

BOOK OF ABSTRACTS

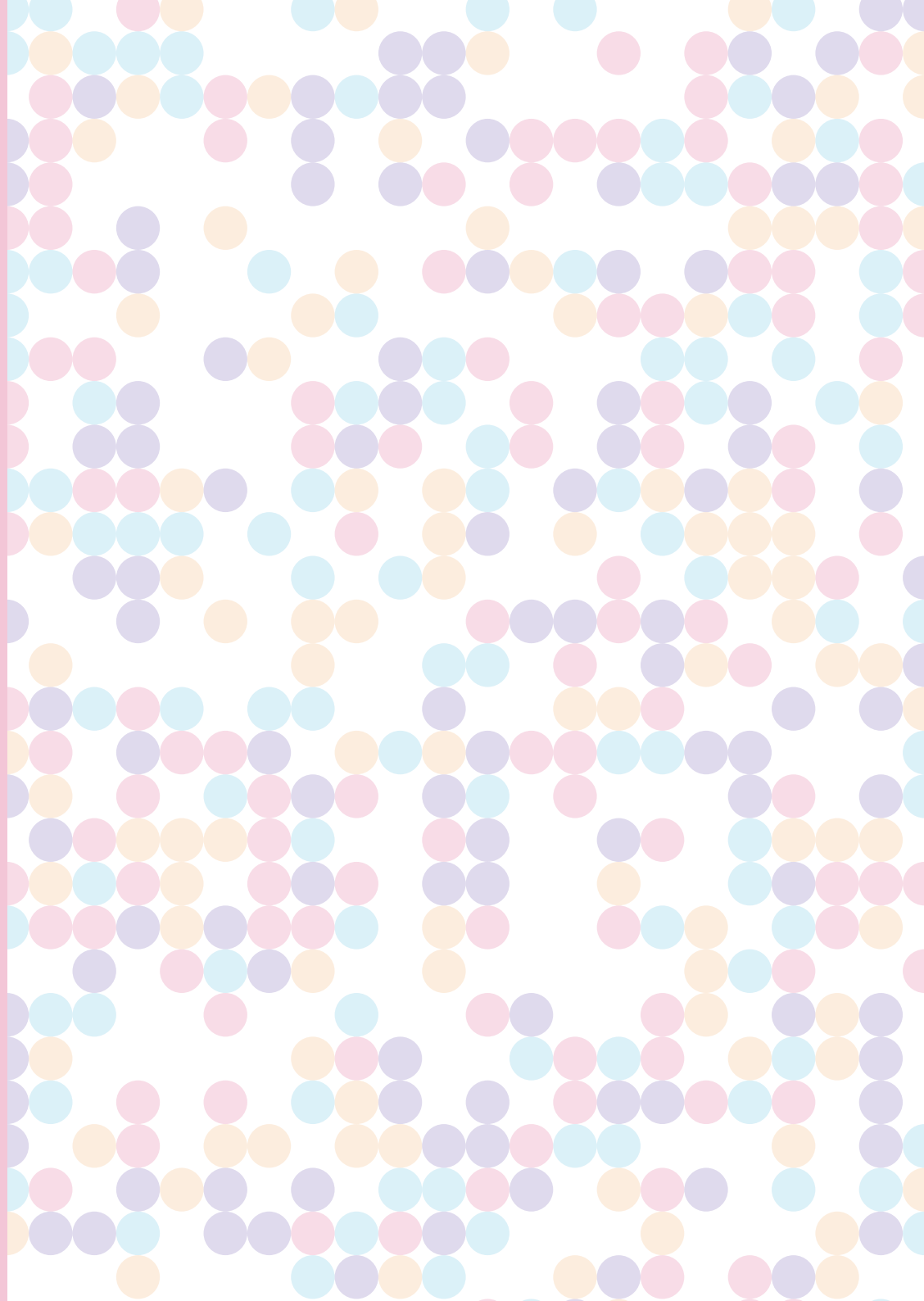
international graffiti symposium

* *disseminate | analyse | understand graffiti-scapes* *

14-16 June 2023 Vienna, Austria

WELCOME TO GOINDIGO 2023

Geert Verhoeven
Jona Schlegel
Benjamin Wild
Stefan Wogrin



international graffiti symposium
 * disseminate | analyse | understand graffiti-scapes *
 14-16 June 2023 Vienna, Austria

WEDNESDAY 14 JUNE disseminating

Registration

Short opening

Webb | *Building Art Crimes: Highs and Lows*

Coffee break

Radošević | *Urban Heritage Hub – Finding balance between a digital source and entertainment*

Carloni et al. | *The Data Crew – Archive with ARCHE and enrich with OpenAtlas*

Davico et al. | *The first complete census of public artworks in Torino*

Lunch

Oedl | *Calle Libre – Festival for Urban Aesthetics*

Michels | *Urban Art Mapping and how to deal with Hot Spots – The Vagabundler Project*

Coffee break

Flenghi et al. | *Storytelling cities: voices from history hidden in the architecture*

Schlegel et al. | *Catching the urban chameleon*

Coffee break

Drinks

Verhoeven

Wild

Wogrin

Carloni

08:30
09:45
10:00
10:45
11:15
12:45
14:00
15:00
15:30
16:30
17:30

THURSDAY 15 JUNE analysing

Registration

Van Tiggelen | *About Graffiti Culture*

DEADBEAT HERO | *The Arcade podcast: turning the visual into the auditive*

Bonadio & Egeland | *Street Art, Graffiti and NFTs: Copyright issues on the streets of Web3*

Coffee break

Discussion round

GET IT OUT:
the how and why of graffiti dissemination

Lunch

Wild et al. | *Towards an automated detection of changes in the urban chameleon skin*

Lorah et al. | *Analysing the Geography of Street Art*

Coffee break

Wieser et al. | *GRAPHIS—A free tool to save, annotate and visualise regions in graffiti photos*

Baumann | *Cartographic Visualisation of Graffiti for Web Maps*

Coffee break

Drinks & social dinner

Schlegel

Verhoeven

Carloni

Wogrin

08:00
09:00
09:45
10:45
11:15
12:45
14:00
15:00
15:30
16:30
17:30

FRIDAY 16 JUNE understanding

Registration

Sypniewski | *The Ancient Graffiti Project: Making the Past Present*

Fernández Merino | *Outer space, inner time*

Verhoeven & Schlegel | *One polygon at a time – trying to manage a graffiti-scape's spatio-temporality*

Coffee break

Tretti-Beckles & Vergara-Heidke | *Attitudes and gazes from graffiti and street art*

Jungfleisch & Shalaby | *Writings in nowhere: Migrant graffiti on the borderland between Greece and Albania*

Wogrin | *From "hic fuit" to hashtag. Documenting old & new forms of name writing within the Spraycity archive*

Best paper award

Farewell & lunch

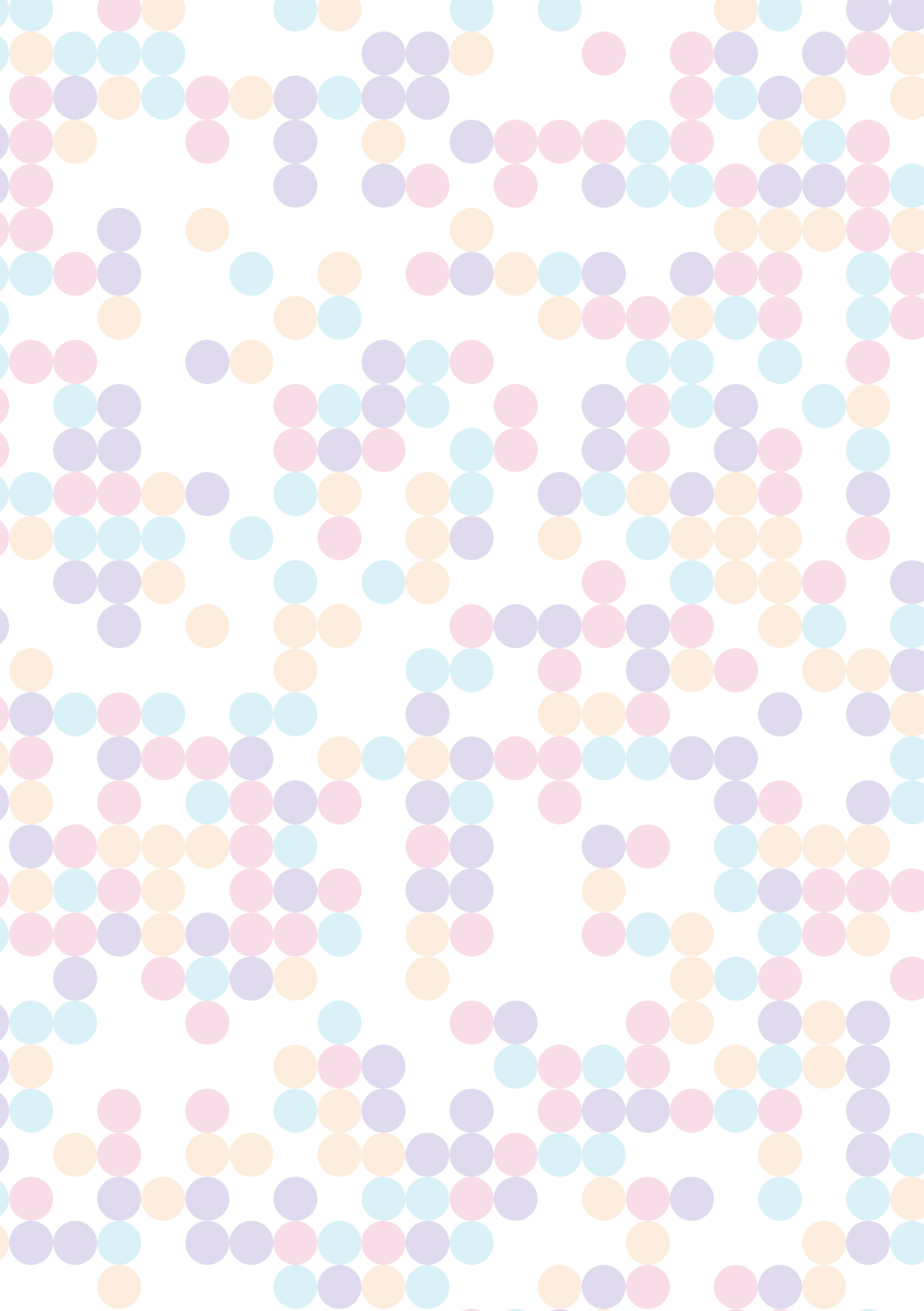
Graffiti spraying workshop
Spraycity

Wild

Schlegel

08:00
09:00
09:45
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11:15
12:45
15:00
17:00

pause — discussion — action
keynote — presentation



14 JUNE 2023 **WEDNESDAY**



disseminating

FIRST
KEYNOTE

Chairman Geert Verhoeven
10:00 - 10:45

Building Art Crimes: Highs and Lows

BRETT WEBB

SESSION

A

Chairman Benjamin Wild
11:15 - 12:45

Urban Heritage Hub Project – Finding balance between a digital source and a digital entertainment for graffiti culture & street art in Serbia

LJILJANA RADOŠEVIĆ

Graffiti and street art are quite sensitive topics for archiving. Dealing with them takes knowing when it is legally possible to publish a photo. And if it is possible to publish a photo to what does it mean without any background information? Therefore in archiving graffiti culture and street art one has to find a fine balance between giving too much information and not giving enough. This affects the users of the archival materials in different ways. Those that belong to these subcultures most of the time know more than researchers or archive managers and to them archives like this are most of the time convenient places to store or find some of the materials. But we have learned through most of our activities that the general population has a tendency to overcome their fear of graffiti and street art and to look at them as more than just vandalism when they get the background story.

Therefore, association Street Art Belgrade, aims at finding the fine balance in these endeavors in order to make graffiti and street art in Serbia understandable and more lovable for the general population. Also, with properly updated archive and with plenty information that contextualize an art piece on the street it is much easier and much faster to prepare virtual reality exhibitions. Instead of starting the research process from scratch every time we plan to do a VR exhibition, there is a good base to start with and to top it up with some new materials that, properly contextualized, will serve for the next exhibition. 3D walls become archival materials as well and they are relatively easy to use as part of the exhibition. Until scanning a whole area becomes standard, scanning 3D walls is easier and more manageable on a financial level and in terms of storage space. Urban Heritage Hub is imagined in such a way to always provide as much knowledge as it is possible while trying to adjust to the changes in technology. This archive collects historic materials and materials that are being produced at the moment in collaboration with artists, photographers and researchers of these artistic forms.

The Data Crew – Archive with ARCHE and enrich with OpenAtlas

**MASSIMILIANO CARLONI, BERNHARD
KOSCHICEK-KROMBOLZ & MARTINA TROGNITZ**

Introduction

Research with digital methods often requires the interplay of different tools and services responding to diverse needs. Examples include archiving, annotating and enriching data, as well as disseminating data and results to a wider audience. Since each task may be the domain of one (or more) separate pieces of software, a robust and streamlined workflow between the different components is essential to ensure the sustainability of the research project and its adaptability to different scenarios. This presentation shows how such a workflow has been realised in the context of project INDIGO, between the digital archive ARCHE and the spatial database OpenAtlas, which are both hosted by the Austrian Centre for Digital Humanities and Cultural Heritage of the Austrian Academy of Sciences.

ARCHE

ARCHE is a digital archive for humanities research data related to Austria in terms of content or origin. It offers long-term preservation of data and has been awarded the CoreTrust-Seal certification. The paradigms of Open Science and the FAIR principles are at the core of ARCHE. Findability and accessibility are made possible through rich metadata, standardised access protocols, and dissemination of metadata to several data aggregators. Thanks to its well-documented API and different dissemination services, ARCHE also provides an easy way to access the data in various standardised formats, and reuse them in new research projects and applications. In the context of project INDIGO, ARCHE is used to store and preserve all the raw and processed outputs of the project, together with extensive metadata.

OpenAtlas

OpenAtlas is an open source database project, developed to acquire, edit, and manage information from the humanities such as history, archaeology, or cultural heritage. The use of CIDOC CRM as ontology and the mapping of the (meta)data to it in the background of the application allow an easy data entry and retrieval. OpenAtlas is constantly being developed

and expanded in the context of collaborations with research projects. For INDIGO, OpenAtlas provides a platform where data hosted by ARCHE will be consolidated and edited manually if necessary. Furthermore, OpenAtlas works as a middleware between data and the frontend via the OpenAtlas API.

Joining the services for INDIGO

Within INDIGO, the two services closely collaborate in order to use the functionalities of both platforms in an optimal way. After ingestion to ARCHE, the data and metadata are available for reuse via an API. This information can be automatically imported into OpenAtlas via a dedicated module developed in the course of the project. In OpenAtlas, the data can then be enriched with further information. OpenAtlas also provides an API, which e.g. allows populating a presentation frontend. This talk will introduce the two services and provide an overview of the workflow, as well as the adjustments and changes to the services for INDIGO.

The first complete census of public artworks in Torino

LUCA DAVICO, PAOLA GUERRESCHI & LUISA MONTOBBIO

The website *Arte per strada Torino* (www.arteperstradatorino.it) arises with the aim of creating a single portal in which to highlight the first complete census of artworks (paintings, sculptures, installations, etc.) existing in public spaces of Torino and in its belt. It also intends to collect and underline publications, documents, other websites related to the topic of public art.

The sources used to register the artworks have been existing repertoires of public artworks in Torino, systematical field surveys in all the city districts and the municipalities of the belt, information collected from Città di Torino and the art associations MAU, Monkeys Evolution, Il Cerchio e le Gocce. The period considered is that from the 90s of the 20th century to now, as this has been a season of huge spread of public art in the area of Torino.

Since the end of the 20th century, public art has registered a tendency towards a progressive institutionalization: the selfmanaged spontaneity of murals is increasingly conveyed into projects conceived or supported by public or private institutions, thus street art - no longer regarded as an antagonist "crime" - increasingly joins programs of urban regeneration, in agreement with authorities.

In parallel, the asset of public art often becomes a competitive factor, playing a role in improving the perception of urban environments and, therefore, resulting in an element of attractiveness in many cities, for example for tourists.

In the policies to revive the city implemented in Torino in the last quarter of a century, public art plays an important role, both by transforming some urban landscapes - aspiring, in particular, to give them a new identity - and by helping to strengthen the image of a "city of contemporary art", also based on events such as Artissima and Paratissima, as well as on various art museums. Not only has public art grown remarkably in Torino, but the works have spread more and more from the center to the outskirts: thus, wether up to the 1970s two thirds of the artworks were gathered in the downtown, today over two thirds are in the

outskirts and in the urban belt.

The website contains a review of over a thousand works of public art catalogued in tabs, one for each (individual or collective) work. Each tab contains the information gathered on author, title, year, project and location of the work - address, neighborhood, geographical coordinates -, links for any insights on other websites. It is also accompanied by one or more photographs and an extract of a map indicating the location in the urban area.

The tabs are accessible through three different pages of the site: a textual list sorted by neighborhoods and municipalities, a photo gallery, an interactive map. This thematic map was created using the open source software QGIS and published on the site, employing the plug-in qgis2web.

*Calle Libre –
Festival for Urban Aesthetics*

KONSTANTIN OEDL

SESSION

B

Chairman Stefan Wogrin
14:00 - 15:00

Urban Art Mapping and how to deal with Hot Spots – The Vagabundler Project

GUNTHER MICHELS

Presentation of the non-commercial online graffiti archive “Vagabundler” with numerous articles, interviews and especially city maps on urban art. The focus is on the city maps using the example of Berlin with currently almost 50,000 photos. Explanation of the system developed by our collective to archive content especially for the Super Hot Spots with two or three examples like Mauerpark, Jungfernheide & Haus Schwarzenberg. Brief explanation of the potential political influence of documentary evidence of a site’s artistic value to enforce legalization. Example: North Side Gallery.

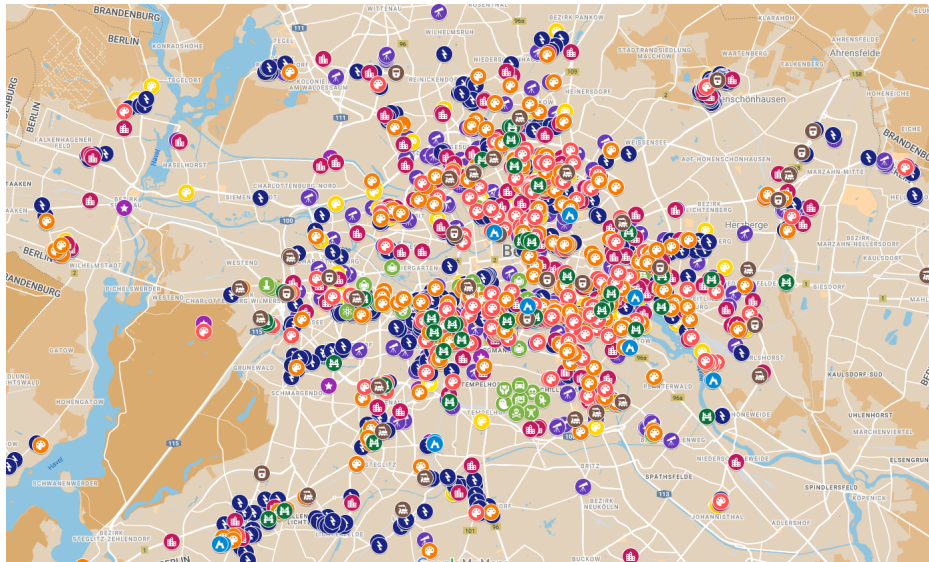


Figure 1. Screenshot of the interactive urban art map for Berlin, Germany.
[City Ambassador: Holger Peter]

- HALLS OF FAME**
 - ✓ Bâtiment 7 Art Factory
 - Canettes de Ruelle – Jam Gallery
 - Canettes de Ruelle – Artworks Area
 - Crémazie Art Alley
 - ... 14 weitere
- MIGHTY MURALS**
 - ✓ Avenue 24th East 8555
 - Avenue Ash 587 - APOK & ESKRO
 - Avenue Atwater 740 – DORAS
 - Avenue Ball 440 – ANNIE HAMEL
 - ... 122 weitere
- GOLDEN NUGGETS**
 - ✓ Avenue 7th East 5572 – FANNY AISHAA
 - Avenue 8th East 5400 – ALFALFA & PUPILA
 - Avenue 26th East 6316 – SNIKR
 - Avenue Ash 355 – JIMMY BAPTISTE
 - ... 105 weitere
- COMPLEX CRAFT**
 - ✓ Avenue 4th East 704 – ART DU COMMUN
 - Avenue 7th East 5629 – CYNDIE BELHUME...

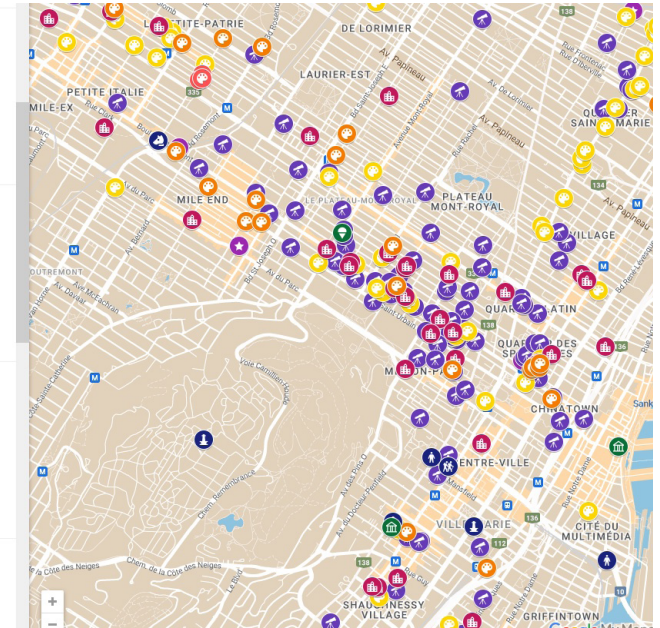


Figure 2. Screenshot of the interactive urban art map for Montreal, Canada.
[City Ambassador: Patrice Loranger]

- ARTISTS & INTERVIEWS**
 - ANALÍA PERTUSI – Perts Jam
 - GERMÁN ACZEL – Cartoonist – Article
 - GERMÁN ACZEL – Podcast – [in German]
 - MURDOCK ALLEN – Painter
 - MURDOCK ALLEN – Podcast – [in English]
- MIGHTY MURALS**
 - ✓ Banfield – Belgrano 1529 – MARTÍN RON
 - Banfield – Belgrano 1646 – MARTÍN RON
 - Burzaco – Orfilia Rico 599 – MURO SUR
 - Caseros – Agüero 2900 – COF & PIKI FAREL...
 - ... 8 weitere
- GOLDEN NUGGETS**
 - ✓ Parque Ferroviario Palermo – Urban Spray S...
 - Agronomía – Pedro Morán 2378 – JUAN IE...
 - Agronomía – San Martín 5743
 - Agronomía – Zamudio 3811 – MILU CORRE...
 - ... 54 weitere
- COMPLEX CRAFT**
 - ✓ Agronomía – Asunción 2777

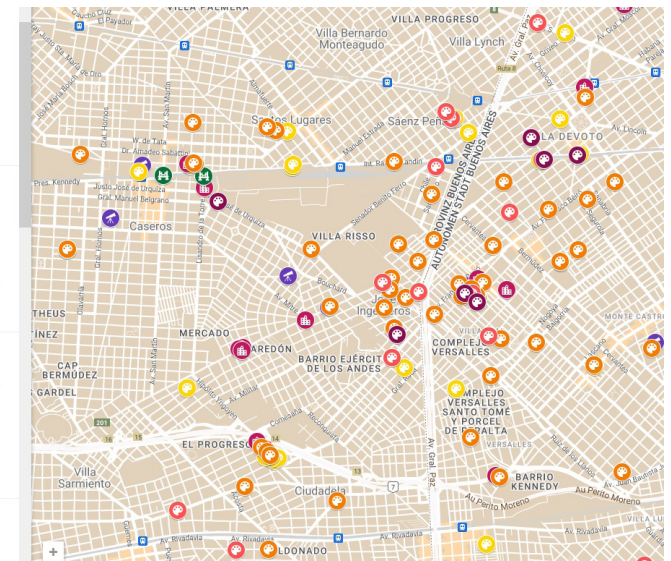


Figure 3. Screenshot of the interactive urban art map for Buenos Aires, Argentina.
[City Ambassador: Analía Pertusi]

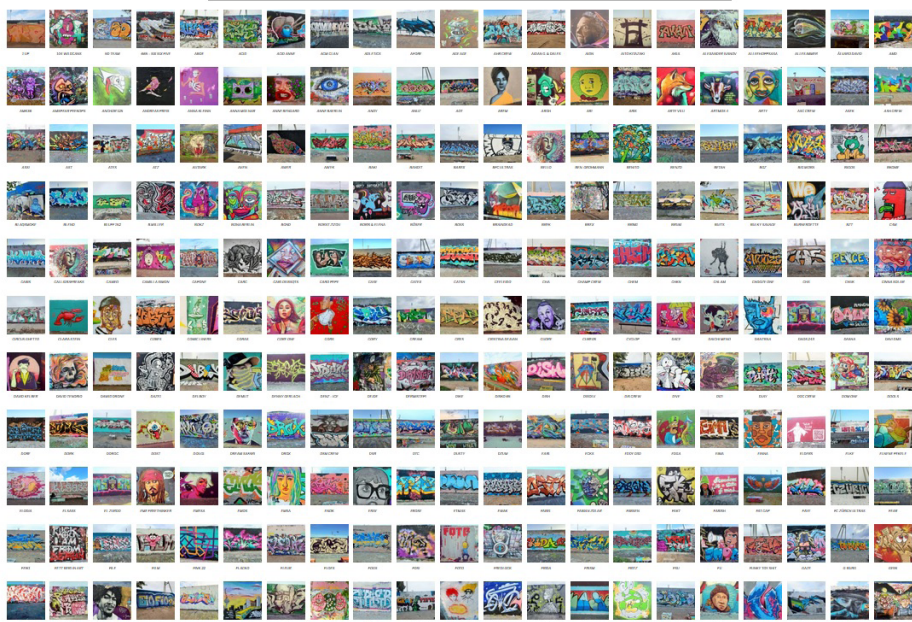


Figure 4. Screenshot of the hot spot page for “Mauerpark” in Berlin.
Each photo leads to an individual artist subpage.

The Hall of Fame of the Mierendorf-INSEL is a legal graffiti open space at Lise-Meitner-Straße 50. At that spot continuously magnificent works of art are getting created by the top artists. In our archive you can find the fantastic different artworks sorted by creators. There is also an announcement on an information board by the city council below.

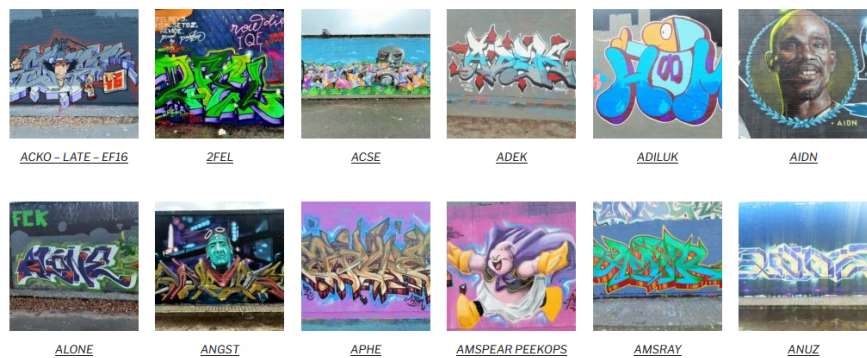


Figure 5. Screenshot of the hot spot page for “Jungferheide” in Berlin.
Each photo leads to an individual artist subpage.

SESSION

C

Chairman Massimiliano Carloni
15:30 - 16:30

Storytelling cities: voices from history hidden in the architecture

**GIULIA FLENGHI, ELENA IPPOLITI,
ALESSANDRA MESCHINI, MICHELE RUSSO &
NOEMI TOMMASELLA**

Cities represent a unique place of cultural stratification, material and immaterial. Their identity also lies in their ability to express various possible narratives, defining itineraries through their heritage. Some traces found in architecture can suggest keys to interpreting such uniqueness in history, traditions, and memory. Graffiti is commonly understood as a social and cultural manifestation of mural painting based on expressing one's creativity. Graffiti, understood not as a specific social movement, consists of the general desire to convey any information over a material surface. This specific activity arose in antiquity. Inscriptions through engravings, epigraphs, and epitaphs identify people's desire to preserve their voices and thoughts over time, handing them down to future people and using architecture as a sub-layer. These textual pieces of information represent the communication instrument of the time, through which words and thoughts are conveyed, with electoral, celebratory, and identifying purposes. In Pompeii, more than 5,000 pieces of graffiti are distributed throughout the city for electoral purposes. These traces of the past thus become a fundamental historical resource since in them lies the voice of the people, an intangible heritage transmitted through the materiality of architecture. Unfortunately, many of these inscriptions are today hidden or barely visible within cities. It happens for several reasons. First, their location is often unknown and unmapped in the architecture, hidden by a morphological complexity or a limitation of accessibility. Also, their decoding is related to the type of handwriting, the engraving technique, and the content conveyed, studied predominantly within the domain of paleography. Finally, in today's society, there is a prevalent dominance of the image with clearly conveyed content, relegating these kinds of cultural products to an omitting background.

The rediscovery of these sources from history thus becomes an exciting topic, not only to give back a voice to those who reported traces but also to recover an intangible heritage identifying place and history. The use of writing as a means of communication thus be-

comes essential to rediscover the lives of those who passed through those places and left a trace of them, carving messages into history. In this perspective, architectures become narrative palimpsests, capable of telling stories of lived life. If narrative museums were born at the end of the 19th century out of the need to communicate the complex contents of collections to a broader audience, narrative cities, on the other hand, have always existed. It happened precisely because of the need of people themselves to convey concepts or leave a trace of their presence. The research project is developed within Rome, a place characterized by deep cultural stratification. The activity aims to map some inscriptions and build narrative itineraries throughout the city, starting from a study of the presence of these particular traces within the architecture. Through these routes, it will be possible to give voice again to a past and an intangible culture that characterizes those places, rediscovering an intangible heritage stratified and hidden in the city.

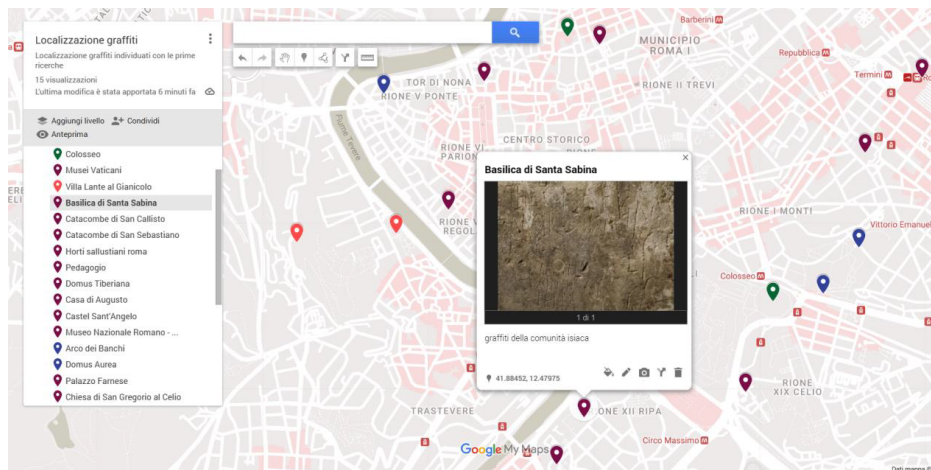


Figure 1. Picture of one graffiti example preserved in Santa Sabina and localization of other case studies for future itineraries.

Catching the Urban Chameleon – Building an Online Platform for Visualising & Analysing Contemporary Graffiti in Vienna

JONA SCHLEGEL, MARTIN WIESER & GEERT VERHOEVEN

This presentation will introduce the online platform UrbanChameleon, which we have been developing to facilitate the analysis and dissemination of contemporary graffiti in Vienna, Austria. The platform is designed to visualise and analyse data collected in the scope of project INDIGO, which is funded by the Heritage Science Austria programme of the Austrian Academy of Sciences (ÖAW) and focuses on circa 13 km of graffiti-covered surfaces along the Danube Canal.

Project INDIGO utilises OpenAtlas, an open-source, web-based database system that leverages the CIDOC CRM (Conceptual Reference Model) to manage and visualise historical, archaeological, and cultural heritage data. The CIDOC CRM is an international standard ontology for exchanging and integrating heterogeneous cultural heritage data and information, enabling the representation of complex relationships and events in a structured manner. The online platform seamlessly connects to OpenAtlas through an API (Application Programming Interface), a set of protocols and tools that enables different software applications to communicate and share data. This integration allows the platform to efficiently fetch and incorporate graffiti data, ensuring a comprehensive and user-friendly exploration experience.

A key feature of the online platform is a 4D viewer that allows users to visualise graffiti in its original location and context, as well as track its temporal changes. This is achieved via Cesium-based tools, open-source software libraries designed to create and visualise 3D geospatial data in web applications. Known for their powerful and flexible capabilities, these tools enable the rendering of high-quality, realistic 3D environments. By incorporating Cesium-based tools into UrbanChameleon, the platform provides immersive and detailed visualisations of graffiti, making it easier for users to understand their spatial context.

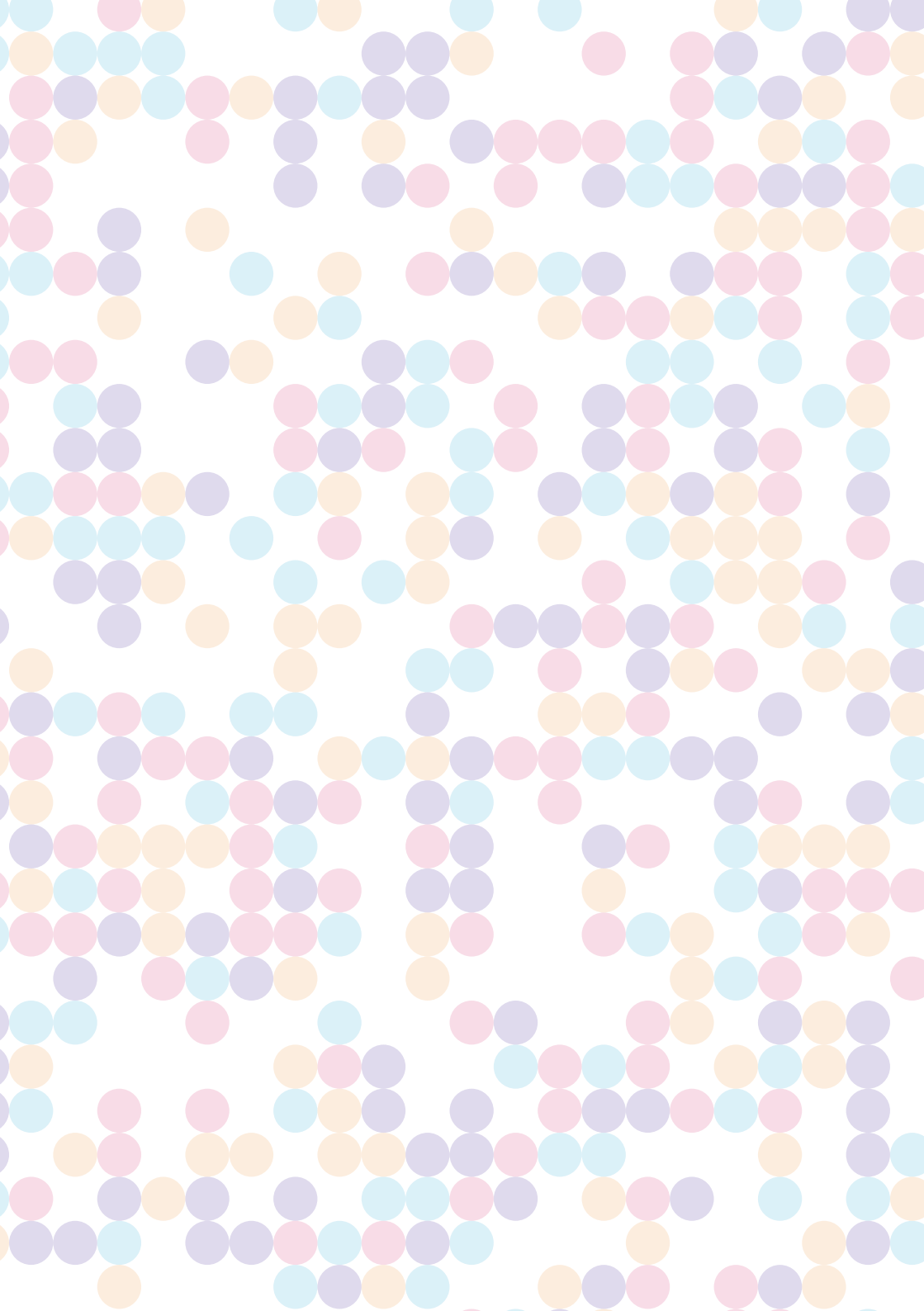
UrbanChameleon benefits from enhanced stability, performance, and scalability, providing a seamless and efficient user experience when exploring graffiti in Vienna. The platform features a user-friendly interface with an interactive map component, offering valuable insights into the distribution and context of contemporary graffiti. By focusing on the core functionalities and user experience, the platform allows researchers to study and understand the cultural heritage and significance of graffiti in an intuitive manner.

In conclusion, the UrbanChameleon platform provides researchers with a comprehensive tool to explore, search, and filter graffiti in Vienna, specifically at the Hall of Fames along the Danube Canal. It enables them to uncover layers of meaning and contextual significance. To truly engage with those graffiti records and unlock their analytical potential, smooth data streaming and proper treatment of the temporal dimension are key, which UrbanChameleon enables via various technical means. In the end, we hope that the platform can be used to digitally explore the colourful walls of the Danube Canal over time and space, but also facilitate the creation of valuable insights into the evolution of graffiti and its role in our contemporary society.

17:30 - ...

DRINKS

Strandbar Herrmann
Herrmannpark
1030 Vienna, Austria



15 JUNE 2023 THURSDAY



analysing

SECOND KEYNOTE

Chairwoman Jona Schlegel
09:00 - 09:45

About Graffiti Culture

**RICHARD
VAN TIGGELEN**

SESSION

D

Chairwoman Jona Schlegel
09:45 - 10:45

*The Artcade podcast:
turning the visual into the auditive*

DEADBEAT HERO

Street Art, Graffiti and NFTs: Copyright issues on the streets of Web3

ENRICO BONADIO & SIRI-HELEN EGELAND

There are numerous examples of street and graffiti artists using NFTs to monetize their physical art in the digital sphere. One reason for this might be that the digital medium combined with the cultural aspects surrounding the NFT scene, such as the sense of community connected to the art and tokens, also allows for street culture to be transferred with the street and graffiti art. One may think that in addition to this, Web3 and NFTs allow for a more democratic and direct link between artists who place their pieces in the street and their audiences. In this talk we will examine these background issues, and analyse the ideas and opinions of a number of street artists, graffiti writers and curators about the tokenisation of street art murals and exploitation via copyright. We will also combine legal analysis with artists' real life experiences to discover fresh insights into the complexity of a rapidly evolving market for street art and graffiti. The talk is based on a chapter that is currently being written and will be published as part of a book examining NFTs and copyright from different perspectives.

DISCUSSION ROUND

MODERATOR
GEERT VERHOEVEN

GET IT OUT
*the how & why
of graffiti
dissemination*

11:15 - 12:45

SESSION

E

Chairman Massimiliano Carloni
14:00 - 15:00

Towards an automated detection of changes in the urban chameleon skin

BENJAMIN WILD, GEERT VERHOEVEN & NORBERT PFEIFER

Colourful and ever-changing: Graffiti can be considered the urban chameleon skin. At the Donaukanal (Eng. Danube Channel), Vienna's central waterway and one of the largest and most active graffiti-scapes worldwide, this metaphor applies like hardly anywhere else. Every day a multitude of graffiti is destroyed by the creation of new works. Recently, efforts have been made to mitigate this constant loss of cultural heritage along the Donaukanal by systematically documenting the graffiti, mainly using photography and photogrammetry. However, keeping track of the newly added works is very time-consuming and often like finding needles in a haystack, considering the large extent and high volatility of the monitored area. Thus, an automated graffiti change detection would significantly reduce the effort and avoid overlooking graffiti.

In this presentation, the main challenges in image-based change detection for an extensive graffiti-scape are outlined. Furthermore, we will showcase a camera-based monitoring framework that provides a robust foundation of data, which serves as input for a novel hybrid method of image-based change detection. The investigated method exploits and combines an established pixel-based change detection algorithm, the Iteratively Multivariate Alteration Detection, with a descriptor-based method. The latter relies on image features rather than pixels as an analysis unit and can robustly filter false alarms from the high-performing but noise-prone pixel-based approach. Overall, the results indicate that the proposed method can largely automate image-based change detection of graffiti-scapes. It can uncover graffiti-related changes and robustly distinguish them from other image differences such as shadows but tends to overlook small-scale graffiti, indicating the need for further finetuning.

Analysing the Geography of Street Art

**PAUL LORAH, HEATHER SHIREY &
DAVID TODD LAWRENCE**

Urban landscapes can be seen as works of art: as a sculptor shapes clay, culture shapes the physical environment over time to create unique places. Although we shape landscapes, the relationship is reciprocal: the places we inhabit influence the life we live, and urban landscapes provide opportunities for some while imposing constraints on others.

Street art provides insights into the cultural forces shaping urban spaces, as it is deeply embedded in the surrounding environment. It can spotlight overlooked voices and foster political dialogue. In some neighborhoods street art reimagines, promotes and markets gentrifying areas. In others, it is a powerful expression of marginalized voices.

While it is clear that street art has the power to shape urban landscapes, this research analyzes the impact of the urban landscape on the geography of street art. How does the street shape the art? Why is street art concentrated in some areas and absent in others? To accomplish this we analyze neighborhood-scale economic, demographic, political, cultural and environmental processes shaping the location and distribution of non-sanctioned street art in the Twin Cities (Minneapolis and Saint Paul, Minnesota).

First, we discuss the results of field surveys of unsanctioned street art conducted in Saint Paul's Midway neighborhood. Observations from these surveys were used to generate a detailed map of street art which was then overlaid with maps depicting a wide range of landscape features. This process provided insights into the cultural and environmental processes shaping the geography of unsanctioned street art.

Second, a Geographic Information System (GIS) was used to construct map layers depicting these landscape features for the entire Twin Cities Metropolitan area. Then, insights about the geography of street art in the Midway neighborhood were used to parameterize GIS suitability modeling tools which were used to generate a hotspot map displaying the hypothesized locations of clusters of street art in the Twin Cities (Figure 1).

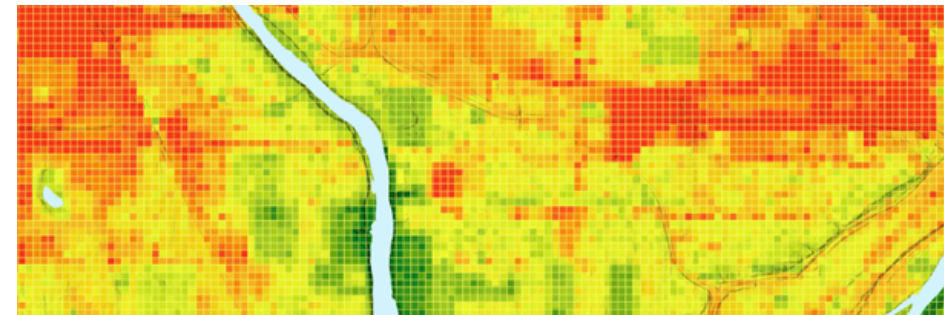


Figure 1. The geography of street art in Saint Paul, Minnesota (detail). Relatively high concentrations of street art are hypothesized to appear in red areas.

Third, we briefly discuss the [George Floyd and Anti-Racist Street Art Archive](#), a crowd sourced database seeking to document street art from around the world. It contains more than 1,000 submissions from the Twin Cities.

Fourth, we analyze the actual location and distribution of street art in the Twin cities by mapping clusters of street art from the George Floyd database. We then compare this pattern to the predicted hotspots generated by our suitability model.

Our results show that the location of street art in the Twin Cities is highly concentrated and that our model accurately predicts the locations of most clusters of street art. We also find street art in unique and unexpected places. Thus, the geography of street art is shaped by a combination of urban structure and unique, local factors. This matters because our interpretation of art is shaped by the setting it is viewed in. Meaning can shift with location and a fuller understanding of spatial context can deepen our connections with both art and the urban landscape.

SESSION

F

Chairman Stefan Wogrin
15:30 - 16:30

GRAPHIS – A free tool to save, annotate and visualise regions in graffiti photos

**MARTIN WIESER, GEERT VERHOEVEN &
MASSIMILIANO CARLONI**

A digital photo file consists of two (or more) parts: one contains the pixel values that encode the visible light reflected from (or emitted by) real-world objects, while one or more file segments hold the metadata. Storing these photo metadata is enabled by various standards. For instance, the [Exif](#) (Exchangeable image file format) standard records technical photo metadata such as the camera's serial number and model, lens aperture and focal length, shutter speed, possible flash compensation, and the date plus time of photo creation. All Exif-defined tags are created by the camera and stored simultaneously upon photo creation.

Besides Exif, [IPTC Photo Metadata](#) exist. These metadata – structured in a standard proposed by the IPTC – are the widely accepted norm for storing administrative, copyright, and descriptive information in images (unedited photos, edited pictures, and AI-generated images). In its 2019.1 version, the IPTC Photo Metadata Standard enabled the storage of image regions. These image regions are shapes like rectangles, circles or any possible polygon that can be marked and saved within an image.

Since the authors are unaware of a tool that allows straightforwardly working with such image regions, and given their potential for graffiti photo annotation, project INDIGO created GRAPHIS. GRAPHIS is an open-source, [freely available](#) Python-based software to create image regions, annotate them with graffiti descriptions or transcriptions, and visualise them. The backbones of GRAPHIS are an SQLite database and ExifTool. Besides storing links to the photos of interest, the [SQLite database](#) keeps track of every image region operation. This principle enables users to start/exit the software at will without the risk of losing work. It also enables collaboration on various photo collections, as each can have its database. At any moment, the user can write the image regions back into the photo's metadata segment, an operation for which GRAPHIS utilises [ExifTool](#).

Cartographic Visualisation of Graffiti for Web Maps

OSKAR BAUMANN



Figure 1. The graphical user interface of GRAPHIS.

GRAPHIS adheres to the IPTC standard at every stage. For example, the IPTC stipulates that every region ideally features a concept that clarifies the role and content type of the region. These concepts must come from a controlled vocabulary: a confined list of terms, each with a definition and a URI. Since none of IPTC's controlled vocabularies features graffiti-related concepts, project INDIGO also created a separate GRAPHIS Image Region vocabulary to contain all relevant concepts. This presentation will first explain the inner workings of GRAPHIS and its underlying vocabulary, after which the software and its functionality will be shown live on some graffiti photographs.

The spatial conditions and location of a wall or surface play a fundamental role in the creation of street art. After graffiti are sprayed onto a wall, its spatial (and temporal) context remains crucial. Without it, understanding such cultural and artistic expressions within their urban environment is severely limited. Preserving the spatial context of graffiti is, therefore, highly significant, as it allows us to maintain a connection to the original message and purpose of the artwork.

Many documentation archives of graffiti and street art present their data records by means of (web-based) maps. Maps make it possible to quickly and intuitively gain insight into the overall situation of graffiti across an area. At a finer scale, they allow for conveying the complex spatial characteristics - the shape - of each individual graffiti. Modern web maps provide a seamless range of zoom levels and detail, allowing users to interactively explore data in a spatial context.

Although some research has been done on the spatial analysis of graffiti, its cartographic presentation is still relatively unexplored. There is much potential in adapting cartographic principles to better visually communicate spatial information surrounding graffiti. The first approaches to showcase graffiti more effectively on a map include representing graffiti features as vector data (points, lines, polygons) and simplifying their shapes through generalisation techniques.

Moreover, technological possibilities are not yet exhausted. Web mapping libraries like MapLibre GL JS and CesiumJS offer powerful tools for creating interactive maps to visualise graffiti data on a 2.5D map or 3D globe. These web maps can be customised and equipped with various filtering options for users to explore the data in depth. Those interested in exploring graffiti archives will benefit from more cartographically sophisticated visualisations and interactivity.

The talk will present the progress of the master thesis research on the challenge of mapping street art. It will present the current state of work-in-progress web maps that feature

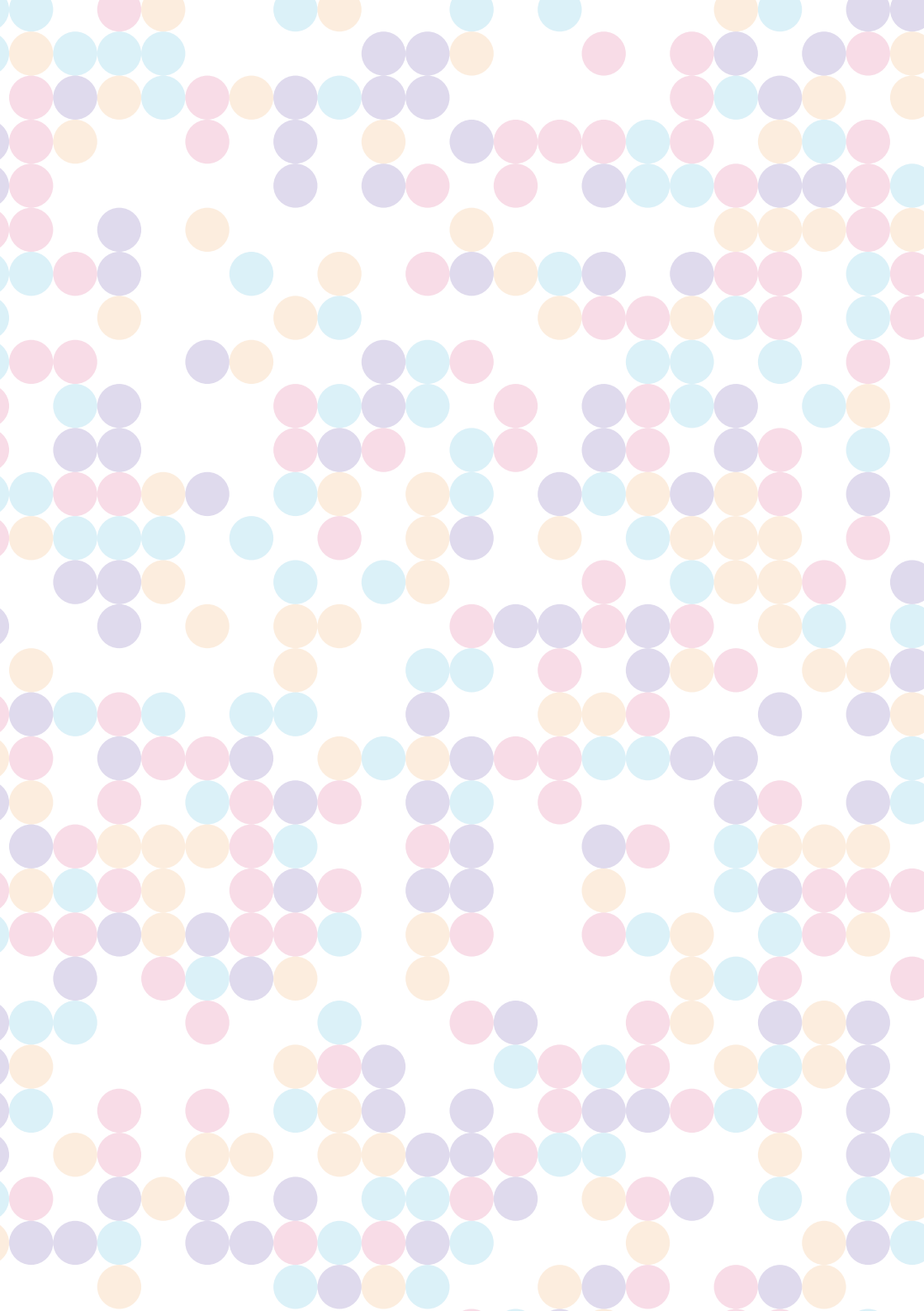
some of INDIGO's data. Additionally, a glimpse into the remaining research work will be offered, which will touch on evaluating the effectiveness and user experience of the web maps.

17:30 - 19:00 - ...

DRINKS

Casa Caribena Summerstage
Roßauer Lände 7-9
1090 Vienna, Austria

SOCIAL DINNER



16 JUNE 2023
FRIDAY

understanding



THIRD
KEYNOTE

Chairman Benjamin Wild
09:00 - 09:45

The Ancient Graffiti Project:
Making the Past Present

**HOLLY
SYPNIEWSKI**

SESSION

G

Chairman Benjamin Wild
09:45 - 10:45

Outer space, inner time *Level of analysis of Graffiti and street art audiences*

FRANCISCA FERNÁNDEZ MERINO

According to Velikonja (2020), there are three starting points of Graffiti and Street Art Research (GSAR): the contextualization, the intentionality of the producer, and the reception which is related to the audience/viewer/observant. Where the audience it's one of the starting points less approached in the literature.

In this paper, I pretend to explore the potential level of analysis from time and (or versus) space and its relationship with graffiti and street art audiences. Time and space will not be considered in linear or geographic terms but in relational terms. Therefore literature on the social construction of space, the historicity of phenomena from oral history, and audience studies will be considered. In this exploration, I intend to argue that to find the meaning and role of both graffiti and its audience, it is necessary to consider literature that points to their relationship and how this develops.



Metro station Baquedano, Santiago, Chile. Oct, 2019.



"Venceremos"

Figure 1. Graffiti is (not) alone. Baquedano Station, Providencia, Región Metropolitana, Chile, Oct, 2019.

The delimiting example for the development of this exploration is the Graffiti “Venceremos” presented in figure 1. The choice of this image responds to both geographical and temporal reasons, as it represents several contentious moments in Chile’s history, and it is located in a place of symbolic value for the population. At the same time, it evokes distinctive memories, which allows for the subtraction of meaning and relationship between its audience and the work.

The potential contributions of this study are, in general, to open spaces of audience research and, in particular, to explore what is asked and eventually answered when the focus is placed on either time or space in graffiti audiences

One polygon at a time – trying to manage a graffiti-scape’s spatio-temporality

GEERT VERHOEVEN & JONA SCHLEGEL

Project INDIGO aims to document, disseminate and analyse the contemporary graffiti-scape surrounding the Viennese Danube Canal (Austria). Despite its focus on present-day graffiti, INDIGO is considered an archaeological project. The authors take the stance that archaeology is an academic discipline trying to understand (our complex relationships with) the material remains of the stratified past, whether that past was centuries (i.e. the remote or ancient past) or days (i.e. the contemporary or recent past) ago. From this point of view, it should not be surprising that INDIGO applies (and improves) various tools and workflows commonly used for acquiring and managing data in more conventional archaeological projects.

However, outsiders might find it strange to hear that a discipline examining space- and time-bound anthropogenic activities has only developed tools to properly analyse and visualise the two-dimensional spatial component of archaeological data. Effective practical approaches to handling the third spatial dimension, let alone the temporal aspect, are generally lacking. INDIGO wants to leverage its focus on “less old” things to advance the management, visualisation and analysis of the uncertain spatio-temporal boundaries characterising “older things”.

Post-depositional processes like erosion, ploughing, animal digging, and soil formation increasingly bias and fuzzyfy the spatial and temporal information obtainable from common archaeological remains like Bronze Age ditches or Celtic ceramics. Because modern artefacts like graffiti are typically less influenced by post-depositional processes, and since their continuous “layering” (which archaeologists call stratification) can be documented in situ, contemporary graffiti-scapes lend themselves well to develop archaeologically-relevant ways of dealing with spatio-temporal complexities.

Despite considerable effort, monitoring the dynamic nature of graffiti along the Danube water channel still poses problems concerning data quality and completeness. INDIGO's initial spatial and temporal (meta)data only accounts for when (and if) a graffito was photographed. Whether the graffiti production occurred hours or days before typically remains unknown, while some graffiti even go undocumented. INDIGO relies on a polygon for each graffito to address these challenges. This polygon is first indicated on – and stored within – each graffito's overview photo via the bespoke software GRAPHIS. AUTOGRAF – another tool coded within INDIGO – transforms this image-bound two-dimensional polygon into a three-dimensional geometric entity correctly located in a real-world coordinate reference system.

A GeoJSON file stores each graffito-polygon. This human- and machine-readable file complements the polygon coordinates with various attribute fields for temporal data. Some fields can be populated upon creating the polygon, while other temporal data might be automatically inferred from subsequent polygons. At the end of the process, each polygon should provide a digital, nuanced representation of one graffito's spatial and temporal dimensions. Through their combination, we hope that INDIGO's online visualisation platform can extract the various explicit or implicit spatial and temporal relationships among the thousands of documented graffiti.

SESSION

H

Chairwoman Jona Schlegel
11:15 - 12:45

Attitudes and gazes from graffitis and street art

**VALENTINA TRETTI-BECKLES &
ADRIÁN VERGARA-HEIDKE**

Placemaking is the process of building a 'place' through relationships, practices and representations of meanings, of a varied nature and with the participation of different actors. These actors play different roles as neighbors, producers, recipients, passers-by, visitors. Placemaking includes all these actors in their relationship with that 'place' and in their interrelationships, practices and in the processes of construction of meaning. Within the stimuli from which people build a sense of a place are the semiotic products that are on the street, for example, commercial signs, advertising, graffiti and urban art.

In 2018 we began a project to archive and analyze the semiotic landscape of neighborhoods in Costa Rica and Chile. Based on this work, two specific aspects caught our attention: the attitudes and semiotic competence of people regarding graffiti and street art. We understand semiotic attitudes as an evaluative mental disposition towards the representation of a semiotic object, particularly tags, throw ups and street art. This evaluative mental disposition can guide the acts and reactions of people towards those objects and space. Semiotic competence is conceptualized as the abilities to produce and understand different semiotic products. In the case of this work, we focus on the gaze of throw ups and the recognition of graphemes. For this paper, we present the preliminary results of two specific objectives of the research that we are developing: first, to determine the semiotic attitudes of international and Costa Rican people regarding tags, throw ups, and street art; second, to identify the reading routes and the recognition of graphemes in throw ups in people outside the environment of graffiti and hip hop culture. For the first objective, focus groups were held in Costa Rica with Costa Ricans and in Germany with individuals of different nationalities. These focus groups were transcribed and analyzed using the appraisal system of linguistics. For the second objective, an instrument was designed that was applied by means of an eye tracker, in which eye movements and responses regarding the graphemes of the graffiti were recorded. The partial results show people's negative attitudes towards tags and throw ups, as well as different reading patterns and responses in the eye tracker.

Writings in nowhere: Migrant graffiti on the borderland between Greece and Albania

JOHANNES JUNGFLAISCH & NORA SHALABY

Undocumented and forced migration from West Asia, Central Asia, and Africa to Europe reached unprecedented levels in the summer and fall of 2015. By the end of that year, more than 850,000 people had crossed the land and maritime borders between Turkey and Greece. Looking back at these events, iconic images of dramatic arrivals in rubber dinghies on the shores of the Aegean islands and refugee treks heading north to Central Europe come to mind. Since then, many journalists and photographers have shifted their attention from the humanitarian calamity in the Mediterranean to calamities elsewhere. Nevertheless, flight and migration to Europe continue until the present day, albeit off the grid and less noticed by the public.

People on the move produce material traces that reflect their living conditions at distinct stages of their contingent migratory journeys. These material remains document not only how they encounter the perils and obstacles during their unnoticed travels, such as, unpredictable forces of nature in the wilderness and border security infrastructure, but also reveal how people on the move attempt to leave a mark in the unfamiliar, often hostile environments they face during their clandestine routes to destination countries. One of the ways to communicate their existence and to enter into dialogue with other undocumented travelers is by inscribing on the walls of the buildings where they temporarily live or pass by. These textual and figural graffiti are often created without any prior planning and by using whatever comes to hand. As such, the inscriptions represent spontaneous expressions of individuals connected through similar experiences in the transitional space of the borderlands.

Based on an archaeological case study conducted in the Greek borderland in the summer of 2022, this paper discusses, on the one hand, the material culture left behind by migrants who moved on from Greece to Albania in the period from 2020 to 2022. On the other hand, it addresses the textual and figural graffiti they inscribed on the walls of two

unexpected places in the liminal area of the Greek borderland; a highway underpass (Fig. 1) and an abandoned chapel. The correlation of the material traces with inscribed graffiti provides insights into the material circumstances from which the scribbles emerged in this specific context. Moreover, by focusing on the content of the graffiti written in different languages and scripts, we attempt to demonstrate how the investigation of migrant graffiti can contribute to a better understanding of the hidden stages of the social process called migration.

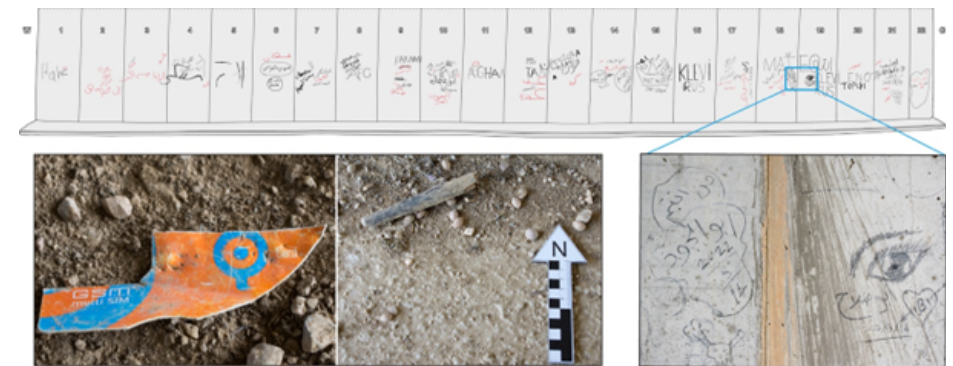


Figure 1. The north wall of a highway underpass is covered with migrant graffiti (above). Writing utensils made from a plastic card and a burnt wooden stick (left). Detail of graffiti on the north wall (right).

*From “hic fuit” to hashtag.
Documenting old and new forms of
name writing within the Spraycity
archive*

STEFAN WOGRIN

Spraycity is a documentation archive dedicated to the graffiti writing movement in Austria. The archive was founded in 2001 by art historian Stefan Wogrin and aims to record, archive and catalog graffiti as photographs to make them publicly accessible for a longer period. While some works have already disappeared in the public space, photographs are often the only possibility to let them remain. The archive currently includes over 300,000 image documents from all over Austria, Europe, Asia and the USA. The Spraycity.at website forms an interface through which a selection of around 112,000 photos can be accessed online.

For more than 20 years the main focus of the archive was dedicated to classical graffiti writing. Since 2022 the photo archive was constantly expanded and new categories were introduced. The category “[Historical Graffiti](#)” shows graffiti photos which date back in the time before the writing movement appeared and can be found usually in churches or castles. Since about 2020 a new form of tagging seems to become popular. Those tags mostly start with an @-sign or a reference to a social media platform. Spraycity also started to document those in the category „[Social Media Graffiti](#)“. Since those tags were also evolving in the last years in some cases a comparison with the development of classical tags can be made. The talk will give an overview about the spraycity archive and the extensions added in the last years.

15:00 - 17:00

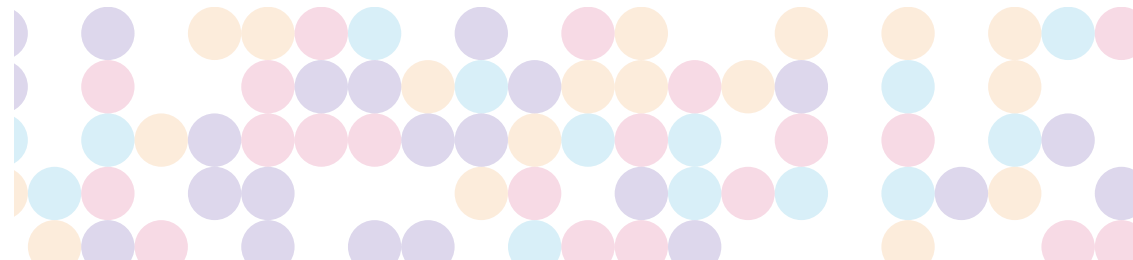
INSTRUCTOR
STEFAN WOGRIN

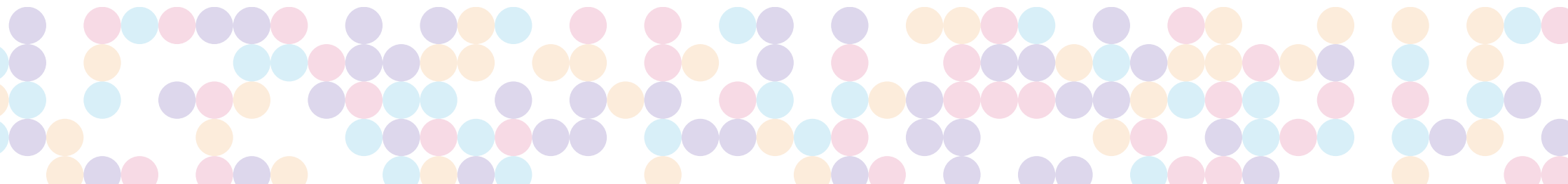
GRAFFITI WORKSHOP

SPACE FOR SCRIBBLES & REVOLUTIONARY THOUGHTS

Baumann	Oskar	Vienna University of Technology
Bonadio	Enrico	City, University of London
Carloni	Massimiliano	Austrian Centre for Digital Humanities and Cultural Heritage
Davico	Luca	Polytechnic University of Turin
DEADBEAT HERO		Soon Art Studio
Egeland	Siri-Helen	University of Agder
Fernández Merino	Francisca	University of Passau
Flenghi	Giulia	Sapienza University of Rome
Guerreschi	Paola	University of Turin
Ippoliti	Elena	Sapienza University of Rome
Jungfleisch	Johannes	Ruhr University Bochum
Koschicek-Krombholz	Bernhard	Austrian Centre for Digital Humanities and Cultural Heritage
Lorah	Paul	University of Saint Thomas
Meschini	Alessandra	Sapienza University of Rome
Michels	Gunther	Vagabundler Collective
Montobbio	Luisa	Polytechnic University of Turin
Oedl	Konstantin	Calle Libre
Pfeifer	Norbert	Vienna University of Technology
Radošević	Ljiljana	University of Jyväskylä / Street Art Belgrade
Russo	Michele	Sapienza University of Rome
Schlegel	Jona	LBI ArchPro
Shalaby	Nora	Humboldt University of Berlin
Shirey	Heather	University of Saint Thomas
Sypniewski	Holly	York College of Pennsylvania
Todd Lawrence	David	University of Saint Thomas
Tommasella	Noemi	Sapienza University of Rome
Tretti-Beckles	Valentina	University Potsdam
Trognitz	Martina	Austrian Centre for Digital Humanities and Cultural Heritage
van Tiggelen	Richard	Dutch Graffiti Library
Vergara-Heidke	Adrián	University of Costa Rica
Verhoeven	Geert	LBI ArchPro
Webb	Brett	Art Crimes/Spray Street
Wieser	Martin	Independent researcher
Wild	Benjamin	Vienna University of Technology
Wogrin	Stefan	Spraycity

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