Dissipating and Unravelling Bits of Graffiti Bytes

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1. Graffiti to Disseminate | Dissemination of Graffiti

Graffiti are a form of visual mark-making involving an individual or a group. Despite their millennia-long history, modern graffiti writing became closely associated with the Hip-Hop cultural movement that emerged in the early 1970s from the Bronx in New York City. As Hip-Hop matured, the release of the movie Wild Style in 1983 became a cinematic manifesto that captured and immortalised the energy of this expanding movement. In doing so, Wild Style also spotlighted the rebellious strokes of graffiti writers, whose creations in the streets and subways of American metropoles were born from a melting pot of adversity and a desire for self-expression. However, much of the modern graffiti scene has changed since Wild Style. Contemporary graffiti metamorphosed from a localised manifestation into a global phenomenon, with graffitists who continue pushing creative boundaries, challenging societal norms, and evolving the discourse around public spaces. The varied and ever-expanding coverage of graffiti in books, movies, exhibitions, press, websites, social media, and public events was one of the reasons for, but also a direct consequence of this substantial change. Magazines, movies, photo books and exhibitions provided the initial exposure boost to contemporary graffiti and graffiti writing culture. As a result, new people started dipping their toes into graffiti (for artistic, rebellious or other reasons); this led to an extension of graffiti's graphical repertoire, triggering renewed inspiration and even more coverage. Over time, this reciprocal relationship effectuated that 'graffiti to disseminate (a message)' got increasingly complemented by the 'dissemination of graffiti'.

This process of dissemination transformation bore intriguing similarities to what had happened with ancient graffiti. *"Admiror o pariens te non cecidisse ruinis qui tot scriptorum taedia sustineas"* (I am amazed, oh wall, that you have not fallen into ruins since you hold the boring scribbles of so many writers). This graffito—found on the basilica's walls during the excavations of Roman Pompeii in present-day Italy (Ancient Graffiti Project, 2023)—attests to the large quantities of ancient graffiti that must have covered this large public building two millennia ago, thus revealing the same 'graffiti to disseminate' impulse, the same drive of modern graffiti creators to communicate with a broader audience. From the 19th century onwards, archaeologists and historians started documenting and studying such ancient graffiti: the scholarly dissemination of ancient graffiti had started.

2. One Graffito, Many Approximations

In the year 79 CE, the Pompeian graffito mentioned above was covered by volcanic ash and pyroclastic surge deposits from Mount Vesuvius' eruption. This graffito kept existing, albeit devoid of human observation. Approximately nineteen centuries later, it resurfaced, got documented and started its second visibility period. Nowadays, that graffito is no longer observable *in situ* but displayed in the National Archaeological Museum of Naples. However, visiting the museum is only necessary to view the physical graffito. A digital representation of the graffito (e.g., as an image) along with relevant information like the language and writing style (so-called graffito metadata) can be found in various locations, the website of the Ancient Graffiti Project (http://ancientgraffiti.org) being one of them.

Such digital representations are known as digital resources in information technology. Regardless of their numerous possible forms (e.g., text files, spreadsheets, photos, three-dimensional surface meshes, databases), any digital graffito resource uses bits and bytes to encode one or more aspects of the physical graffito in some way. In archaeology, several papers pondered which terminology to use for these digital 'forms' of an original physical resource (Endres, 2012; Garstki, 2017; Rabinowitz, 2015). Are they digital representations, reproductions, surrogates, proxies, incarnations, avatars or facsimiles? Which term best conveys the deficits, commonalities, and advantages of these digital versions when compared to their physical antecedent? For many reasons, 'digital approximation' seems to be the most neutral and accurate term, simply because digitising can only approximate one of the infinite dimensions of a physical object.

When documenting a spray-painted graffito via digital photography, the resulting photos do not provide digital data on the paint's smell, temperature or thickness. In that sense, almost no digitising effort can provide data on all aspects of a physical asset. Because the digital resource is always an incomplete representation, exhaustively 'preserving' cultural heritage like graffiti in the digital realm is impossible. Even if all properties could be digitised (like for an audio signal), the resulting digital resource is still an approximation; it is imperfect because digitising uses sampling to discretise any analogue (i.e., continuous) property to a finite set of digital values.

3. Approximations Facilitate Dissipation and Analyses

In most cases, digitising all aspects of a physical, analogue resource is impossible, which is why digital documentation has only a modest role in preserving cultural heritage (Brown, 2005). However, if done correctly, the digital resources resulting from the digital documentation can still help us manage, distribute, visualise, examine and safeguard specific aspects of that physical resource. In the words of Korzybski: "A map is not the territory it represents, but, if correct, it has a similar structure to the territory, which accounts for its usefulness" (Korzybski, 1933, p. 58).

Ideally, one aims for excellent digital documentation of certain real-world graffiti aspects by purposefully acquiring data and metadata. *Data* are the raw, uncontextualised and meaningless stuff. To cite Schöch, digital data in the Humanities are "selectively constructed, machine-actionable abstraction representing some aspects of a given object of humanistic inquiry" (Schöch, 2013, p. 4). *Data* are called *information* when processed (e.g., cleaned, transformed, renamed) into a form consumable by a human. Analogous to how work is required to release potential energy, data are potential information, but work is needed to obtain it (Pomerantz, 2015). [Note that we ignore the philosophical debate about whether information only has the potential to inform or must actually inform.] Metadata are second-order (i.e., meta) data about data. Although metadata are data, it is more accurate to call them information because they should be informative. They promote the discovery of resources, structure them, support their administration and facilitate analyses.

Digital graffito documentation typically yields digital photographs. These digital resources can provide information on a graffito's colour, width and height, location, surface topography and physical surroundings. Other graffito metadata—like creator, legal character, moment of production and time of destruction—might be derived from a digital resource or obtained via observation of the physical graffito. Usually, all those metadata are stored in a spreadsheet or database, two other examples of digital graffito resources. Suppose any digital documentation is followed by strategies to digitally safeguard, disseminate, and analyse these imperfect digital resources. In that case, there is hope to (better) understand the multi-faceted nature of the ancient and contemporary graffiti-scapes from which these resources originated. This train of thought guided the organisation of the goINDIGO 2023 symposium.

4. From goINDIGO 2002 to goINDIGO 2023

In 2022, the academic project INDIGO organised the goINDIGO 2022 symposium to discuss the documentation, archiving and dissemination of graffiti-scapes (Verhoeven, Schlegel, Wild, & Wogrin, 2023). Since goINDIGO 2022

mainly covered more technical aspects of graffiti research, a second symposium tackling more humanistic-oriented aspects was conceptualised already during the INDIGO application phase. As a result, goINDIGO 2023 became a reality slightly over one year after the initial goINDIGO symposium. From 14-16 June 2023, 62 participants from 13 countries gathered in Vienna, Austria, to discuss the dissemination, analysis, and understanding of ancient and modern graffiti-scapes.

As Figure 1 visualises, "dissemination" formed the topical overlap between both symposia. This not only made the symposia's connection more explicit; it also provided extra room to cover the wide variety of graffiti dissemination activities and divided the 2023 symposium into three topical parts, similar to the 2022 symposium.

Throughout two and a half days, three keynote lectures and eighteen presentations touched upon many facets of disseminating, analysing, and understanding graffiti-scapes. The word cloud generated from the goINDIGO 2023 book of abstracts (Verhoeven, Schlegel, Wild, Wogrin, et al., 2023) reflects this topical diversity (Figure 2). Apart from one regular talk and one keynote, all presentations can be rewatched via the goINDIGO 2023 YouTube playlist (https://www.youtube.com/playlist?list=PLATjvnj_VR_BWSbqS4BiZoqFx7COBAOWf).

The dedicated "graffiti dissemination" discussion session between academics and graffiti creators was not recorded to respect the anonymity of the latter. The discussion's transcript was also omitted from this volume, as the editors felt it lacked the added value that characterised the written-out 2022 discussions (Merrill et al., 2023; Wild et al., 2023). However, these proceedings do include the thoughts and ideas shared during the opening keynote and ten of the eighteen subsequent presentations. Including one non-symposium contribution, this book bundles twelve unique viewpoints on the dissipation, exploration, and unravelling of graffiti-scapes.

5. Overview of This Volume

This volume groups all papers according to the main themes of goINDIGO 2023:

- **Disseminating** is the act of spreading (meta)data, information, knowledge or wisdom, whether in analogue, digital, or hybrid form. Scientific papers, a website, an exhibition, an archive, and a non-specialist presentation are all valid ways to disseminate (scholarly) results.

- **Analysing** refers to the entire process of quantitatively or qualitatively studying or evaluating one or more characteristics of a physical or digital resource. Depending on the (meta)data and the properties one wants to analyse, one or more methods are suitable.
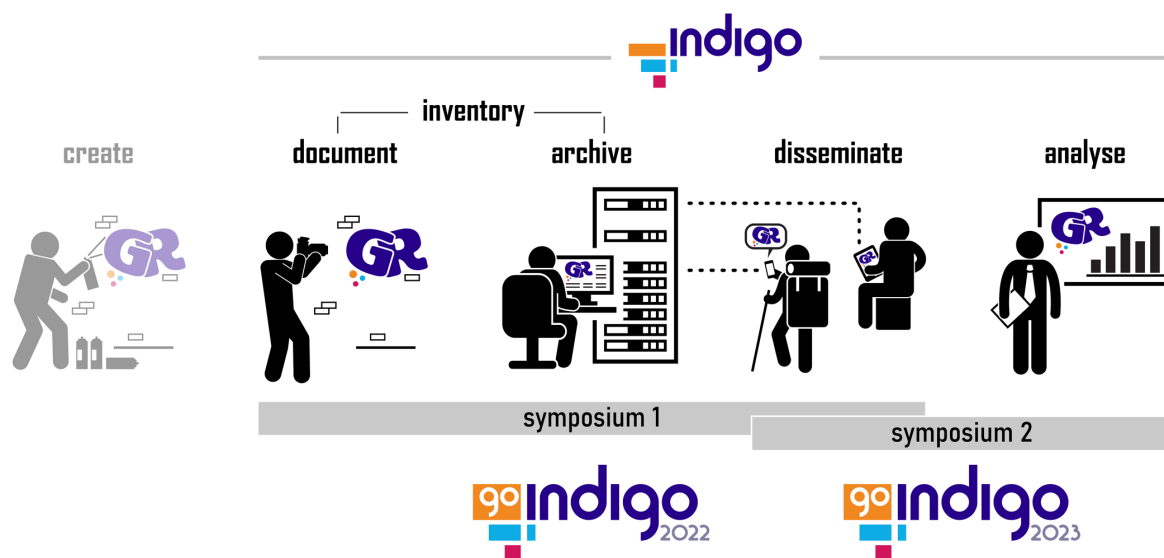

Figure 1. The main goals of project INDIGO and how they fit within the two goINDIGO symposia.
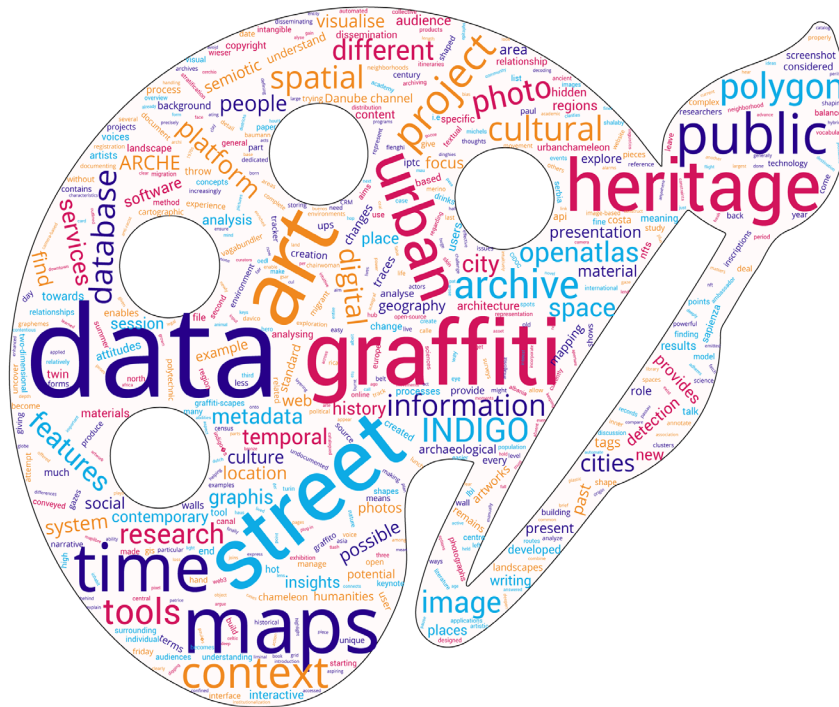
Figure 2. The word cloud extracted from the goINDIGO 2023 book of abstracts.

Analysis should be as objective and systematic as possible to make sense.

- **Understanding** implies a more profound comprehension of properties once they are analysed and contextualised. Concerning humans, understanding can also mean "looking at things from another person's point of view" to understand that person's stance on certain things. In that way, analysing could also be considered "looking at things from our point of view".

However, these proceedings had to combine the latter two themes since there was no clear-cut distinction between papers about "analysing" and "understanding" graffiti. Although this volume thus only features two main sections, some papers in these proceedings still deal with both topics. In those cases, papers were assigned a section according to their primary focus.

The first two papers in the **DISSEMINATION** section present well-known graffiti websites: Art Crimes and Vagabundler. As the opening keynote speaker of goINDIGO2023, *Brett*

Webb tells his personal graffiti story in "Building Art Crimes: Highs and Lows". Art Crimes was likely the first graffiti website launched on the World Wide Web back in 1993. Despite all odds, this pioneering website is still online after three decades, continuing to inspire people. The same kind of inspiration, along with graffiti tours in many large cities worldwide, can be found on the Vagabundler website. The quantity of graffiti-related information on this website is astonishing. *Gunther Michels*, Vagabundler's driving force, details in the second paper how this information is continuously collected, managed and made accessible via maps. However, whereas Vagabundler and the vast majority of graffiti websites map graffiti in spatially two-dimensional (2D) maps, *Oskar Baumann* describes in "Graffiti Exploration via Interactive Web Maps" his academic endeavour to disseminate graffiti via three-dimensional (3D) Web-based maps, leveraging even adaptive symbols to represent graffiti optimally across various map scales.

Creating a digital 3D world is also one of the primary aims of Urban Chameleon, INDIGO's envisioned open-access

platform for visually and analytically exploring its monitored graffiti-scape. In "Getting Hold of the Urban Chameleon", *Jona Schlegel et al.* provide an in-depth overview of Urban Chameleon's development process. Urban Chameleon gets most of its input via services run by the Austrian Centre for Digital Humanities and Cultural Heritage (ACDH-CH). These services are described in the "Data Crew" paper by *Martina Trognitz et al.* The paper explains how the digital archive ARCHE, the spatial database OpenAtlas, and the Vocabs repository for controlled vocabularies are part of the core infrastructure used by the ACDH-CH to digitally safeguard, structure and disseminate much of INDIGO's (meta)data. However, other projects can also use these services to publish cultural heritage-related data and insights in ways that align with the goals and practices of the Semantic Web.

In the last paper of this section, *Geert Verhoeven et al.* delve further into the world of semantic data, more specifically, photo metadata standards and controlled vocabularies. Although discussions on standardised metadata and terminology are seldom encountered in graffiti research, scientific management and stewardship of digital resources can not work without these vital components. However, graffito metadata like type and colour often only apply to a delineated portion of a given photograph. Hence, the authors developed the open-source GRAPHIS software in which users can create image regions for metadata annotation. Since GRAPHIS can also store this region and annotated metadata inside the photograph, it enables refined dissemination and analysis of graffito-specific information. In that way, this "GRAPHIS" paper nicely bridges to the second section.

The **ANALYSING & UNDERSTANDING** section kicks off with "The first complete census of public artworks in Torino" by *Luca Davico et al.* Based on an analysis of existing collections, this public artworks census enables policymakers, artistic associations, and scholars to research these artworks. Documenting and analysing stone inscriptions is the topic of the following two papers. First, *Giulia Flenghi et al.* elaborate on their "Talking City" project, which maps little-known graffiti and epigraphy in Rome to build narrative itineraries throughout the city. *Ruth Tenschert et al.* explain in their

"Eternal Witnesses" paper how examining different types of graffiti necessitated different recording methods and how weathered graffiti could be made legible again.

These three 'hands-on' contributions are followed by three more theoretical papers, each highlighting the multidimensional nature of graffiti analysis. In "Each Graffito Deserves Its Polygon", *Geert Verhoeven et al.* explore ways of tracking and managing the temporality of graffiti, hoping that one day such approaches will allow for detailed spatio-temporal analyses of entire graffiti-scapes. Space and time also play a central role in *Francisca Fernandez Merino*'s work. In her "Outer Space, Inner Time" paper, Francisca emphasises the need to consider the relationship between graffiti and their audience. To that end, she explores how embodiment can provide a fresh perspective on the meaning of context, time, and space in graffiti research. The last paper by *Valentina Tretti-Beckles* and *Adrián Vergara-Heidke* also contributes to a broader understanding of graffiti by exploring their contextualisation, intentionality, and reception. However, rather than advocating for a relational approach to time and space, the "Attitudes and Gazes from Graffiti" paper investigates how semiotic attitudes and competence shape people's perceptions of graffiti within the context of place-making.

6. Conclusion

In the year of Hip-Hop's 50th anniversary and the 40th birthday of Wild Style, goINDIGO 2023 managed to bring various disciplines together to discuss the various ways of dissipating and understanding bits of graffiti bytes. The proceedings of this symposium pick up and reiterate where the previous proceedings left off: with the contemporary ways of disseminating old or new graffiti. Afterwards, several papers discuss practical and theoretical ways to unravel graffiti-scapes and develop new insights.

In summation, tackling graffiti as sociocultural artefacts demands multidisciplinary frameworks. We, the editors, hope the interconnected graffiti themes covered here and in the goINDIGO 2022 proceedings provide inspiration and an up-to-date overview of various framework components to deal with ancient and contemporary graffiti-scapes.

Acknowledgements

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