten (private communication) has compared the Sky Survey plate taken in 1951.01 with another taken in 1963.16, and looked for proper motions of the objects in the field of the source. No object was found which could have moved into the error rectangle in the 17.3 yr since the original Sky Survey plate was taken. There is therefore no optical object that might be associated with CP0950 which is brighter than the limiting magnitude of the prints, $m_{pg} \approx 21$.

In the case of CP1133, there is on the red print a very faint image at the print limit near the northern edge of the error rectangle; nothing is visible on the blue print. The apparent magnitude of this object is about 20.5. There is no other optical object within twice the quoted error limits on either print. Finding charts for CP1133 are given in Fig. 2, which has been reproduced from the Sky Survey prints.

From the limiting magnitude $m_{pg} \approx 20.5$ which has been found for both CP0950 and CP1133, an upper limit may be set to the absolute optical luminosity of the object responsible for the radio pulses; for an assumed spectrum similar to that of the Sun

$$L \leq 6 \times 10^{-4} L_{\odot} D^2$$

where L_{\odot} is the luminosity of the Sun, and D is the distance of the object in parsecs. The distance of CP0950 has been estimated by Pilkington *et al.*⁵ and by Lyne and Rickett⁶

would expect for the local time of the observations. In this communication we suggest that the observations as described are compatible with an interstellar field component of about 10^{-4} gauss directed towards the source and with a larger rotation contribution from the ionosphere.

It is likely that the critical frequency (f_{cp}) on the ray path at the time of the observations ($\sim 20^h$ UT April 3, 1968) was about 7.6 MHz (private communication from T. R. Hartz). This, combined with a probable F -region equivalent thickness of 305 km (ref. 2), suggests a total electron content of about $22 \times 10^{14} \text{ cm}^{-2}$. At an elevation of 45° on the meridian at Jodrell Bank, one would expect about 12 radians of ionospheric Faraday rotation at 150 MHz.

Evidence that the interstellar field is directed towards CP 0950 ($l = 229^\circ$, $b = 43^\circ$) and is therefore oppositely directed to the geomagnetic field over Jodrell Bank is available from measurements of the rotation measure (RM) of polarized radiation from the radio galaxy 3C 227 ($l = 229^\circ$, $b = 42^\circ$). This is given by Morris and Borge⁷ as $\text{RM} = -6 \pm 3$ radians m^{-2} and by Gardner and Davies⁸ as $\text{RM} = -7 \pm 3$ radians m^{-2} . From these data we estimate that for CP 0950 at a distance of ~ 30 pc (ref. 5) the

expected rotation measure will be $-6.5 \times \frac{30}{140} = -1.4$ radians m^{-2} , where we have assumed the path in the galactic disk in which Faraday rotation takes place for 3C 227 at 140 pc. This implies an interstellar Faraday rotation at 150 MHz of -5.6 ± 1.8 radians for CP 0950.

It seems reasonable to conclude that the total rotation of $+4$ radians observed by Smith could be made up of $+12$ radians in the ionosphere and -8 radians in interstellar space. This interpretation is consistent with the observation¹ that the total rotation was in the same sense as the ionospheric contribution and implies an interstellar magnetic field four times larger than the upper limit set by Smith. Further measurements of the total Faraday rotation at a time of day when the ionospheric contribution is considerably smaller would be sufficient to decide which of the two interpretations is correct.

Received May 7, 1968.

¹ Smith, F. G., *Nature*, **218**, 325 (1968), (Paper 47).

² Roger, R. S., *J. Atmos. Terr. Phys.*, **26**, 475 (1964).

³ Morris, D., and Borge, G. L., *Astrophys. J.*, **139**, 1368 (1964).

⁴ Gardner, F. P., and Davies, R. D., *Austral. J. Phys.*, **14**, 129 (1965).

⁵ Lyne, A. G., and Rickett, B. J., *Nature*, **218**, 326 (1968), (Paper 10).

49. General Relativistic Influence on Observed Pulsar Frequencies if Pulsars are Orbiting Objects

by

BANESH HOFFMANN

Queens College,
City University of New York,
Flushing, New York

RECENTLY¹, I pointed out that pulsars might be a means of making a new test of the general theory of relativity by providing a stable extra-terrestrial frequency standard against which the differential general relativistic effect on terrestrial clock rates at perihelion and aphelion could be measured.

The purpose of this communication is to point out what could be an important analogous effect should the pulsars prove to be orbiting bodies.

Suppose the pulsars were orbiting bodies, and for simplicity consider the case of a pulsar the orbit of which is in a plane perpendicular to the line of sight. The contribution of its motion to the first order Doppler effect will then be essentially zero, and one might be tempted to assume that once the contribution of the Earth's orbital motion had been subtracted, any residual variation in the observed frequency of recurrence of the pulses would arise from a variation in the basic pulse rhythm of the source itself. As was previously pointed out¹, however, there would be a small general relativistic effect of about 1 part in 2×10^4 arising from the ellipticity of the terrestrial orbit. In addition to this, as will be shown, there could be a non-annual residual variation in the observed frequency that did not arise from a variation in the intrinsic pulse rhythm of the source itself, provided the orbit of the source was significantly different from a circle.

Let the maximum and minimum orbital distances of the source from its star be R_a and R_p , respectively, let the mass of the star be M , and let the intervals between pulses measured in Schwarzschild co-ordinate time at

maximum and minimum orbital distances from the central star be dt_a and dt_p .

Then¹,

$$dt_p/dt_a - 1 = 3MG(R_a - R_p)/2c^2 R_a R_p$$

where G is the Newtonian gravitational constant and c is the speed of light. For the Earth this comes to 4.9×10^{-10} .

It could be smaller or larger for an orbiting pulsar source depending on the values of R_a , R_p and M . Because the Schwarzschild coordinates used in deriving this formula are static, the effect will be transmitted faithfully to the Earth and will appear as a residual variation in the rhythm of the received pulses. Because the effect does not depend on the orientation of the plane of the pulsar orbit relative to the line of sight, it will yield information involving the eccentricity of the orbit, the mass of the central star and the period of the orbital motion, even though the orbit is here assumed to be in a plane perpendicular to the line of sight.

Should pulsars prove to be orbiting objects, there could be a problem concerning their intrinsic periodicities if the above effect, which could be relatively large for some of them, were not taken into account in analysing the data. Moreover, if the problem were removed by taking account of this effect we would have yet another confirmation of general relativity.

Received April 5, 1968.

¹ Hoffmann, B., *Nature*, **218**, 667 (1968).

² Hoffmann, B., and Sproul, W. T., *Amer. J. Phys.*, **29**, 640 (1961).

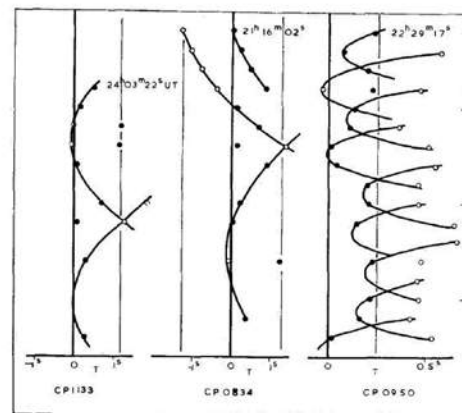


Fig. 3. The day-to-day variation of pulse arrival time.

The three additional sources emit pulses which are remarkably similar to those from the first source, and their characteristics have been obtained by similar methods. Examples of the observed pulses are shown in Figs. 1 and 2. All the measurements were made at a frequency of 81.5 MHz with a bandwidth of 1 MHz, using the 470 m \times 45 m north-south phased array and the 470 m \times 20 m east-west phased array at the Mullard Radio Astronomy Observatory.

The approximate positions of the sources were derived from the response of the aerial systems. The position of CP.0950 has been determined with greater precision from observations at 408 MHz with the one-mile telescope (following communication) using the same method as previously employed³ for locating CP.1919. The best available positions for all four sources are given in Table 1.

The periodicity of the pulses was determined in the same way as previously reported¹. The time of occurrence of a pulse at approximately the same sidereal time each day was determined, and the incremental time interval between this pulse and a standard time differing by successive units of 23 h 56 m 04 s was plotted as shown in Fig. 3.

In this way the variation of periodicity caused by the motion of the Earth has been compared with the expected variation, and found to be consistent in each case. The true periods P_0 in solar seconds are given in Table 1.

The rate of change of frequency during the pulse and the intrinsic pulse duration have been derived, as before, from observations in which the signal from one aerial of the interferometer was delayed relative to the other by passage through an additional length of cable. In the case of CP.0950 it was found that the results were often in-

consistent with the emission of a broad-band pulse; individual pulses sometimes occurred in which nearly all the energy received within a receiver bandwidth of 1 MHz was confined to a band of less than 0.3 MHz. This feature will be discussed in more detail later⁴.

The frequency sweep can be interpreted in terms of dispersion in the intervening medium, and the integrated electron density Nl is given in Table 1. The smaller dispersion of CP.0950 suggests that for an assumed value of $N \sim 0.1$ – 0.2 cm^{-3} the distance is likely to be only 15–30 pc.

The short pulse lengths of all the sources indicate physical dimensions in the range 3,000–10,000 km. The variations in the peak pulse amplitude observed from day to day are shown in Fig. 4.

The similarity in the quantities given in Table 1 shows that pulsating sources are, indeed, a new class of object in which the intrinsic powers, pulse widths, variability and periodicities are similar. Although CP.0950 has a periodicity somewhat shorter than the other three, and it would be difficult to detect still shorter pulse periods with the present system, there are no observational selection effects which would reduce the probability of detecting sources having periodicities as long as 10 s. The limited range in periodicity clearly has great significance in relation to the nature of the sources, and the shorter period of CP.0950 may make it more difficult to account for them without invoking the very high densities of neutron stars.

All the sources are characterized by a period of emission which is very much shorter than the repetition period and which occurs at a precisely defined phase of the cycle. This places limitations on the eccentricity of the orbits in a binary neutron star model⁵ because of precession of the perihelion; in the case of CP.0950 the eccentricity must be less than about 0.1.

All the sources show an extremely variable flux density both from pulse to pulse and on a longer time scale. In the first communication¹ it was suggested that the rapid variation from pulse to pulse might be caused by interplanetary scintillation. The recent observations were, however, carried out during the night when interplanetary scintillation is known to be small, and it seems that the rapid variations in flux density must be interpreted in terms of the source; the pulse to pulse variation cannot be attributed to interstellar scintillation (unpublished results of F. A. G. Scheuer).

Using the approximate distances given by the measured dispersion, we may conclude that the local density of pulsating sources is $\sim 10^{-3} \text{ pc}^{-3}$. The lifetime during which radio pulses are emitted from each source will depend on the supply of energy and on the mechanism by which it is converted into radio pulses; there may be many other "dead" sources which are no longer observable. If the sources are associated with superdense stars of mass $\sim M_{\odot}$ and if they emit radio pulses for T years, the total number which have occurred over a period of $\sim 10^{10}$ years

	CP.0834	CP.0950	CP.1133	CP.1919
$\alpha(1950.0)$	09 ^h 50 ^m 30.4 ^s ± 15 ^s	09 ^h 50 ^m 23.9 ^s ± 0.7 ^s	11 ^h 33 ^m 23.1 ^s ± 20 ^s	19 ^h 10 ^m 37.0 ^s ± 0.2 ^s
$\delta(1950.0)$	07° 00' ± 45"	08° 10' ± 1"	17° 00' ± 45"	21° 47' 02" ± 10"
P_0 (s)	1.27778 ± 0.00008	0.253071 ± 0.000008	1.1869 ± 0.0004	1.3772795 ± 0.0000020
$- \left(\frac{dP}{dt} \right)$ at 81.5 MHz (MHz s ⁻¹)	5.3 ± 0.5	20 ± 5	11 ± 3	5.15 ± 0.03 (ref. 6)
Integrated electron density Nl (cm ⁻² pc)	12 ± 1	3.2 ± 0.8	6 ± 2	12.55 ± 0.06 (ref. 6)
Emitted pulse duration (Gaussian) (ms)	35 ± 10	< 10	12 ± 4	16 ± 4
Mean flux density at 81.5 MHz (10 ⁻²¹ W m ⁻² Hz ⁻¹)	0.3	0.8	0.3	0.4
P_0	220 ^s	230 ^s	240 ^s	56 ^s
b°	26°	44°	70°	4°

ELİF ERKER

1992, Kocaeli

Eğitim

Sakarya Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü

Education

Sakarya University, Faculty of Fine Arts, Painting Department

Sergiler

2014 Karma Sergi, SAU GSF Sanat Galerisi, Sakarya

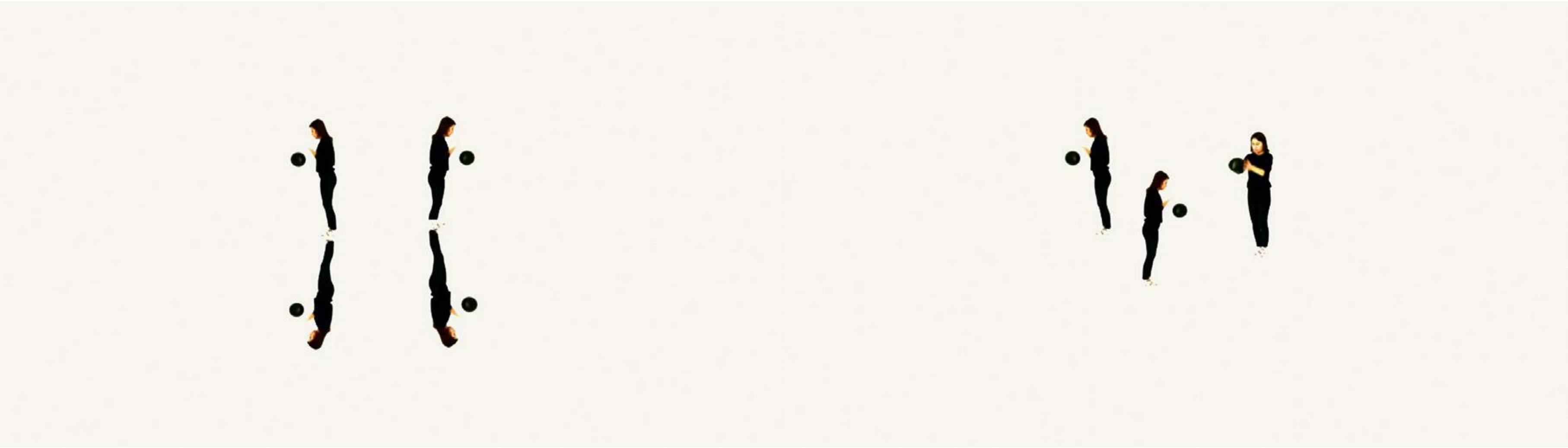
Exhibitions

2014 Group Exhibition, SAU FFA Gallery, Sakarya

Yanılsama / **Illusion**

Video Yerleştirme / **Video Installation**, 2015





ELİF KÖSE

1990, Adana

Eğitim

Mersin Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü
(Yüksek Lisans)

Mersin Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü

Education

Mersin University, Faculty of Fine Arts, Painting Department (MFA)

Mersin Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü

Sergiler

2014 "Göz ve Kulak Eşiğinde Retimleme", MEÜ, Mersin

2013 "Sınırlar ve Yörüngeler", Siemens Sanat, İstanbul

"Şam Görsel Sanatlar Festivali", Depo, İstanbul

"Zaman, mekan, doğa, ölüm", solo sergi, Mersin

2012 "Kentsel Dönüşüm", Tandem Projesi, Riga, Letonya

Exhibitions

2014 "On The Threshold Of Eye and Ear: Piccription", MEU, Mersin

2013 "Borders Orbits", Siemens Art, İstanbul

"Damascus Visual Arts Festival", Depo, İstanbul

"Time, space, nature, death", solo exhibition, Mersin

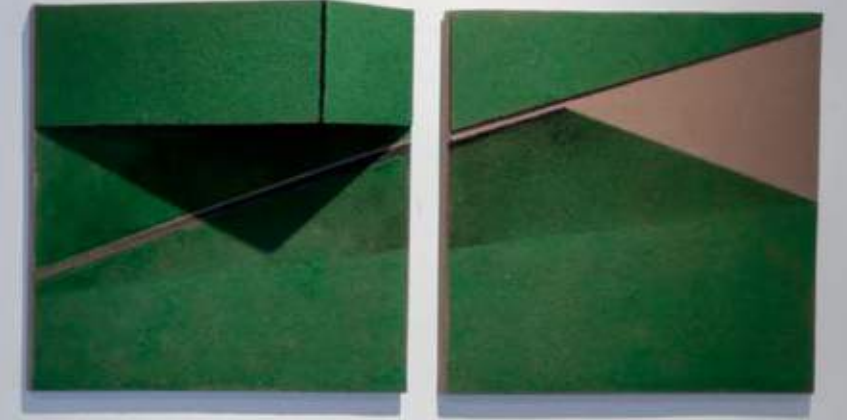
2012 "Urban Renewal", Tandem Project, Riga, Letonia



Gölge 3 / Shadow 3

Tuval üzerine karışık teknik

Mixed media on canvas, 50x110x13 cm, 2015





FERHAT AKAY

1968, İskenderun

Eğitim

Mimar Sinan Güzel Sanatlar Üniversitesi, Fotoğraf Bölümü

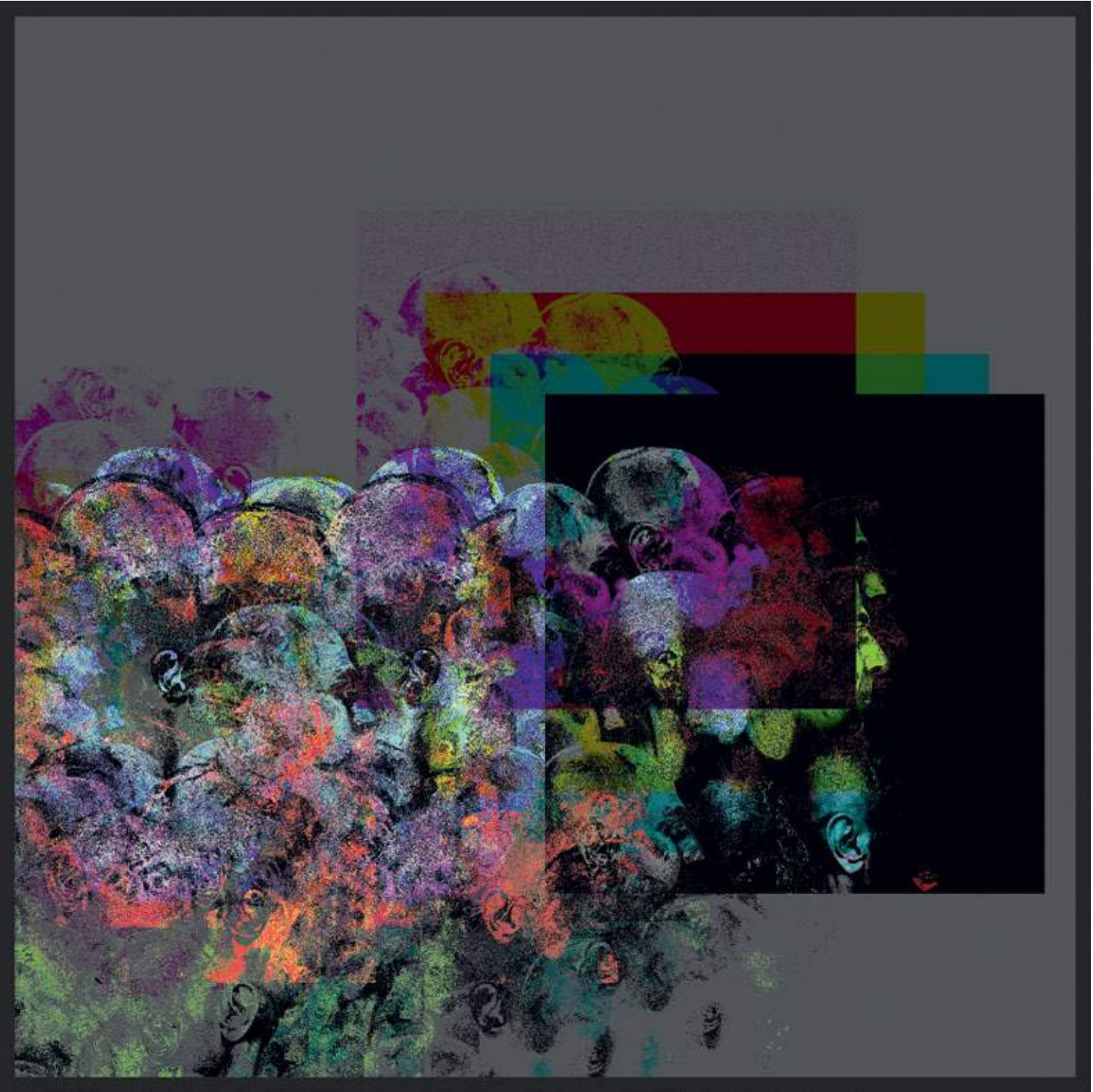
Education

Mimar Sinan Fine Arts University, Photography Department

Pentatonik Katmanlar / **Pentatonic Layers**

Fine Art Print, 140x140 cm, 2014





FURKAN ÖZTEKİN

1993, Tekirdağ

Eğitim

Dokuz Eylül Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü

Education

Dokuz Eylül University, Faculty of Fine Arts, Painting Department

Sergiler

2015 "İçten", İzmir Sanat, İzmir

Exhibition

2015 "Heartfelt", İzmir Sanat, İzmir

Kalanlar / Leftovers

Bristol kağıt, renkli dergi ve gazete parçaları, dijital siyah beyaz baskı

Bristol paper, magazine and newspaper pieces, black and white prints

30 adet/pieces 10x6 cm, 1 adet/piece 46x24 cm, 2015





GİZEM DİNÇ

1993, Ankara

Eğitim

Hacettepe Üniversitesi, Güzel Sanatlar Fakültesi, Heykel Bölümü
(Yüksek Lisans)

Hacettepe Üniversitesi, İletişim Fakültesi, Sanat Tarihi
(Yandal Programı)

Alanus Güzel Sanatlar ve Sosyal Bilimler Üniversitesi,
Güzel Sanatlar, Heykel Bölümü (Erasmus)

Education

Hacettepe University, Faculty of Fine Arts, Sculpture Department
(MFA)

Hacettepe University, Faculty of Communication, Art History
(Minor)

Alanus University of Fine Art and Social Science (Germany),
Fine Arts, Sculpture (Erasmus)

Sergiler

2015 "Erdemir Çelik ve Yaşam" Heykel Yarışması,
Tophane-i Amire, İstanbul

Kültür Bakanlığı "Genç Sanat" Yarışması Sergisi,
Cernodern, Ankara

Hacettepe Üniversitesi Güzel Sanatlar Fakültesi 29.
Mezuniyet Sergisi, Hacettepe Üniversitesi, Ankara

2014 Tage der Offenen Tür, Alanus Hochschule, Alfter, Almanya

2013 Akademiada 4. Uluslararası Sanat Akademisi,
Yakın Doğu Üniversitesi, Lefkoşa, Kıbrıs

Exhibition

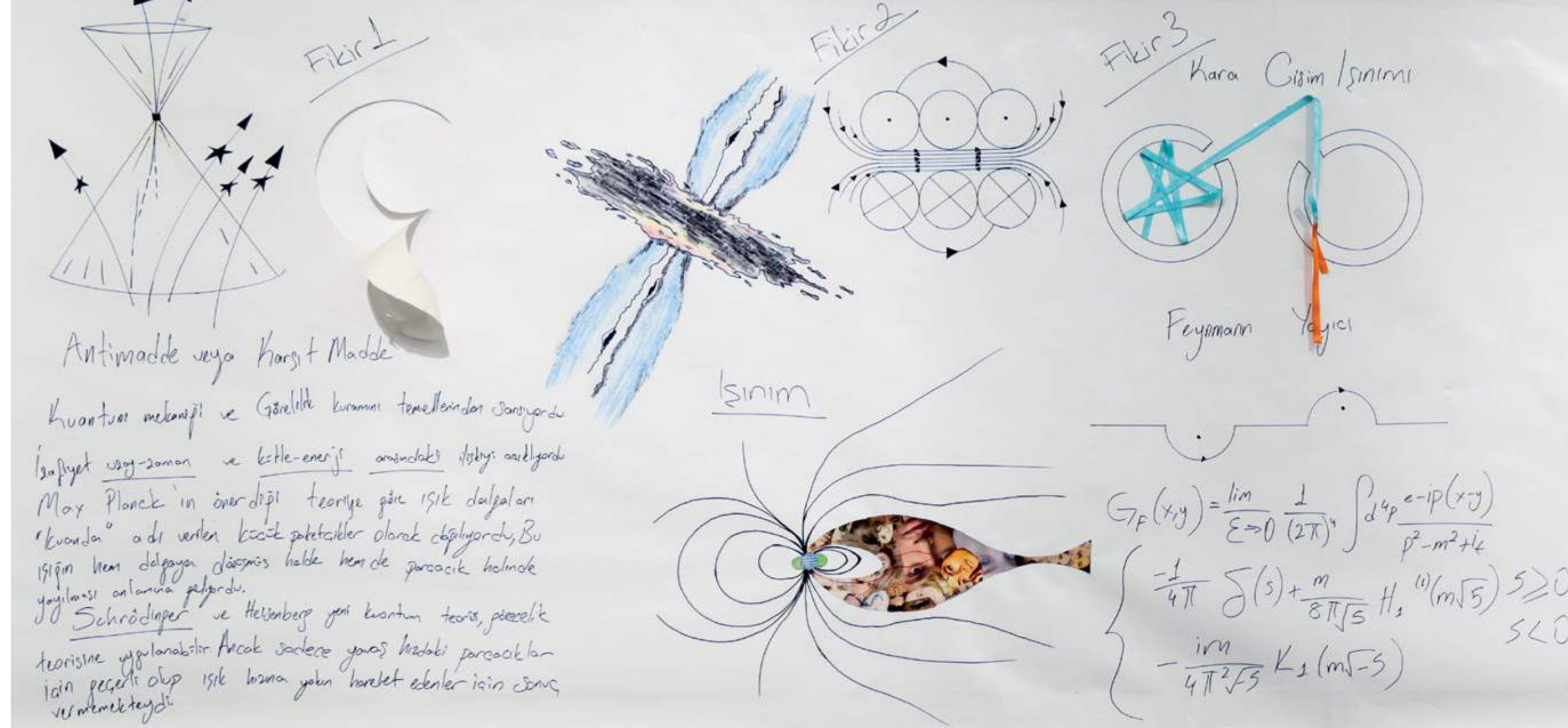
2015 "Erdemir Steel and Life" Sculpture Competition Exhibition,
Tophane-i Amire, İstanbul

Ministry of Culture "Young Art" Competition Exhibition,
Cernodern, Ankara

29th Faculty of Fine Arts Graduation Exhibition,
Hacettepe University, Ankara

2014 Tage der Offenen Tür, Alanus Hochschule, Alfter, Almanya

2013 Akademiada 4th International Art Academy,
Near East University, Nicosia, Cyprus



İsimsiz / **Untitled**

Karışık teknik / **Mixed Media**, 100x850 cm, 2015

GÜRKAN MIHÇI

1980, Ankara

Eğitim

Özyeğin Üniversitesi, Tasarım, Toplum, İnovasyon (Doktora)
Sabancı Üniversitesi Görsel Sanatlar ve Görsel İletişim Tasarımı
(Yüksek Lisans)
Bilkent Üniversitesi, Grafik Tasarım Bölümü

Education

Ozyegin University, Design, Society, Innovation (PhD)
Sabanci University, Visual Arts and Visual Communication (MA)
Bilkent University, Graphic Design Department

Sergiler

2014 "Cinnet", Maquis Project, İzmir, Türkiye
FILE-Elektronik Dil Festivali, Resmi Seçilenler Sergisi,
Sao Paulo, Brezilya
2013 The Wrong - Yeni Dijital Sanat Bienali, Sao Paulo, Brezilya
2010 Radio Zero, Radyo Festivali, Portekiz

Exhibitions

2014 "Cinnet", Maquis Project, İzmir, Turkey
FILE - Electronic Language Festival, Official Selection
Exhibition, Sao Paulo, Brazil
2013 The Wrong - New Digital Art Biennale, Sao Paulo, Brazil
2010 Radio Zero, Radio Festival, Portugal

5 Kulaklık ile Sonsuz Soyut Ses Kompozisyonu
Infinite Abstract Sound Composition with 5 Headphones





H. BURAK YEL

1994, İstanbul

Eğitim

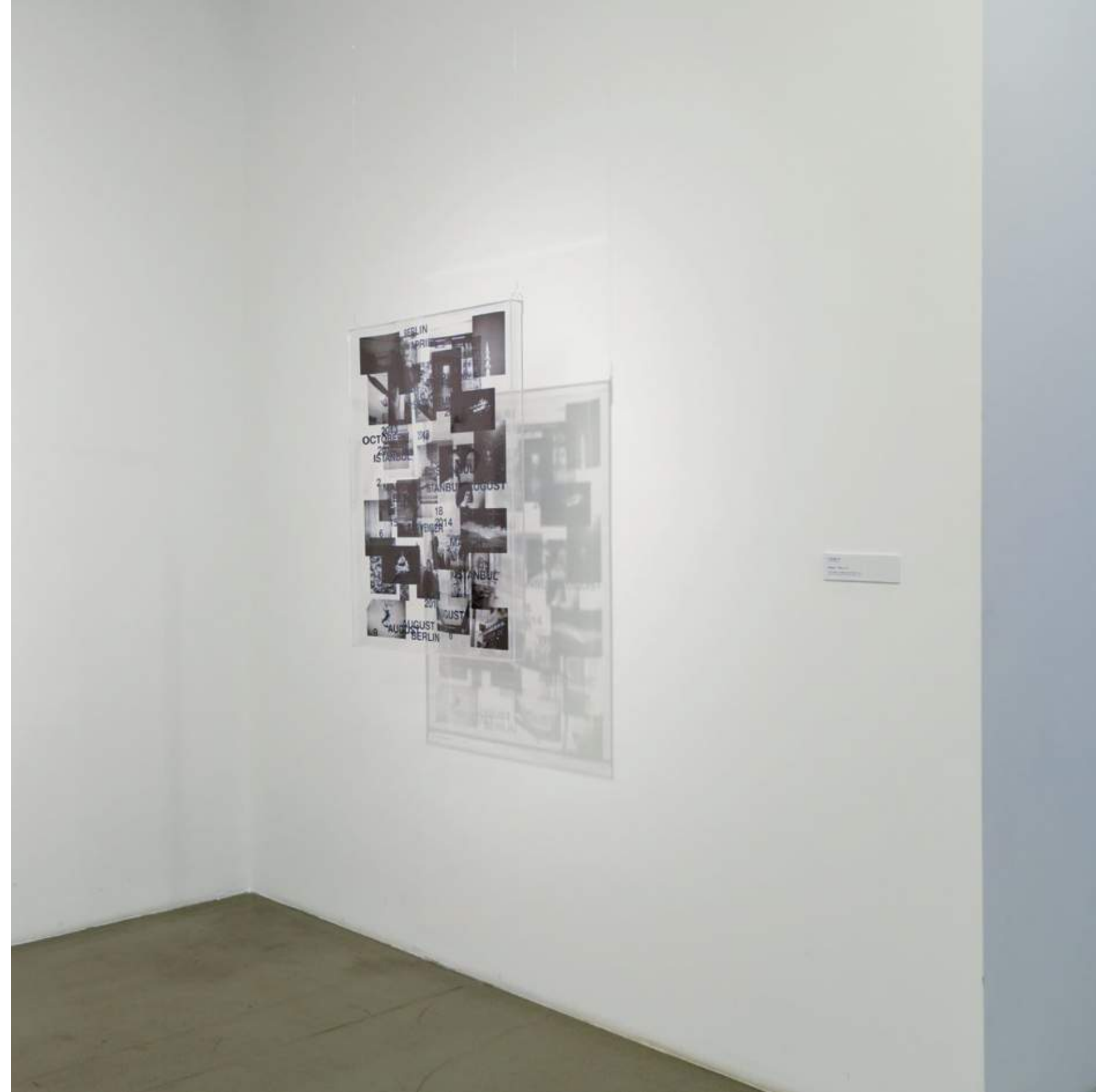
Mimar Sinan Güzel Sanatlar Üniversitesi, Grafik Tasarım Bölümü

Education

Mimar Sinan Fine Arts University, Graphic Design Department

Birleşme / Merge

Film baskısı ve akrilik kutu / Film print and acrylic box, 60x86x4 cm, 2015



HAZAL ÜNSAL

1992, Ankara

Eğitim

Hacettepe Üniversitesi, Güzel Sanatlar Fakültesi, Heykel Bölümü
(Yüksek Lisans)

Hacettepe Üniversitesi, Güzel Sanatlar Fakültesi, Heykel Bölümü

Education

Hacettepe University, Faculty of Fine Arts, Sculpture Department
(MFA)

Hacettepe University, Faculty of Fine Arts, Sculpture Department

Sergiler

2015 2. Uluslararası Sanat ve Tasarım Çalıştay Sergisi,
Başkent Üniversitesi, Ankara

2014 Hacettepe Üniversitesi Mezuniyet Sergisi,
Cer Modern, Ankara
Günümüz Gün Heykel Sergisi,
Elektrik Mühendisleri Odası, Ankara
Divriği Ulu Camii Fotoğraf Sergisi,
Hacettepe Üniversitesi, Ankara

2013 2. Sokak Özgürleştirir Sokak Sergisi, Ankara

Exhibitions

2015 2nd International Art and Design Workshop Exhibition,
Baskent University Ankara

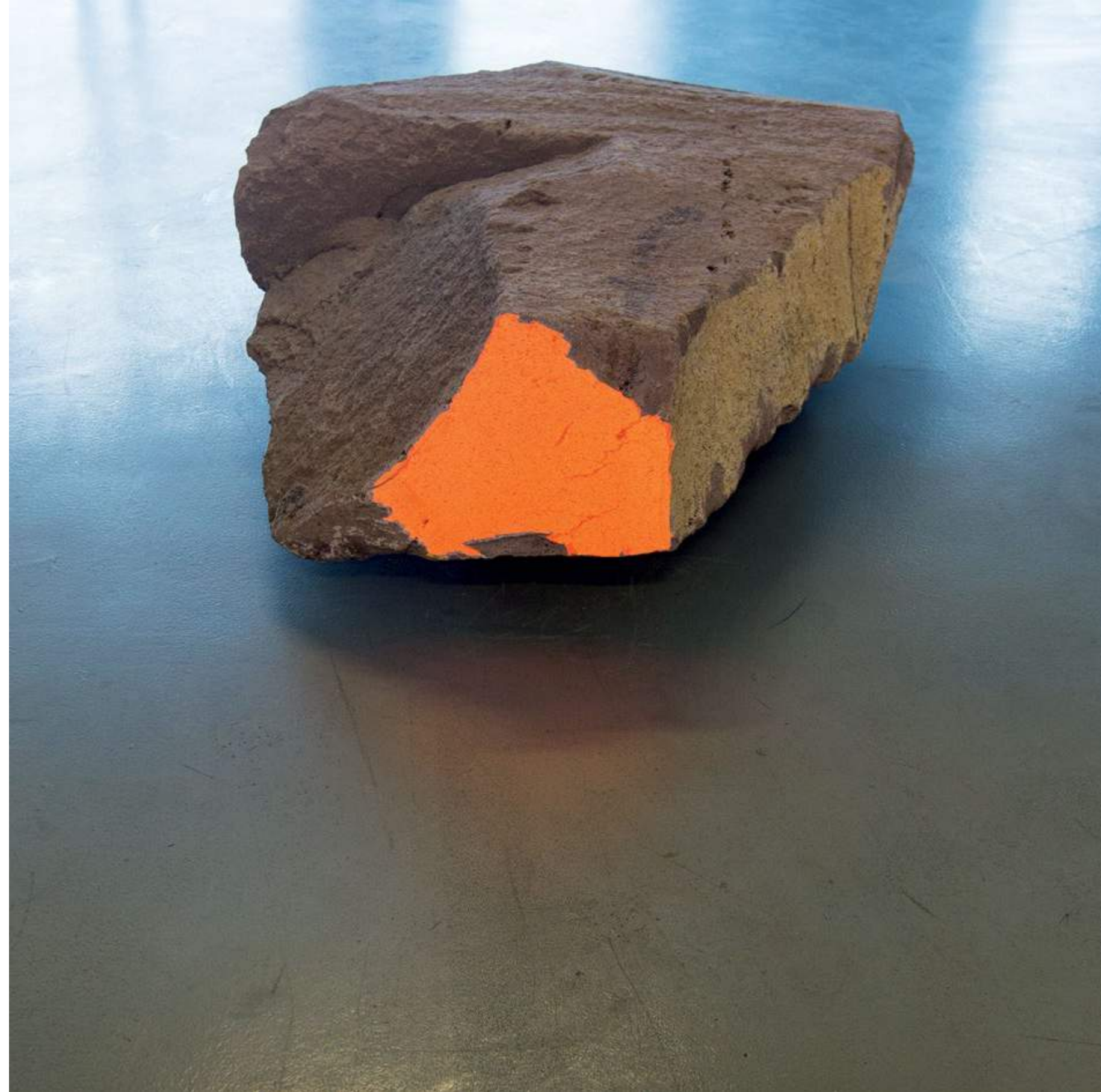
2014 Hacettepe University Graduation Exhibition,
Cer Modern, Ankara
Day is Today, The Chamber of Electrical Engineers, Ankara
Divrigi Great Mosque Photography Exhibition,
Hacettepe University, Ankara

2013 2nd Sokak Özgürleştirir Street Exhibition, Ankara

Taş / Stone

Taş üzerine projeksiyon / Projection mapping on the stone,
160x120x70 cm, 2014





MEHMET ÖĞÜT

1983, Diyarbakır

Eğitim

Kabk: Royal Academy of Art, Güzel Sanatlar Bölümü (Erasmus)
Marmara Üniversitesi, Güzel Sanatlar Enstitüsü, Resim Bölümü
(Yüksek Lisans)
Marmara Üniversitesi, Atatürk Eğitim Fakültesi, Resim - İş
Öğretmenliği Bölümü

Education

Kabk: Royal Academy of Art, Fine Arts Department (Erasmus)
Marmara University, Institute of Fine Arts, Painting Department
(MFA)
Marmara University, Atatürk Faculty of Education, Art and Crafts
Teacher Education

Sergiler

- 2015 ESSL Art Award Cee 2015, MSGSÜ Tophane-i Amire KSM,
İstanbul
- 2015 Art Video Koeln, Köln, Almanya
- 2014 Genç Yeni Farklı 5, Galeri Zilberman, İstanbul
- 2012 Cockaigne, Pasajist, İstanbul
- 2011 Ateşin Düştüğü Yer, İHV 20. Yıl sergisi, Tütün Deposu,
İstanbul

Exhibitions

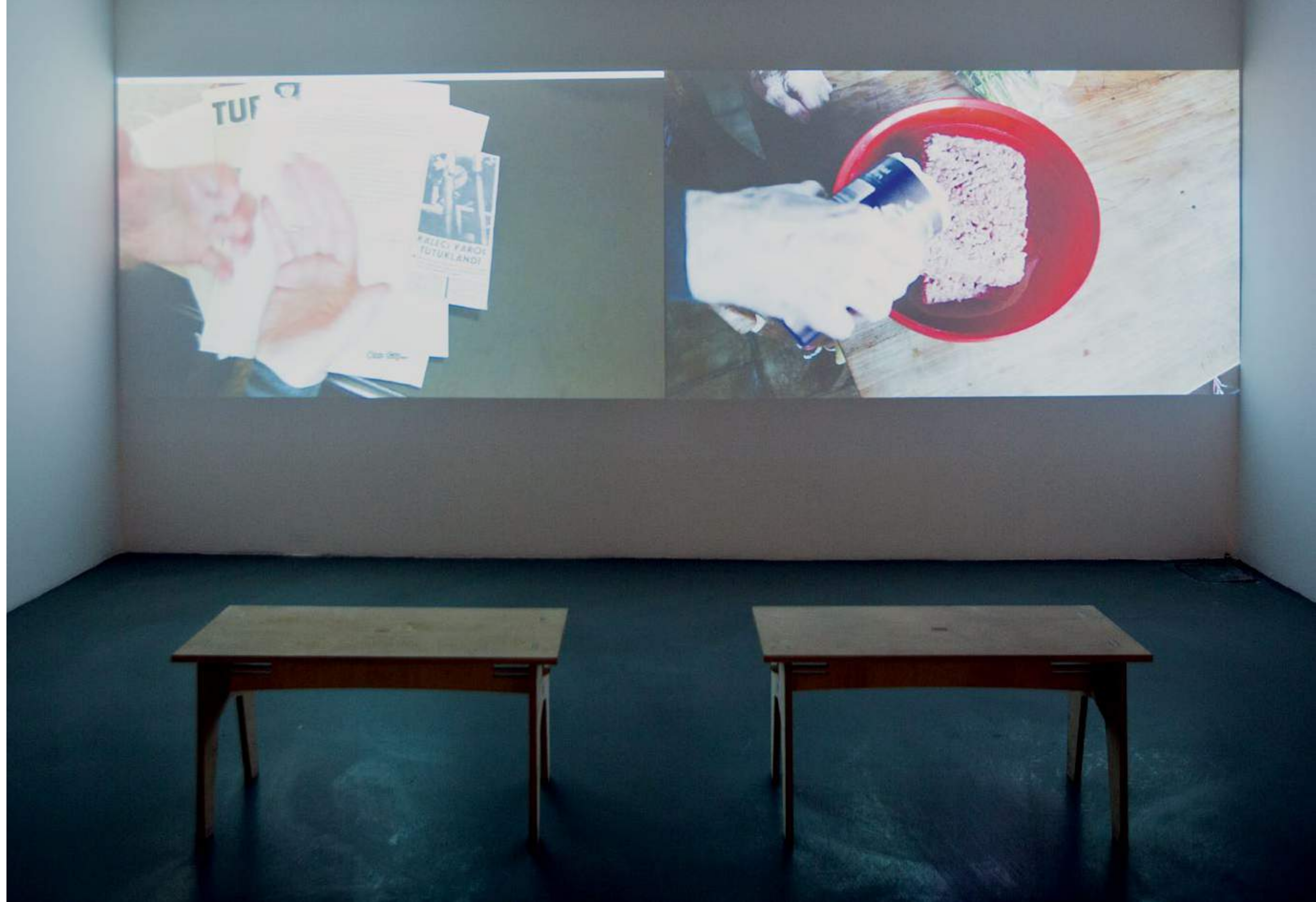
- 2015 ESSL Art Award Cee 2015, MSGSÜ Tophane-i Amire KSM,
İstanbul
- 2015 Art Video Koeln, Cologne, Germany
- 2014 Young Fresh Different 5, Galeri Zilberman, Istanbul, Turkey
- 2012 Cockaigne, Pasajist, Istanbul, Turkey
- 2011 Where Fire Has Struck, Human Rights Foundation of Turkey
20th Year Exhibitions, Tütün Deposu, Istanbul

Bir Ülkenin Anıları / Bölüm I ve II

The Memories of a Country / Part I and II

Çoklu kanal video yerleştirme ve iki kanallı senkronize video,
tek kanallı ses

Multi-channel video installation and two channel synchronized
video, single channel audio, 10 min, 2015





SONER ULU

1983, Ankara

Eğitim

Dokuz Eylül Üniversitesi, Güzel Sanatlar Fakültesi, Fotoğraf Bölümü
Ankara Üniversitesi, Dil, Tarih ve Coğrafya Fakültesi, Antropoloji Bölümü

Education

Dokuz Eylül University, Faculty of Fine Arts, Photography Department
Ankara University, Faculty of Language, History and Geography, Anthropology Department

Sergiler

2014 "Experimental Photography", K2 Güncel Sanat Merkezi, İzmir

2013 "Karşıyaka", Suat Ateş Kültür Merkezi, İzmir
"Diren Sanat", 8. Karaburun Bilim Kongresi, İzmir

Exhibitions

2014 "Experimental Photography", K2 Contemporary Art Center, İzmir

2013 "Karşıyaka", Suat Ateş Cultural Center, İzmir
"Diren Sanat", 8th Karaburun Science Congress, İzmir



Cars

Fine Art Print, 120x80 cm, 2015



ŞAFAK GÜRBOĞA

1989, İzmir

Eğitim

Dokuz Eylül Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü
(Yüksek Lisans)

Dokuz Eylül Üniversitesi, Güzel Sanatlar Fakültesi, Resim Bölümü

Education

Dokuz Eylül University, Faculty of Fine Arts, Painting Department
(MFA)

Dokuz Eylül University, Faculty of Fine Arts, Painting Department

Sergiler

2015 İstanbul Rotary Sanat Yarışması Ödülü ve Sergisi, İstanbul

2014 "veritas-gerçek" solo sergi, K2 Rezidans, İzmir

PORTIZMIR3 Çağdaş Sanat Trienali, İzmir

2013 "Genç, Yeni, Farklı", Galeri Zilberman, İstanbul

2012 "Deneyimin Ötesi", Pera Müzesi, İstanbul

Exhibitions

2015 İstanbul Rotary Art Competition Exhibitor & Award
Ceremony, İstanbul

2014 "veritas-gerçek" solo exhibition, K2 Rezidans, İzmir
PORTIZMIR3 International Triennial of Contemporary Art, İzmir

2013 "Young, Fresh, Different", Galeri Zilberman, İstanbul

2012 "Beyond Experience", Pera Museum, İstanbul

O yeri hatırlıyorum / I remember this place

Yerleştirme / Installation, 2015





VOLKAN KIZILTUNÇ

1976, Ankara

Eğitim

Mimar Sinan Güzel Sanatlar Üniversitesi, Fotoğraf Bölümü,

Yüksek Lisans

Mimar Sinan Güzel Sanatlar Üniversitesi, Fotoğraf Bölümü, Lisans

İstanbul Üniversitesi, Klasik Arkeoloji Bölümü

Education

Mimar Sinan Fine Arts University, Photography Department, MA

Mimar Sinan Fine Arts University, Photography Department, BA

Istanbul University, Classical Archeology Department

Sergiler

2015 "Görünen & Görünmeyen", Trafo Çağdaş Sanat Merkezi, Szczecin, Polonya

"Küçük Yüzler, Büyük Bedenler", Elgiz Çağdaş Sanat Müzesi, İstanbul

2014 "Gizemli Nesne", Johalla Projects Gallery, Chicago, ABD

2013 "Eşik[te]" Solo Sergi, Merkür Galeri, İstanbul

"ESSL Sanat Ödülü Kazananlar Sergisi", ESSL Çağdaş Sanat Müzesi, Viyana, Avusturya

Exhibitions

2015 "Visible & Invisible", Trafo Center for Contemporary Art, Szczecin, Poland

"Small Faces, Big Bodies", Elgiz Contemporary Art Museum, İstanbul

2014 "The Enigmatic Object", Johalla Projects Gallery, Chicago, USA

2013 "[In] the Threshold", Solo Exhibition, Merkur Gallery, İstanbul

"ESSL Art Award Winners Exhibition", ESSL Contemporary Art Museum, Vienna, Austria

Hafıza Boşlukları: Araba / **Gaps of Memory: The Car**

8 mm'den Aktarılmış HD Video

HD Video Converted from 8 mm Films, 8'00"





AKBANK SANAT
İstiklal Caddesi No: 8 Beyoğlu 34435 İstanbul
T: (212) 252 35 00-01
www.akbanksanat.com

METİN / **TEXT**
Leyla Belli
Derya Bigalı
Philippe Van Cauteren

ÇEVİRİ / **TRANSLATION**
Yiğit Adam

TASARIM / **DESIGN**
Being Çözüm

BASKI / **PRINT**
Diasan Basım Form Matbaacılık San. ve Tic. A.Ş.
Akçaburgaz Mah. 1590 Sokak No: 3
Esenyurt, İstanbul
T: (212) 858 21 41 pbx