



Deliverable for the Project

**ARTIS – Art and Research on Transformation
of Individuals and Societies**

Research and Innovation Action

H2020-SC6-TRANSFORMATIONS-2019

Societal challenges and the arts

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- **Provide point of comparison/contrast to institutional art: Are the experiences had in the urban environment as well as their lasting impacts and incidences of transformation similar to those found in museums? What are the overlaps and differences?** 15
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Task 3.1/3.1B: Empirical data collection—art experiences in the street —do these engender the same types and the same proportions of experience? What are the implications for self, perspectives, and health? (lead: HUB; support: UNIVIE, IFNU, RHUL, Month 7-42)..... 18

Once again, the main empirical core of this WP will constitute a systematic collection of data on individual participants’ interactions with art in urban environments—in street/street-level gallery/neighborhood context. This will use a comparable procedure to that of WP2 (Museum) Studies 2A to 2D. A representative selection of street art examples (selection of the 15-20, included in list from WP1), focusing primarily on the Berlin area will be tested with individuals who naturally encounter the artworks as part of their everyday routines (N = 100+ per artwork). We will use the same procedures and matched pre- and post-art engagement self reports and surveys of emotional, cognitive, appraisal, and meaning factors matched with network analysis to create a map of general art engagement and to identify specific experience types, including transformations. These will be compared to and combined with the results from WP2..... 18

Task 3.1B: We will (as in WP2) empirically connect the types of art experience to lasting changes (as assessed through behavioral and physiological measures) in: health, mood, psychology, brain, self-identity (HUB, see WP6), physiology/interoception (RHUL, UNIVIE), social attitudes/stereotyping, and political attitudes (RHUL, see WP7) in immediate and longitudinal perspectives. Results will be compared to the institutional/museum setting. 18

Task 3.1C: Subjective experience interviews, micro-phenomenology (lead: AAU; support: HUB); Assessment of physical actions, modes of engagement, enaction (lead: HUB; support: AAU, UNIVIE); Correlation to activations and social connections in the brain (lead: UNIVIE) (all Month 7-42)..... 18

As in WP2, we will also expand past basic self-report survey measures. A portion of participants (10-15% as in WP2) will be assessed via micro-phenomenology to further explore subjective experience and role of previous aesthetic experiences, expectations or general awareness of urban art as individuals go about their days. Also, interventions to make public art more salient will be considered..... 18

Participants (15-25% of Task 3.1 totals) will also be assessed using a 4E perspective, as well as via mobile eye- or movement-tracking to consider modes of engagement and how viewers move about the art/how art might modulate or even disrupt physical everyday actions and movements. Participants (N = 30 per artwork) will also be assessed via fNIRS to consider the relation to brain activations, levels, with results once again combined to paint a nuanced picture of experience and matched to the institutional art settings. 18

Task 3.2: Compelling examples; testing in other geographic cultural locations (lead: HUB; support: UNIVIE, AAU, Month 7-42)..... 18

As above, we will also leave open the possibility to consider urban locations outside of Berlin/DE in order to provide a point of comparison and explore modes of interaction over a geographically and culturally diverse area (Belgrade, FDU, Bucharest, A. Pirici, London, Tino Sehgal, Aarhus, AAU, Vienna, UNIVIE). This will also be achieved naturally as part of the WP2, Study 2.2 investigation of particularly compelling art examples, which we anticipate will also include street art or other public installations. This task will be achieved with our project partners, and smaller researcher groups visiting the locations for 3-5 day stints of intense investigation. The public setting will also allow for ease of mobility and testing without need to negotiate access prior to assessment..... 19



Task 3.3: Comparison of marginalized and disengaged groups and general analysis of personality and background factors (lead: HUB; support: IFNU, Month 7-42)..... 19

Matched to WP2, Study 2.3, we will also expose participants from marginalized (recent non-EU immigrants) and art-disengaged communities to artworks found to be particularly transformative. Here we will also work with an ongoing project by IFNU to explore different groups in Berlin, and which will assist in providing access or identifying target marginalized or art-disengaged individuals. We will also assess all participants' background and inter-individual factors following Task 2.5 from WP2. 19

Task 3.4: Longitudinal impact of experience (lead: HUB; support: UNIVIE, AAU, Month 7-42) 19

A subset (target 10-25%) of participant will also be contacted 2 weeks and 4 weeks later to consider longer lasting impacts on behavior, mood, attitude from engaging the target artworks. This will follow the procedure and questions of WP2, Task 2.4. 19

Task 3.5: Mobile tracking of people throughout the city—How do people respond to aesthetic stimuli in everyday life, architecture and urban landmarks? (lead: IFNU; support: HUB, AAU, FDU, Month 7-42)..... 19

We will also use an experience sampling technique to monitor participants throughout their day and to record their interactions with the urban/aesthetic environment and switches from a pragmatic to an aesthetic engagement. This will overlap with WP4, Task 4.1 (experience sampling of general art engagements, described further below) and will focus on three cities (currently planned for Berlin, Belgrade, Aarhus/Copenhagen, N = 60 per city, divided into mainstream and marginalized communities). We will use special apps installed on individuals' mobile phones that will allow us to randomly contact participants throughout their day, identifying whether they have recently had interactions with art or aesthetic features in the environment (e.g., in the past five minutes have you encountered art or other design?), with follow-up questions regarding key emotion and cognitive aspects. These will be based on our refined list of core factors (WP2-3, Del. 3.3), allowing for the systematic identification of experience type. 19

This will be coupled with elicited short descriptions of the objects (or pictures taken by the phone camera). This procedure will allow us to address whether individuals are aware of urban art installations, or whether other aesthetic objects such as architecture or other landmarks elicit comparable types of experiences/impacts as those identified in WP2. By using geo-tracking, we will also create a map of art engagement throughout our target cities, which can be used for comparable contextual models for arts policy initiatives (see WP9). We will also pair the identification of aesthetic objects to surveys on current mood, wellbeing, and social attitudes. We will specifically focus on the impact of urban art on stress, wellbeing (focus of the Neurourbanism project partner IFNU), and acceptance of others. In addition, by monitoring both mainstream and marginalized groups, we can assess potential differences in response to the urban landscape, or whether presence of cultural symbols of marginalized groups, enhance their feeling of belonging to a city..... 20

The app is designed to require only a minimum of processing power and to work on virtually any smart phone currently on the market. market, thus avoiding, as much as possible, to systematically exclude or under-represent any target populations. We will make adjustments (employing a non-smart phone-based method) should this be deemed necessary..... 20



Task 3.6: Theoretical model revision, operationalization, quantification (lead: UNIVIE, Month 30-52) 20

Based on the results of WP2-3, the ARTIS team will then work in a final step to refine our theories and model of art experience and especially transformative varieties, incorporating the new evidence and especially multiple levels of physiological, brain, body, and attitude factors and lasting implications in order provide an actionable tool for stakeholder use. We will also operationalize the specific phenomenon of transformation through art by producing a refined model of the relevant psychological processes and specific self-report or physiological factors (primarily from the core items identified in WP2, Task 2.1 and WP3, T3.1) that can be used for its empirical identification (Del. 3.3)..... 20

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Explanation of the Work Carried Out in WP3 21

Due to the highly intertwined nature of the tasks listed above, this report will mainly contain and overview over the different projects that address several tasks at the same time. 21

Project A: NEAL+ 21

Lead: HUB Collected sample: N = 114..... 21

Collection date: September 2022, ongoing. 21

Setting/art type: Public art 21

Status: Ongoing data collection 21

The NEAL+ project used the questionnaire of the NEAL survey (Notable Emotions and Appraisals Lists: Base Survey with Emotions and Appraisal Lists) with an additional 9 questions, and were handed out to pedestrians at two public art sites in Berlin: At the exhibition, *Magical Hackerism* at SAVVY Contemporary, a public gallery in the Wedding district of Berlin, and in front of Haus der Statistik, an abandoned building in Alexanderplatz, Berlin with the lettering “Allesandersplatz” (“everything different-square”) written on top. Further studies are planned, amongst others at *The Statue of Limitations* in Wedding and in the Humboldt Forum. We also asked the participants if we could contact them after two and four weeks to assess the longitudinal impact of their art experiences..... 21

The study tested the transformative impact of public art on the behavior, mood, and attitude of the participants, and how the public artworks reflect back on the neighborhood and colonial history, etc. The results will be compared to the NEAL study conducted in museums in order to understand the difference between urban art and art in the museums. Whereas the participants found SAVVY Contemporary significantly more beautiful and saw it more as art than Allesandersplatz, both art works were seen as a good use of public space. Especially SAVVY Contemporary gave participants a new relation to the place. There is not enough post-survey data yet to see the long-term effects of the public artwork. We are planning to conduct similar studies in front of challenging architecture, such as the TV tower and the Rocket Tower, both in Berlin..... 22

Project B: NEAL+ murals 22

Lead: UNIVIE, HUB 22

Collected sample: N = 142..... 22



Collection date: June 2023 22

Setting/art type: Murals in Vienna and Berlin 22

Status: Ongoing data collection 22

For the NEAL+ murals project, students were assigned (in groups of 2-3) to one mural of four murals in total and asked to complete around 4 hours of data collection per week, over the course of 3 weeks. For this, the NEAL+ formular was used, in order to allow comparisons with the Berlin public art findings. Bad weather caused some problems and prevented some of the data collection. 3 of the 4 groups have about 45/50 responses, and the last one has 15, because this location was more of a commercial/shopping area, while the others were more residential and thus calmer to recruit people. 22

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Due to the weather conditions, more data will need to be collected. We are planning a similar study at murals in Berlin, amongst others, the so-called “meat façade,” a memorial of the Berlin wall, as well as murals at University of Pennsylvania, to compare with the results from WP2’s museum studies. 23

Task 3.1 / 3.1C Subjective experience interviews, micro-phenomenology; Assessment of physical actions, modes of engagement, enaction; Correlation to activations and social connections in the brain; Interventions to make public art more salient..... 23

Project C: Public Art Gallery: Study 1 (Nature-attitudes and Awareness) 23

Lead: UNIVIE, HUB 23

Collected sample: N = 49 (gallery visitors/street traffic) 23

Collection date: January to April 2021 23

Setting/art type: Urban setting, Galerie Wedding, Berlin, Exhibition “The Mine Gives, the Mine Takes,” installation art 23

Status: preliminary data analysis finished; results presented at international conferences (VSAC, IAEA); paper in preparation 23

During the Corona time, we have conducted several studies on specific implications from viewing art, especially as these impact societal challenges. Art show was curated to be perceived from the street level as “window exhibitions” due to Covid19 restrictions...... 23

One primary means of conducting research was with a key partner in Berlin. Our partner, the Galerie Wedding is located in the multicultural neighbourhood of Berlin Mitte. This typically operates as a free-to-the-public, community centered institution, which is in fact located in the corner of the Municipal government office, a few-minutes walk from Leopoldplatz. While the gallery was forced to close itself to entry, it was able to shift its operations to use its full length windows an interior space as a means of displaying art installations, which could be viewed from the outside as individuals passed by on the sidewalk. Thus, this provided a rare opportunity to continue our data collection. Further, the 2019-2020 exhibition program of the gallery was devoted to the exploration of the theme Soft Solidarity (SoS), proposing to the public artistic meditations on societal challenges. 24

In the current project, we focused on the exhibition within this program, “The Mine Gives, the Mine Takes,” by the artist Ana Alenso, curated by Solvej Helweg Ovesen. This tackled the



longstanding socio-economic crisis affecting Venezuela and connected this to the widespread gold mining activities. These topics were addressed through three main artworks creating a sculptural landscape within the gallery walls, where working mining machines showed the mechanisms of the mining and drew interest, a video installation intertwined images and videos shot from satellites with a documentary film about the mines in the southern Orinoco of the Venezuelan Amazon and its devastation, and another video installation drew a parallel to Gelsenkirchen, a German city with a long history in coal mining and similar environmental impacts. Information material was provided by brochures in English and German. 24

In interviews with the artist and curator, it was suggested that this work should specifically transform attitudes about impact of material possessions (gold) on the environment, leading to a reshuffling of values, and an awareness and sense of connection to a region that most viewers would never experience first-hand. 24

Data was collected from the outside foot-traffic, using a pre-/post-design with several dependent variables focused on Nature Awareness, Empathic Concern, Nature in Self, and mood. We also assessed evaluations and art experience. 24

Results suggested, indeed, significant impact from the exhibition on attitudes, with higher nature awareness post viewing, and significant change in how integrated individuals thought they were with nature, although, interestingly, reflecting a decrease. This reflects the aim of the artist in pointing out how detached we are from the natural implications of our actions (in this case buying gold or technology). Participants also showed some change in values, reducing hedonistic importance and increasing biospheric, further providing emerging evidence for the possibility and extent of transformative art. Two interesting findings were that the amount of felt emotions was central for attitude changes and that it was, in particular, emotions that the curator of the exhibition aimed at eliciting and not those of the artist that drove our effects. 25

Project D: Public Art Gallery: Study 1 (Neighborhood connectedness) Contemporary art, community connectedness; Is exhibition language a barrier to impact? 26

Lead: UNIVIE, HUB, AAU Collected sample: Survey N = 72, Observation/language N = 266 (street traffic) Collection date: April - May 2021, ongoing data processing. Setting/art type: Galerie Wedding, Berlin, Exhibition “Job Center. Aufgeladene Orte. Psychic Places” by artist Emily Hunt, curated by Solvej Helweg Ovesen 26

We also assessed a similar question involving specific impacts from gallery art on another societal challenge, involving sense of belonging and understanding of the community area. This involved an exhibition, once again at the Galerie Wedding in Berlin, again conducted during the middle of Covid lockdown conditions in Germany, and thus making use of the gallery’s movement to use their street-facing windows to allow and exhibition to be viewed from the street as individuals pass by on the sidewalk. The exhibition (“Job Center. Aufgeladene Orte. Psychic Places” by artist Emily Hunt, curated by Solvej Helweg Ovesen; 11th March 2021 - 29th May 2021) was concerned with personal stories concerning specific places in the neighborhood. This especially showcased a hand-drawn map of the area that participants could take with them and with the artist’s text and explanations on the back... 26

The exhibition’s intention, according to the interviews with artist and curator, was to present the local characters, the bizarre faces, and the energy of Berlin's Wedding district, and bring the visitors to explore the district with the map that depicts the spots which became emotional anchor points for many during the lockdown. Notably also, the area itself is again a blue-



collar region of Berlin with a high immigrant population. Thus, the exhibition had an ambitious aim of possibly serving as an ambassador to the area and to German/EU society in general..... 26

Participants (N = 71) were stopped on the street and asked if they would like to participate in exchange for a coffee voucher. As part of the overall experience, using a similar list of evaluations (Liking, beauty, interest, meaningfulness, would pay to see more art of this artwork, understanding) and emotion terms, we also assessed for changes in how connected and satisfied participants felt with their community, using a measure of connectedness between ‘community and self’. We also asked selected questions about the neighborhood (i.e., happiness with bus, food, people), and also measured mood/wellbeing and Empathic Concern. 27

Project E: Berlin Conversations on Mental Health..... 27

Lead: HUB, UOXF, IFNU 27

Collected sample: Qualitative study..... 27

Collection date: 15.10.2023 27

Setting/art type: Workshop and panel talk in connection to an exhibition..... 27

Status: Complete 27

As part of the exhibition, *YOYI! Care, Repair, Heal*, at Gropius Bau, ARTIS took part in organizing a workshop and panel talk to discuss togetherness in the city, in collaboration with the Wellcome Trust and Gropius Bau..... 27

The workshop took place in the atrium of Gropius Bau, which is also the only part of the museum that is public. Here, neighborhood initiatives, citizens, museum guests, other researchers, and ARTIS members discussed different questions revolving around the topic of how neighborhoods could enable good social togetherness in the city, as well as what role museums and cultural institutions had to play in this. Subsequently, the results of those discussions were taken up in a public panel, debating what neighborhood policies are needed. 27

Among others, we discussed the idea of “art as a prescription” as part of a mental health strategy, and how museums should engage more with the public and their surrounding neighborhoods. Some very specific recommendations were also made, for example, to (partly) remove or lower the pay wall, to allow alternative entrances to museums, since the main entrances can be intimidating, or to create a children-friendly environment. 27

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Project F: Your Emotional City..... 28

Lead: HUB, support IFNU 28

Collected sample: N = 919 (finished the baseline assessment in the APP “Your Emotional City”)..... 28

Collection date: since August 2022..... 28

Setting/art type: Berlin, worldwide..... 28

Status: ongoing data collection, descriptive statistics 28



We have spent 2020-2022 developing an app in collaboration between HUB, IFNU, and Charité University Medicine, based on an existing “Urban Mind App” of the UC London (<https://www.urbanmind.info/>). The app allows Ecological Momentary Assessment (EMA) as an experience sampling technique to monitor participants throughout their day (3 times a day for one week) and to record their interactions with both the private and semi-public spaces (home/work) and the urban/ public aesthetic environment (see Task 3.1. for the corresponding report). and switches from a pragmatic to an aesthetic engagement. 28

The App, “*Your Emotional City*,” which is also being framed as a citizen science project, has been launched in August 2022 (first data point collected. 28.8.2023) and has been tested and used in Berlin. We have focused on this local finetuning in one context, so facilitate future extensive use in different urban environments across Europe..... 28

The app also uses geo-tracking that allows to create a map of art engagement in every-day life and in public spaces throughout any target city, which can be used for comparable contextual models for arts policy initiatives (see WP9). It has become an important tool for WP3 as so far 57% of the 19.229 data point entries (assessed: 21.6.2023) were collected when participants were out in the city. In 2023 we added the question: “Do you see any art around you?” which in 76% of the assessments has been answered with “yes.” 28

Data analysis has started in June 2023 and will continue while the app will be rolled out to other cities. A focus will be on the interaction of aesthetic measures (“interestingness,” “beauty”) and art presence with well-being (“happy,” “stressed,” etc.). This gives additional experience sampling data for “Art in Urban Settings” and the potential data-driven differences in participants with different socio-economic, migration, etc. backgrounds with respect to those measures. This app will also overlap with WP4 and be used for the experience sampling of art in every-day life and with WP2 for longitudinal assessments. 29

Project G: Ongoing assessments of the Body— Mutualities exhibition, 17th International Architecture Exhibition Venice Biennale Architettura 2021 29

**Lead: UNIVIE, HUB, IFNU Collected sample: N = 216 (Venice visitors; general population)
Colleciton Date: 2021, 2022 Setting/art type: architectural installation, Mutualities exhibition
(The Future of Neurourbanism, in partnership with the Interdisciplinary Forum
Neurourbanism e.V. and the architecture group Space Council), collateral event at the 17th
International Architecture Exhibition Biennale Architettura 2021 Venice, Italy. 29**

In 2022, we also had the opportunity to discuss and further pilot using the movement tracker technology as part of a dynamic installation presenting viewers in a gallery space with projections of future urban public spaces, and with the tracker meant to allow for online assessment and dynamic adjustment based on viewer movement patterns and the conditions of the installation itself. In this proof of concept, we discussed and planned about how architecture and art installations have the ability to change attitudes about future cities, urbanism and living together..... 29

Project H: An Afterlife for Life 29

Lead: AAU 29

Collected sample: N = 27 (Micro-Phenomenological interviews, museum visitors), plus field observation..... 29

Setting/art type: Installation artwork, “Life,” by Olafur Eliasson, Foundation Beyeler, Basel 30



Collection/Observation date: June 2021 30

Our partner at Aarhus University conducted interview studies at the installation artwork “Life” by Olafur Eliasson, Foundation Beyeler, Basel. This involved, as a response to Corona lockdown measures, the opening of buildings at the foundation to the outside, their flooding with fluorescent pondwater and the introduction of a temporary biome that was open for visits 24 hours a day, 17 of which without paying an entrance fee. Analyses of interviews and observations clearly showed that such intervention elicit powerful reflection on the distinction of nature and culture and humans’ interaction with nature, but also became a point of community interaction during the lockdowns, with visitors coming to congregate on the grass in front of the works. The museum became an inviting public space rather than the peaceful but elitist grounds it normally offers, an experience that left a lasting impression in those living it. This is powerfully expressed by the following participant quote sharing their experience of a visit versus the end of the exhibition period: 30

“I saw this blue shimmering dragonfly, incredibly large, something I had not seen before here. And I was glad, that it (the art work/Olafur’s intention with it) finally worked out: That life installed itself there, took over the place, (I was glad) that it is nice that it is continuing doing this. And with this thought, there comes this other one: It won’t! In four weeks this is over. In that moment I felt like a compassion for this dragonfly: Now she likes it here, has built up her territory and then this will disappear. She will have to find herself a new place. So, the installation – it opens up a room, but it plays also a bit with the creatures. [...] It was like a slightly stinging feeling, a bad aftertaste, slightly bitter, maybe. Like: not easily digestible. [...] Maybe it has something to do with the fact, that I in any case have a hard time to imagine that, in a few weeks time, the water will just be drained again, the panes set in again and everything will be as it was before. [...] It is a painful knowledge. A stifling feeling. A bit as if a cloth would be put on the whole experience. [...] The installation, it opened something. Gave access. And now we will be cut off again. It is like building up a wall, separating two parts that were connected. That was a nice feeling, this connectedness from inside and outside. This feeling that you were always welcome. And I am left with this memory that it was open. I think that won’t leave me anymore. I won’t be able to use those rooms anymore without thinking of this. (bitter tone, tears in their eyes)”..... 31

The experiential data that was collected has been used to develop a website with the artist to allow the installation a life also after its removal in summer 22. The page can be visited here: 31

<https://experiencing-life.net/> 31

Project I: Surveys at Futurium (Futurium Birthday, “Art and the City”) 31

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Lead: HUB, support IFNU 32

Collected sample: N = 102 (finished the baseline assessment in the APP “Your Emotional City”)..... 32

Collection date: 17.11.2022 32

Setting/art type: Berlin, event. 32

Status: Descriptive statistics. 32



ARTIS and IFNU discussed and explored citizens’ aesthetic and affective experience of the urban environment at a Citizen Science event at the birthday celebration of FUTURIUM Berlin. During the FUTURIUM event, we invited visitors to get a first taste of the *Your Emotional City!* app. In an interactive online survey visitors could rate their affective and aesthetic experience of urban spaces and see the results in real time on screen. Some questions regarded familiar places in Berlin, others were taken from previous psychological and neuroscientific studies on the built environment. The results were discussed in light of personal experiences and past research findings..... 32

Throughout the event, visitors could indicate their individual places of stress and well-being on an analog map of the city so that slowly but surely an emotional map of Berlin emerged. The map clearly showed how cities such as Berlin can be very stressful indeed, while also providing opportunities for restoration and stimulation. The aim of “Your Emotional City” is thus not only to identify factors that contribute to stress and poor health, but to reveal and promote the positive aspects of city living, too. For more info, see: <https://artis-h2020.eu/citizen-science-event-in-berlin> 32

Conclusion..... 32



Version history

	Version	Date	Submitted by	Checked by/Notes
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Updated/Annex to EU				



A Brief Introduction—ARTIS and Empirical Studies

ARTIS (Art and Research on Transformations of Individuals and Societies) is an EU REA Horizon 2020-funded project under the call “*TRANSFORMATIONS-SC6-2019: Societal challenges and the arts.*” We represent a first-of-its-kind consortium of research institutions in the social sciences, Art History, Philosophy, Art education, and Art and Cultural Policy with the collective aim of addressing, and systematically assessing, applying, and informing better policy regarding, some of the most persistent yet undefined aspects of art’s potentially important role in human society.

ARTIS argues that to make better policy that advances art’s efficacy, it is necessary to build a systematic program that combines empirical and theoretical research with perspectives of artists, art educators, and other art stakeholders. This requires us to: **Integrate** state-of-the-art empirical approaches from psychology, neuroscience, and phenomenology to conduct a series of investigations that identify specific types of experiences with art. **Connect** these to changes at individual (neurocognitive, emotional, health) and societal (prosocial and political attitudes) levels. **Capture** these experiences in different settings across countries in people’s everyday life. **Contextualize** and challenge the empirical data using theoretical approaches from philosophy as well as political science and art criticism. **Combine** this empirical and theoretical focus with a series of interventions, workshops, and experimentations co-created with art schools, artists, and galleries. **Translate** the insights gained into policy guidelines disseminated by key stakeholders in art and culture.

As can be seen, connecting empirical findings across WPs is a central goal of ARTIS. Furthermore, understanding the sociopolitical context of art engagement is crucial to identifying characteristics that may promote or obstruct European community resilience through the arts.

The current report combines insights gained through the empirical activities of WPs 2-5, focusing on the sociodemographic profile of participants who engage with the arts, and compares those to the findings of a large cross-cultural study conducted across the member states of the European Union. In the following, we provide an overview of the WP6 Objectives and the focal task of this report, Task 6.2, and report on the results of the European Values Survey followed by the results of WPs 2-5.



WP3—Values, Enaction, Society

Figure 1 shows the overall organization of ARTIS with its 9 WPs. WP3 is part of the CAPTURE aspect of ARTIS, aiming at empirically investigating art experiences (see also grant agreement, p 36). While WP2 attends specifically to art experiences in traditional museum settings and WP4 to art experiences that occur as part of our working and home life, WP focuses on art in the public realm especially of urban settings employing a multitude of different methods.

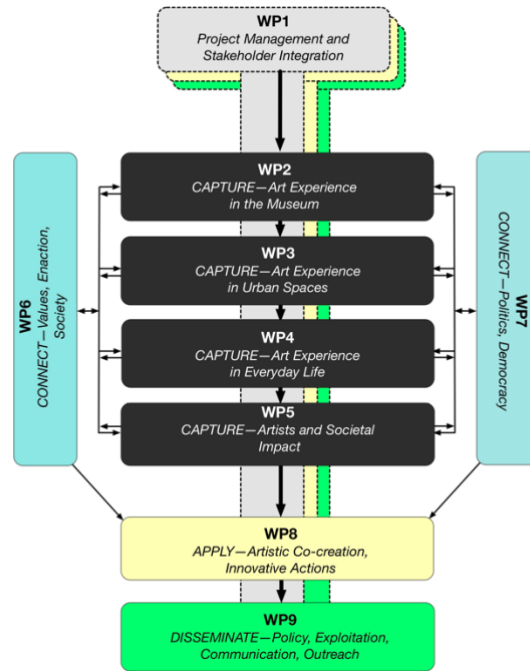


Figure 1. Overall Organization of ARTIS Project

WP3 Overview and Objectives

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In WP3, a series of studies have been conducted regarding art in urban spaces (based on list from WP1), focusing on residents of the local areas and considering their everyday interaction with the art.

Objectives:

- Create a map of emotional/cognitive factors in art experience with urban artworks and identification of specific experience types, linked to the same measures (from WP2) of lasting change at the level of health, outlook, prosocial attitudes, physiology.
- Provide point of comparison/contrast to institutional art: Are the experiences had in the urban environment as well as their lasting impacts and incidences of transformation similar to those found in museums? What are the overlaps and differences?
- Compare similar studies with selected compelling artwork examples meeting H2020 call (from WP1), quantifying their actual impact and modes of engagement in relation to baseline sample, as well as use bottom-up data driven method to identify most impactful/transformational artworks from a larger set.
- Apply interview, micro-phenomenology, and experience sampling to also track how encountering art pieces spontaneously might modulate everyday life routines or activities. Also take a more expansive view of art's typical definition to consider other design, architecture, or urban monuments, and explore their ability to act as points of general disruption or modulation throughout daily/working life.
- Consider marginalized and disengaged community members and record personality/background, taste, identity data on all participants to identify key context factors or barriers/alternative modes of encountering/responding to art.
- Combine WP2-3 findings to operationalize the psychological process of transformation, key contextual modulating factors, and create a "short battery" of key self-report factors that can be used to quickly identify an experience type for use in future empirical studies

WP3 - Objectives matched to projects

For WP3 we stated the following objectives:



1. Create a map of emotional/cognitive factors in art experience with urban artworks and identification of specific experience types, linked to measures from WP2 of lasting change at the level of health, outlook, prosocial attitudes, physiology.
 - **Project A: Your Emotional City:** Created a map of urban art experiences in Berlin, as well as their impacts on health and attitudes. Data collection is ongoing; initial descriptive analysis is done.
 - **Project B: Surveys at Futurium (Futurium Birthday, “Art and the City”):** Created an analogue map over stress and well-being in Berlin in a Citizen Science approach
2. Provide point of comparison/contrast to institutional art: Are the experiences had in the urban environment as well as their lasting impacts and incidences of transformation similar to those found in museums (WP2)? What are the overlaps and differences?
 - **Project C: NEAL+**
 - **Project D: NEAL+ murals**
 - Both projects used the same New Emotions and Assessmens List (NEAL) that has been developed in WP2 & 6 in order to allow comparison between institutional and urban art.
3. Compare similar studies with selected compelling artwork examples meeting H2020 call (from WP1), quantifying their actual impact and modes of engagement in relation to baseline sample, as well as use bottom-up data driven methods to identify most impactful/transformational artworks from a larger set.
 - **Project C: NEAL+**
 - **Project D: NEAL+ murals**
 - NEAL+ as base survey for impact of art has been comined with compelling artworks within two partner cities (Berlin and Vienna)
4. Apply interview, micro-phenomenology, and experience sampling to also track how encountering art pieces spontaneously might modulate everyday life routines or activities. Also take a more expansive view of art's typical definition to consider other design, architecture, or urban monuments, and explore their ability to act as points of general disruption or modulation throughout daily/working life.



This project has received funding from the European Union's Horizon 2020 research and innovation program under grant agreement No 870827



on health and wellbeing. Data collection is ongoing; initial descriptive analysis is done.

Consider marginalized and disengaged community members and record personality/background, taste, identity data on all participants to identify key context factors or barriers/alternative modes of encountering/responding to art.

- **Project A: Your Emotional City:** The “Your Emotional City” app sampled has been translated into Turkish, Arabic, Russian to target Migration communities in Berlin. Data collection is ongoing; initial descriptive analysis is done.
- **Project F: Public Art Gallery: Neighborhood connectedness:** Addressed language barriers in public art in a neighborhood with a large Turkish community.
- **Project I: An Afterlife for Life:** Showed how removing the paywall could create a new use of a space that was previously only used as a museum (working with a recent migrant community).
- **Project G: Berlin Conversations on mental health:** Discussed how museums could become more accessible and engaging with diverse neighborhoods.

Combine WP2-3 findings to operationalize the psychological process of transformation, key contextual modulating factors, and create a "short battery" of key self-report factors that can be used to quickly identify an experience type for use in future empirical studies.

Project C: NEAL+

Project D: NEAL+ murals

- Both projects were originally set up to work with shorter batteries. Methodological considerations had the ARTIS consortium change the plan to a more comprehensive data assessment,



WP3 Proposed Tasks

Task 3.1/3.1B: Empirical data collection—art experiences in the street—do these engender the same types and the same proportions of experience? What are the implications for self, perspectives, and health? (lead: HUB; support: UNIVIE, IFNU, RHUL, Month 7-42)

Once again, the main empirical core of this WP will constitute a systematic collection of data on individual participants' interactions with art in urban environments—in street/street-level gallery/neighborhood context. This will use a comparable procedure to that of WP2 (Museum) Studies 2A to 2D. A representative selection of street art examples (selection of the 15-20, included in list from WP1), focusing primarily on the Berlin area will be tested with individuals who naturally encounter the artworks as part of their everyday routines (N = 100+ per artwork). We will use the same procedures and matched pre- and post-art engagement self reports and surveys of emotional, cognitive, appraisal, and meaning factors matched with network analysis to create a map of general art engagement and to identify specific experience types, including transformations. These will be compared to and combined with the results from WP2.

Task 3.1B: We will (as in WP2) empirically connect the types of art experience to lasting changes (as assessed through behavioral and physiological measures) in: health, mood, psychology, brain, self-identity (HUB, see WP6), physiology/interoception (RHUL, UNIVIE), social attitudes/stereotyping, and political attitudes (RHUL, see WP7) in immediate and longitudinal perspectives. Results will be compared to the institutional/museum setting.

Task 3.1C: Subjective experience interviews, micro-phenomenology (lead: AAU; support: HUB); Assessment of physical actions, modes of engagement, enaction (lead: HUB; support: AAU, UNIVIE); Correlation to activations and social connections in the brain (lead: UNIVIE) (all Month 7-42).

As in WP2, we will also expand past basic self-report survey measures. A portion of participants (10-15% as in WP2) will be assessed via micro-phenomenology to further explore subjective experience and role of previous aesthetic experiences, expectations or general awareness of urban art as individuals go about their days. Also, interventions to make public art more salient will be considered.

Participants (15-25% of Task 3.1 totals) will also be assessed using a 4E perspective, as well as via mobile eye- or movement-tracking to consider modes of engagement and how viewers move about the art/how art might modulate or even disrupt physical everyday actions and movements. Participants (N = 30 per artwork) will also be assessed via fNIRS to consider the relation to brain activations, levels, with results once again combined to paint a nuanced picture of experience and matched to the institutional art settings.

Task 3.2: Compelling examples; testing in other geographic cultural locations (lead: HUB; support: UNIVIE, AAU, Month 7-42)



As above, we will also leave open the possibility to consider urban locations outside of Berlin/DE in order to provide a point of comparison and explore modes of interaction over a geographically and culturally diverse area (Belgrade, FDU, Bucharest, A. Pirici, London, Tino Sehgal, Aarhus, AAU, Vienna, UNIVIE). This will also be achieved naturally as part of the WP2, Study 2.2 investigation of particularly compelling art examples, which we anticipate will also include street art or other public installations. This task will be achieved with our project partners, and smaller researcher groups visiting the locations for 3-5 day stints of intense investigation. The public setting will also allow for ease of mobility and testing without need to negotiate access prior to assessment.

Task 3.3: Comparison of marginalized and disengaged groups and general analysis of personality and background factors (lead: HUB; support: IFNU, Month 7-42)

Matched to WP2, Study 2.3, we will also expose participants from marginalized (recent non-EU immigrants) and art-disengaged communities to artworks found to be particularly transformative. Here we will also work with an ongoing project by IFNU to explore different groups in Berlin, and which will assist in providing access or identifying target marginalized or art-disengaged individuals. We will also assess all participants' background and inter-individual factors following Task 2.5 from WP2.

Task 3.4: Longitudinal impact of experience (lead: HUB; support: UNIVIE, AAU, Month 7-42)

A subset (target 10-25%) of participant will also be contacted 2 weeks and 4 weeks later to consider longer lasting impacts on behavior, mood, attitude from engaging the target artworks. This will follow the procedure and questions of WP2, Task 2.4.

Task 3.5: Mobile tracking of people throughout the city—How do people respond to aesthetic stimuli in everyday life, architecture and urban landmarks? (lead: IFNU; support: HUB, AAU, FDU, Month 7-42)

We will also use an experience sampling technique to monitor participants throughout their day and to record their interactions with the urban/aesthetic environment and switches from a pragmatic to an aesthetic engagement. This will overlap with WP4, Task 4.1 (experience sampling of general art engagements, described further below) and will focus on three cities (currently planned for Berlin, Belgrade, Aarhus/Copenhagen, N = 60 per city, divided into mainstream and marginalized communities). We will use special apps installed on individuals' mobile phones that will allow us to randomly contact participants throughout their day, identifying whether they have recently had interactions with art or aesthetic features in the environment (e.g., in the past five minutes have you encountered art or other design?), with follow-up questions regarding key emotion and cognitive aspects. These will be based on our refined list of core factors (WP2-3, Del. 3.3), allowing for the systematic identification of experience type.



This will be coupled with elicited short descriptions of the objects (or pictures taken by the phone camera). This procedure will allow us to address whether individuals are aware of urban art installations, or whether other aesthetic objects such as architecture or other landmarks elicit comparable types of experiences/impacts as those identified in WP2. By using geo-tracking, we will also create a map of art engagement throughout our target cities, which can be used for comparable contextual models for arts policy initiatives (see WP9). We will also pair the identification of aesthetic objects to surveys on current mood, wellbeing, and social attitudes. We will specifically focus on the impact of urban art on stress, wellbeing (focus of the Neurourbanism project partner IFNU), and acceptance of others. In addition, by monitoring both mainstream and marginalized groups, we can assess potential differences in response to the urban landscape, or whether presence of cultural symbols of marginalized groups, enhance their feeling of belonging to a city.

The app is designed to require only a minimum of processing power and to work on virtually any smart phone currently on the market. market, thus avoiding, as much as possible, to systematically exclude or under-represent any target populations. We will make adjustments (employing a non-smart phone-based method) should this be deemed necessary.

Task 3.6: Theoretical model revision, operationalization, quantification (lead: UNIVIE, Month 30-52)

Based on the results of WP2-3, the ARTIS team will then work in a final step to refine our theories and model of art experience and especially transformative varieties, incorporating the new evidence and especially multiple levels of physiological, brain, body, and attitude factors and lasting implications in order provide an actionable tool for stakeholder use. We will also operationalize the specific phenomenon of transformation through art by producing a refined model of the relevant psychological processes and specific self-report or physiological factors (primarily from the core items identified in WP2, Task 2.1 and WP3, T3.1) that can be used for its empirical identification (Del. 3.3).



Explanation of the Work Carried Out in WP3

Due to the highly intertwined nature of the tasks listed above, this report will mainly contain an overview over the different projects that address several tasks at the same time.

Project A: NEAL+

Lead: HUB

Collected sample: N = 114

Collection date: September 2022, ongoing.

Setting/art type: Public art

Status: Ongoing data collection

The NEAL+ project used the questionnaire of the NEAL survey (Notable Emotions and Appraisals Lists: Base Survey with Emotions and Appraisal Lists) with an additional 9 questions, and were handed out to pedestrians at two public art sites in Berlin: At the exhibition, *Magical*



Figure 2: From the exhibition, 'Magical Hackerism'

experiences.

How beautiful is the place you where you are at?	1 2 3 4 5	
Not at all beautiful	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Very beautiful
How interesting do you find the place where you are at?	1 2 3 4 5	
Not at all interesting	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Very interesting
How dense do you experience the place you are in right now?	1 2 3 4 5	
Not at all dense	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Very dense
Would this object normally catch your eye while walking past?	1 2 3 4 5	
Not at all	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Very much
Would you consider the object art?	1 2 3 4 5	
Not at all	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Very much
Do you experience a special connection to this place through looking at the object?	1 2 3 4 5	
Not at all	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Very much
Do you think this object is a good use of the Public Space?	1 2 3 4 5	
It is a waste of space	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	It is a great use of space
Would you prefer that this space instead contain nature (trees, greenery)?	1 2 3 4 5	
Absolutely not	<input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/> <input type="radio"/>	Absolutely, I would
Have you ever spent time looking at this object before today?		
Yes	<input type="radio"/>	No <input type="radio"/>

Figure 1: Additional questions for NEAL+

Hackerism at SAVVY Contemporary, a public gallery in the Wedding district of Berlin, and in front of Haus der Statistik, an abandoned building in Alexanderplatz, Berlin with the lettering “Allesandersplatz” (“everything different-square”) written on top. Further studies are planned, amongst others at *The Statue of Limitations* in Wedding and in the Humboldt Forum. We also asked the participants if we could contact them after two and four weeks to assess the longitudinal impact of their art



The study tested the transformative impact of public art on the behavior, mood, and attitude of the participants, and how the public artworks reflect back on the neighborhood and colonial history, etc. The results will be compared to the NEAL study conducted in museums in order to understand the difference between urban art and art in the museums. Whereas the participants found SAVVY Contemporary significantly more beautiful and saw it more as art than Allesandersplatz, both art works were seen as a good use of public space. Especially SAVVY Contemporary gave participants a new relation to the place. There is not enough post-survey data yet to see the long-term effects of the public artwork. We are planning to conduct similar studies in front of challenging architecture, such as the TV tower and the Rocket Tower, both in Berlin.



Figure 3: Hannah Kruft in front of Allesandersplatz

Project B: NEAL+ murals

Lead: UNIVIE, HUB

Collected sample: N = 142

Collection date: June 2023

Setting/art type: Murals in Vienna and Berlin

Status: Ongoing data collection



Figure 9: Some of the murals used for data collection in Vienna

For the NEAL+ murals project, students were assigned (in groups of 2-3) to one mural of four murals in total and asked to complete around 4 hours of data collection per week, over the course of 3 weeks. For this, the NEAL+ formular was used, in order to allow comparisons with the Berlin public art findings. Bad weather caused some problems and prevented some of the data collection. 3 of the 4 groups have about 45/50 responses, and the last one has 15, because this location was more of a commercial/shopping area, while the others were more residential and thus calmer to recruit people.



Due to the weather conditions, more data will need to be collected. We are planning a similar study at murals in Berlin, amongst others, the so-called “meat façade,” a memorial of the Berlin wall, as well as murals at University of Pennsylvania, to compare with the results from WP2’s museum studies.



Figure 10: "Fleischfassade" for planned future mural study in Berlin.

Task 3.1 / 3.1C Subjective experience interviews, micro-phenomenology;

Assessment of physical actions, modes of engagement, enaction; Correlation to activations and social connections in the brain; Interventions to make public art more salient

Project C: Public Art Gallery: Study 1 (Nature-attitudes and Awareness)

Lead: UNIVIE, HUB

Collected sample: N = 49 (gallery visitors/street traffic)

Collection date: January to April 2021

Setting/art type: Urban setting, Galerie Wedding, Berlin, Exhibition “The Mine Gives, the Mine Takes,” installation art

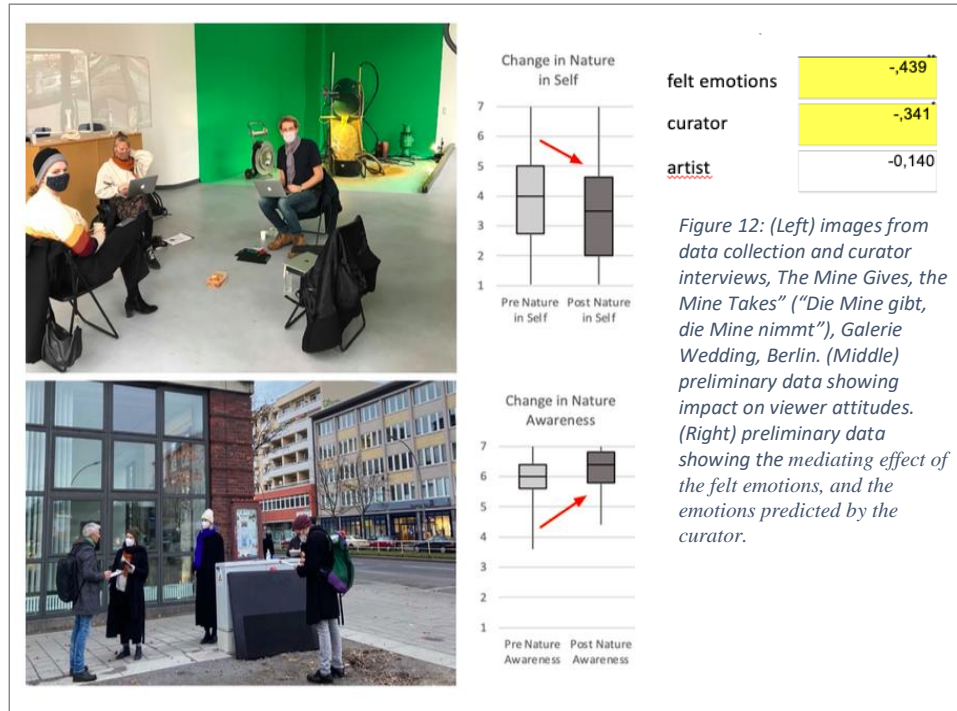
Status: preliminary data analysis finished; results presented at international conferences (VSAC, IAEA); paper in preparation



Figure 11: (Left) Exhibition poster, *The Mine Gives, the Mine Takes* (“Die Mine gibt, die Mine nimmt”), Galerie Wedding, Berlin, curated by Solvej Helweg Ovesen; artist Ana Alenso (image from Galerie Wedding). (Right) photos of exhibition and gallery exterior (images by authors).

During the Corona time, we have conducted several studies on specific implications from viewing art, especially as these impact societal challenges. Art show was curated to be perceived from the street level as “window exhibitions” due to Covid19 restrictions.

One primary means of conducting research was with a key partner in Berlin. Our partner, the Galerie Wedding is located in the multicultural neighbourhood of Berlin Mitte. This typically operates as a free-to-the-public, community centered institution, which is in fact located in the corner of the Municipal



government office, a few-minutes walk from Leopoldplatz. While the gallery was forced to close itself to entry, it was able to shift its operations to use its full length windows an interior space as a means of displaying art installations, which could be viewed from the outside as individuals passed by on the sidewalk. Thus, this provided a rare opportunity to continue our data collection. Further, the 2019-2020 exhibition program of the gallery was devoted to the exploration of the theme Soft Solidarity (SoS), proposing to the public artistic meditations on societal challenges.

In the current project, we focused on the exhibition within this program, “The Mine Gives, the Mine Takes,” by the artist Ana Alenso, curated by Solvej Helweg Ovesen. This tackled the longstanding socio-economic crisis affecting Venezuela and connected this to the widespread gold mining activities. These topics were addressed through three main artworks creating a sculptural landscape within the gallery walls, where working mining machines showed the mechanisms of the mining and drew interest, a video installation intertwined images and videos shot from satellites with a documentary film about the mines in the southern Orinoco of the Venezuelan Amazon and its devastation, and another video installation drew a parallel to Gelsenkirchen, a German city with a long history in coal mining and similar environmental impacts. Information material was provided by brochures in English and German.

In interviews with the artist and curator, it was suggested that this work should specifically transform attitudes about impact of material possessions (gold) on the environment, leading to a reshuffling of values, and an awareness and sense of connection to a region that most viewers would never experience first-hand.

Data was collected from the outside foot-traffic, using a pre-/post-design with several dependent variables focused on Nature Awareness, Empathic Concern, Nature in Self, and mood. We also assessed evaluations and art experience.



Results suggested, indeed, significant impact from the exhibition on attitudes, with higher nature awareness post viewing, and significant change in how integrated individuals thought they were with nature, although, interestingly, reflecting a decrease. This reflects the aim of the artist in pointing out how detached we are from the natural implications of our actions (in this case buying gold or technology). Participants also showed some change in values, reducing hedonistic importance and increasing biospheric, further providing emerging evidence for the possibility and extent of transformative art. Two interesting findings were that the amount of felt emotions was central for attitude changes and that it was, in particular, emotions that the curator of the exhibition aimed at eliciting and not those of the artist that drove our effects.



Project D: Public Art Gallery: Study 1 (Neighborhood connectedness) Contemporary art, community connectedness; Is exhibition language a barrier to impact?

Lead: UNIVIE, HUB, AAU

Collected sample: Survey N = 72, Observation/language N = 266 (street traffic)

Collection date: April - May 2021, ongoing data processing.

Setting/art type: Galerie Wedding, Berlin, Exhibition “*Job Center. Aufgeladene Orte. Psychic Places*” by artist Emily Hunt, curated by Solvej Helweg Ovesen

We also assessed a similar question involving specific impacts from gallery art on another societal challenge, involving sense of belonging and understanding of the community area. This involved an exhibition, once again at the Galerie Wedding in Berlin, again conducted during the middle of Covid lockdown conditions in Germany, and thus making use of the gallery’s movement to use their street-facing windows to allow an exhibition to be viewed from the street as individuals pass by on the sidewalk. The exhibition (“*Job Center. Aufgeladene Orte. Psychic Places*” by artist Emily Hunt, curated by Solvej Helweg Ovesen; 11th March 2021 - 29th May 2021) was concerned with personal stories concerning specific places in the neighborhood. This especially showcased a hand-drawn map of the area that participants could take with them and with the artist’s text and explanations on the back.



The exhibition’s intention, according to the interviews with artist and curator, was to present the local characters, the bizarre faces, and the energy of Berlin’s Wedding district, and bring the visitors to explore the district with the map that depicts the spots which became emotional anchor points for many during the lockdown.

Notably also, the area itself is again a blue-collar region of Berlin with a high immigrant population. Thus, the exhibition had an ambitious aim of possibly serving as an ambassador to the area and to German/EU society in general.



Participants (N = 71) were stopped on the street and asked if they would like to participate in exchange for a coffee voucher. As part of the overall experience, using a similar list of evaluations (Liking, beauty, interest, meaningfulness, would pay to see more art of this artwork, understanding) and emotion terms, we also assessed for changes in how connected and satisfied participants felt with their community, using a measure of connectedness between ‘community and self’. We also asked selected questions about the neighborhood (i.e., happiness with bus, food, people), and also measured mood/wellbeing and Empathic Concern.

Project E: Berlin Conversations on Mental Health

Lead: HUB, UOXF, IFNU

Collected sample: Qualitative study.

Collection date: 15.10.2023

Setting/art type: Workshop and panel talk in connection to an exhibition.

Status: Complete



Figure 15: The Resonance Room at Gropius Bau

As part of the exhibition, *YOYI! Care, Repair, Heal*, at Gropius Bau, ARTIS took part in organizing a workshop and panel talk to discuss togetherness in the city, in collaboration with the Wellcome Trust and Gropius Bau.



Figure 16: Panel debate

The workshop took place in the atrium of Gropius Bau, which is also the only part of the museum that is public. Here, neighborhood initiatives, citizens, museum guests, other researchers, and ARTIS members discussed different questions revolving around the topic of how neighborhoods could enable good social togetherness in the city, as well as what role museums and cultural institutions had to play in this. Subsequently, the results of those discussions were taken up in a public panel, debating what neighborhood policies are needed.

Among others, we discussed the idea of “art as a prescription” as part of a mental health strategy, and how museums should engage more with the public and their surrounding neighborhoods. Some very specific recommendations were also made, for example, to (partly) remove or lower the pay wall, to allow alternative entrances to museums, since the main entrances can be intimidating, or to create a children-friendly environment.



Project F: Your Emotional City

Lead: HUB, support IFNU

Collected sample: N = 919 (finished the baseline assessment in the APP “Your Emotional City”)

Collection date: since August 2022

Setting/art type: Berlin, worldwide

Status: ongoing data collection, descriptive statistics

We have spent 2020-2022 developing an app in collaboration between HUB, IFNU, and Charité University Medicine, based on an existing “Urban Mind App” of the UC London (<https://www.urbanmind.info/>). The app allows Ecological Momentary Assessment (EMA) as an experience sampling technique to monitor participants throughout their day (3 times a day for one week) and to record their interactions with both the private and semi-public spaces (home/work) and the urban/ public aesthetic environment (see Task 3.1. for the corresponding report). and switches from a pragmatic to an aesthetic engagement.

The App, “Your Emotional City,” which is also being framed as a citizen science project, has been launched in August 2022 (first data point collected. 28.8.2023) and has been tested and used in Berlin. We have focused on this local finetuning in one context, so facilitate future extensive use in different urban environments across Europe.

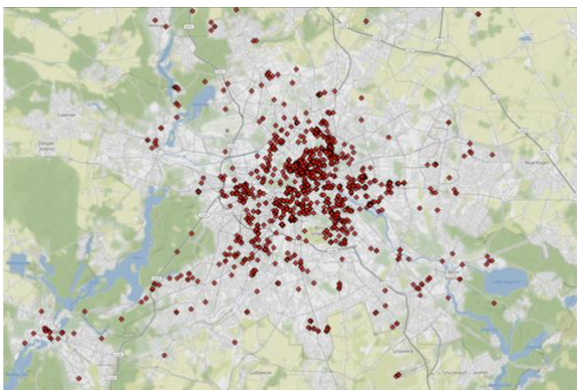


Figure 3: Data points collected in Berlin with the App “Your Emotional City”, by June 2023



Figure 2: Logo and new Cooperations-Partner (Charité University Medicine; TU Berlin) for the Citizen Science approach: “Your Emotional City!”

The app also uses geo-tracking that allows to create a map of art engagement in every-day life and in public spaces throughout any target city, which can be used for comparable contextual models for arts policy initiatives (see WP9). It has become an important tool for WP3 as so far 57% of the 19.229 data point entries (assessed: 21.6.2023) were collected when participants were out in the city. In 2023 we added the question: “Do you see any art around you?” which in 76% of the assessments has been answered with “yes.”

Data analysis has started in June 2023 and will continue while the app will be rolled out to other cities. A focus will be on the interaction of aesthetic measures (“interestingness,” “beauty”) and art presence with well-being (“happy,” “stressed,” etc.). This gives additional experience sampling data for “Art in Urban Settings” and the potential data-driven differences in participants with different socio-economic, migration, etc. backgrounds with respect to those measures. This app will also overlap with WP4 and be used for the experience sampling of art in every-day life and with WP2 for longitudinal assessments.

Project G: Ongoing assessments of the Body— Mutualities exhibition, 17th International Architecture Exhibition Venice Biennale Architettura 2021

Lead: UNIVIE, HUB, IFNU

Collected sample: N = 216 (Venice visitors; general population)

Collection Date: 2021, 2022

Setting/art type: architectural installation, Mutualities exhibition (The Future of Neurourbanism, in partnership with the Interdisciplinary Forum Neurourbanism e.V. and the architecture group Space Council), collateral event at the 17th International Architecture Exhibition Biennale Architettura 2021 Venice, Italy.



Figure 17: Images from Mutualities exhibition (The Future of Neurourbanism, in partnership with the Interdisciplinary Forum Neurourbanism e.V. and the architecture group SpaceCouncil), collateral event at the 17th International Architecture Exhibition Biennale

In 2022, we also had the opportunity to discuss and further pilot using the movement tracker technology as part of a dynamic installation presenting viewers in a gallery space with projections of future urban public spaces, and with the tracker meant to allow for online assessment and dynamic adjustment based on viewer movement patterns and the conditions of the installation itself. In this proof of concept, we discussed and planned about

how architecture and art installations have the ability to change attitudes about future cities, urbanism and living together.

Project H: An Afterlife for Life

Lead: AAU

Collected sample: N = 27 (Micro-Phenomenological interviews, museum visitors), plus field observation



Setting/art type: Installation artwork, “Life,” by Olafur Eliasson, Foundation Beyeler, Basel
Collection/Observation date: June 2021

Our partner at Aarhus University conducted interview studies at the installation artwork “Life” by Olafur Eliasson, Foundation Beyeler, Basel. This involved, as a response to Corona lockdown measures, the opening of buildings at the foundation to the outside, their flooding with fluorescent pondwater and the introduction of a temporary biome that was open for visits 24 hours a day, 17 of which without paying an entrance fee. Analyses of interviews and observations clearly showed that such intervention elicit powerful reflection on the distinction of nature and culture and humans’ interaction with nature, but also became a point of community interaction during the lockdowns, with visitors coming to congregate on the grass in front of the works. The museum became an inviting public space rather than the peaceful but elitist grounds it normally offers, an experience that left a lasting impression in those living it. This is powerfully expressed by the following participant quote sharing their experience of a visit versus the end of the exhibition period:



“I saw this blue shimmering dragonfly, incredibly large, something I had not seen before here. And I was glad, that it (the art work/Olafur’s intention with it) finally worked out: That life installed itself there, took over the place, (I was glad) that it is nice that it is continuing doing this. And with this thought, there comes this other one: It won’t! In four weeks this is over. In that moment I felt like a compassion for this dragonfly: Now she likes it here, has built up her territory and then this will disappear. She will have to find herself a new place. So, the installation – it opens up a room, but it plays also a bit with the creatures. [...] It was like a slightly stinging feeling, a bad aftertaste, slightly bitter, maybe. Like: not easily digestible. [...] Maybe it has something to do with the fact, that I in any case have a hard time to imagine that, in a few weeks time, the water will just be drained again, the panes set in again and everything will be as it was before. [...] It is a painful knowledge. A stifling feeling. A bit as if a cloth would be put on the whole experience. [...] The installation, it opened something. Gave access. And now we will be cut off again. It is like building up a wall, separating two parts that were connected. That was a nice feeling, this connectedness from inside and outside. This feeling that you were always welcome. And I am left with this memory

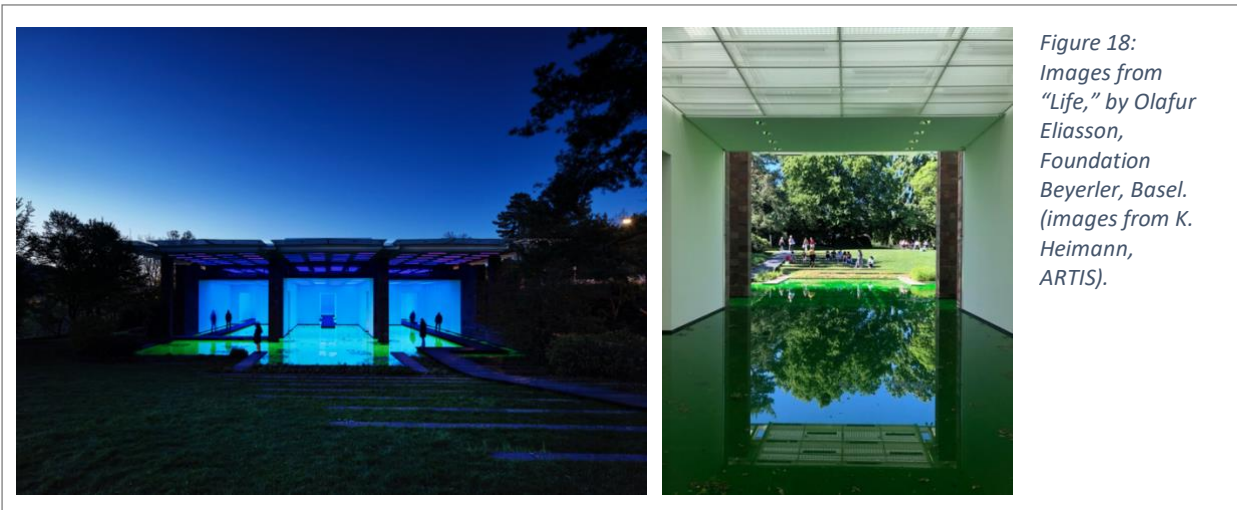


Figure 18:
Images from
“Life,” by Olafur
Eliasson,
Foundation
Beyerler, Basel.
(images from K.
Heimann,
ARTIS).

that it was open. I think that won’t leave me anymore. I won’t be able to use those rooms anymore without thinking of this. (bitter tone, tears in their eyes)”

The experiential data that was collected has been used to develop a website with the artist to allow the installation a life also after its removal in summer 22. The page can be visited here: <https://experiencing-life.net/>

Project I: Surveys at Futurium (Futurium Birthday, “Art and the City”)

Lead: HUB, support IFNU

Collected sample: N = 102 (finished the baseline assessment in the APP “Your Emotional City”)

Collection date: 17.11.2022

Setting/art type: Berlin, event.

Status: Descriptive statistics.

ARTIS and IFNU discussed and explored citizens’ aesthetic and affective experience of the urban environment at a Citizen Science event at the birthday celebration of FUTURIUM Berlin. During the FUTURIUM event, we invited visitors to get a first taste of the *Your Emotional City!* app. In an interactive online survey visitors could rate their affective and aesthetic experience of urban spaces and see the results in real time on screen. Some questions regarded familiar places in Berlin, others were taken from previous psychological and neuroscientific studies on the built environment. The results were discussed in light of personal experiences and past research findings.



Figure 5: Joerg Fingerhut at FUTURIUM's birthday



Figure 4: "What do you wish for the future of art in the city?"

Throughout the event, visitors could indicate their individual places of stress and well-being on an analog map of the city so that slowly but surely an emotional map of Berlin emerged. The map clearly showed how cities such as Berlin can be very stressful indeed, while also providing opportunities for restoration and stimulation. The aim of “Your Emotional City” is thus not only to identify factors that contribute to stress and poor health, but to reveal and promote the positive aspects of city living, too. For more info, see: <https://artis-h2020.eu/citizen-science-event-in-berlin>

Conclusion

The activities of WP3 are currently in progress, and there are still several studies under way and papers either submitted or being written up. The work on these studies and publications will extend beyond the 48-month timeframe. In addition to these core tasks, WP3 will continue to provide Data to the CAPTURE part of ARTIS that spans work packages 2-5. This year, there is also a collaboration with a Neurourbanism Project on “Exploring and Designing Density. Neurourbanism as a Novel Approach in Global Mental health,” in which HUB and IFNU are involved.



In this report we detailed the progress of the ARTIS project's WP3, which focuses on the empirical study of art experiences in urban settings. This work package has successfully executed numerous projects, engaging a diverse range of participants across various countries. The projects have explored the impact of art on factors like health, well-being, community connectedness, and attitudes towards public spaces and urban design.

Here are some of its main findings:

1. **Health and Well-being Enhancements:** The ARTIS project's research underscores that art in urban environments significantly boosts individual health and emotional well-being. These findings demonstrate the therapeutic and uplifting potential of art in everyday urban settings.
2. **Strengthened Community Ties:** The study highlights how art fosters stronger community connections. People engaging with urban art feel a deeper sense of belonging and community spirit, illustrating art's power to unite diverse groups.
3. **Altered Urban Space Perceptions:** Art experiences have been shown to change how individuals perceive and value their urban surroundings. This shift in perspective contributes to a more positive view of public spaces and urban design, emphasizing art's role in urban planning.
4. **Innovative Data Collection Methods:** The use of tools like the "Your Emotional City" app marks a significant advancement in gathering data about art's impact, showcasing how technology can aid in cultural research.
5. **Implications for Urban Development:** The findings indicate that art plays a crucial role in enhancing quality of life and social interactions in urban areas. These insights are valuable for policymakers and urban planners in fostering more livable, art-infused cities.

Looking ahead, WP3 is poised for a promising final reporting period. Ongoing data collection and analysis efforts, particularly with the NEAL+ data, are expected to yield insightful findings. The "Your Emotional City" app continues to be a vital tool for data gathering and is being fine-tuned for broader application. The upcoming period will see the results from projects A, B, E, and F presented at various conferences and subsequent publication of papers. This phase is crucial for fulfilling WP3's objectives and is anticipated to contribute significantly to understanding the transformative power of art in urban environments.

Overall, ARTIS contributes significantly to understanding the multifaceted role of art in society. This will be used in the final reporting period to provide insights for policy recommendations and societal engagement with the arts.

