



Critical Heritages (CoHERE): performing and representing identities in Europe

Work Package 4: Digital heritage dialogue[s]

Report: Online Visual Dialogues about Place: Using the Geostream Tools to Identify Heritage Practices on Photo-sharing Social Media

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CoHERE explores the ways in which identities in Europe are constructed through heritage *representations* and *performances* that connect to ideas of place, history, tradition and belonging. The research identifies existing heritage practices and discourses in Europe. It also identifies means to sustain and transmit European heritages that are likely to contribute to the evolution of inclusive, communitarian identities and counteract disaffection with, and division within, the EU. A number of modes of representation and performance are explored in the project, from cultural policy, museum display, heritage interpretation, school curricula and political discourse to music and dance performances, food and cuisine, rituals and protest.

Work Package 4, **Digital Heritage Dialogue[s]** engages with digital design methodologies to investigate heritage conversations online and on-site, and to craft opportunities for talk/dialogue within exhibition and heritage settings to develop intercultural dialogue. The WP explores the potential of existing and future digital technologies to provide deeper understandings of European heritage alongside reflexive identities and inclusive senses of belonging.

This report relates to a key objective of the WP to ‘investigate the role and cultural currency of serendipitous online heritage dialogues as manifested in social media platforms’. It presents the analysis of geotagged user-generated content aggregated from photo-sharing platforms to identify emerging approaches to heritage and identity building in reference to three European public squares. It discusses how notions of Europe and heritage are implicitly addressed in photo-sharing practices, and how official heritage discourses are both challenged and complemented by online, participatory accounts of place. The report analyses visual dialogues around the nexus place-heritage-identity, highlighting affective, curatorial and experiential approaches in negotiating past and present, online and offline representations of place and how they are intertwined in processes of identity-building.

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The dataset demo that supports this report is available on:

<http://cohere-ca.ncl.ac.uk/#/grid/170>

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Executive Summary

This report presents the analysis of user-generated content aggregated from photo-sharing platforms to identify emerging practices of heritage and identity building in reference to three European squares: Loreto square (Milan, Italy), Old Eldon square (Newcastle upon Tyne, UK) and Kotzia square (Athens, Greece). The focus on urban squares reflects the importance of public spaces in the interplay between heritage and contemporary use of a place and in shaping the cultural identity of an area.

The aims of this study are to: (a) explore modes of visual representations of place and identity on geosocial platforms; (b) identify the potential of such platforms to support dialogic practices around heritage and identity; (c) to assess whether official heritage discourses are challenged by participatory online photo-sharing practices.

The analysis is based on a large-scale photographic dataset of 15,061 images aggregated using the tools in Geostream project. The research methodology includes: keyword-based searches in the database; annotation of the dataset and subsequent identification of thematic groups of images; and, qualitative and discursive analysis of three key themes that emerged through the data:

The first theme focuses on images depicting temporary collective events in the squares, conceptualised as *transnational rituals*. These images indicate how place is redefined and receives new value from experiences and performative events. Photo-sharing practices support the circulation of collective behaviours, ideas and activist proposals, highlighting complex dynamics across online and offline dimensions.

The second theme investigates the way users curate their online profile by uploading their photographs on multiple platforms, and integrating images and texts (e.g. titles, descriptions, tags) to develop narratives of fleeting daily life moments. Place becomes the theatre of the everyday and inspiration for *impromptu* reflections.

The third theme seeks to understand how traces and memories of historical events which took place in the selected squares remain relevant in the present. Instances in which images are used as triggers for debates and hold the potential to question official historical accounts and catalyse current political antagonisms are examined alongside hidden and/or normalised uses of the past.

The keyword-based queries highlighted a lack of evidence for a culturally conscious use of the terms 'Europe' and 'European' in the metadata associated with the images, (e.g. tags and descriptions). It also demonstrated that significant heritage practices, such the Remembrance Day ceremony in the Old Eldon square, have limited presence among the geotagged images, bringing into question the users' motivations to geotag.

These themes together identify the potential of geosocial platforms in supporting a range of dialogic practices carried out through the combination of images and textual metadata. They also corroborate our hypothesis that traditional heritage perspectives are complemented and challenged on social media by processes attributing value to place in relation to ephemeral events or its role in people's everyday life.

1. Introduction

This report presents the analysis of selected user-generated content aggregated through the tools developed in the Geostream project, created to process geospatial information on the web. This research activity addresses Objective 1 of WP4 in the Horizon 2020 project CoHERE, which explores the potential of digital technologies to provide deeper understandings of European heritage and reflexive modes of identity construction [<https://research.ncl.ac.uk/cohere/researchstrands>]. The DataMiner tool developed by Geostream was identified as a suitable tool for aggregating geotagged content from a selection of online platforms (e.g. Flickr), which allowed the research team to explore how online social practices contribute to the development of cultural meanings and the construction of identities around specific places. The analysis presented in this report derives from the critical engagement with primarily visual data that has been aggregated with reference to three public squares in Europe (Italy, Greece and the UK), with complex and multi-layered heritage associations. The resulting dataset is made available on: <http://cohere-ca.ncl.ac.uk/#/grid/170>. The demo webpage and the report together form deliverable D4.1.

Within the context of CoHERE, the dataset created using Geostream tools is investigated in relation to notions of heritage and identity connected to place, and the role of online digital platforms in fostering dialogue(s) around dissonant aspects of European heritage. The rest of this section outlines the research questions of this investigation; it introduces Geostream and explains the reasons for using it in this context; lastly it outlines the structure of this report.

1.1 *Research hypothesis*

The overall aim of CoHERE WP4 is to explore digitally-enabled dialogue(s) around heritage representations. The investigation presented in this report draws on a dataset created through the re-purposing of Geostream technology as a research tool to explore the hypothesis that:

the analysis and critical reviewing of geolocated social media activity can provide useful insights in the public's perception of cultural heritage associated with a place, because it affords the coexistence of both aligning and distancing approaches to official or authorised (Smith 2006) representations.

1.2 *Research Aims*

The research aims of this investigation are:

- a) To explore how **visual representations** of place and identity are constructed / produced on geosocial digital platforms.
- b) To identify the potential of geolocated social media platforms to develop forms of **dialogue** about the nexus heritage-place-identity in European contexts.

- c) To understand how participatory **online practices ascertain, redefine and/or counteract established approaches** to heritage and identity, with reference to selected places of relevance to the CoHERE project.

1.3 Why Geostream?

Geostream project's main goal was to develop techniques and tools for collecting, integrating, extracting, processing and exploiting user-generated geospatial information on the web. It was developed by a consortium of research institutions and SMEs partially funded by the European Commission (FP7-BSG-SME, Grant Agreement number: 315631, 2013-2015) with the aim of improving applications 'in the geospatial domain, such as location-based services or trip planning' (Lamprianidis & Pfoser 2014: 553). Specifically, the Geostream aggregator is able to collect the following types of data: events (from DBpedia, Wikimapia, OpenStreetMap, Foursquare and Google Places); photos (mostly from Flickr and Panoramio); events (from LastFM and Eventful). The aggregator allows keyword-based searches that can be conducted on the label, description and tags of a resource. It is also possible to identify geographical areas with high density of Points of Interests of certain categories (e.g. food, entertainment, shops and so forth).

As discussed in the methodology section of this report, it was the ability of this aggregator to collect and present a significant volume of geolocated visual materials (i.e. user-generated photographs and their metadata) that rendered Geostream useful for the research activities in WP4. The aggregator, which has not been used before in the context of academic research, also provided the opportunity to test its capacity to be repurposed. As Geostream was initially developed for tourism and place promotion, it also offered the opportunity to reflect on the role of commercial tourism applications in shaping our understanding of place. The opportunities and challenges of this approach are discussed in the methodology section of this report.

1.4 Structure of the report

The report is organised as follows: Section 2 presents the key theoretical concepts that underpin this investigation. Section 3 provides a detailed account of the methodological strategy used to collect, analyse and critically reflect on the collected data. The characteristics of the dataset are also outlined in section 3. Section 4 reviews the mentions of the word 'Europe' and of heritage related terms in the dataset and reflects of notable absences among the geotagged images. Sections 5-7 provide the critical investigation of three analytical perspectives identified in the data. The report concludes with suggestions for further investigation related to the findings.

2. Theoretical framework

Heritage is nowadays recognised as an open process, a boundary object impossible to lead back to self-contained definitions (Graham & Howard 2008; Winter 2013). Its discursive, multi-actor dimension implies the co-presence of official, authorised perspectives (Smith 2006) alongside alternative, dissonant, less evident heritage approaches, respondent to different sets of cultural and political stances. The potential of online practices to challenge traditional heritage approaches is acknowledged by a growing body of literature exploring forms of participatory culture supported by digital technologies. These publications explore the value of user-generated content in contributing new social practices and forms of engagement to the work of institutions of memory (Giaccardi 2012; Ridge 2014). As cultural institutions are increasingly looking at social media to shift their communication practices towards less authoritarian positions, experimental projects have been developed to enable multivocality and bottom-up perspectives in the meaning making and the curatorial processes (Russo et al. 2008; Kidd 2014).

This body of literature supports our hypothesis that social media afford more dynamism and polyvocality than traditional institutional practices in dealing with heritage representations, thus substantiating the coexistence of multiple and sometimes dissonant heritage discourses. In the analysis of the dataset gathered through Geostream, we corroborate this hypothesis with examples of heritage practices that challenge expert knowledge or introduce non-traditional categories and approaches to heritage and identity building.

As Geostream intersects place, cultural content and sociality, our analysis draws upon a transdisciplinary body of literature developed within the HCI community, Heritage Studies, Visual and Digital Sociology. The connection between place, heritage and identity has been abundantly explored through ideas of distinctiveness and cultural or historical significance (e.g. Convery et al. 2014), and in relation to landscape and memory (Nora 1992; Hoelscher & Alderman 2004). Nevertheless, more could be said on the social production of heritage on digital media, with a particular focus on locative and visual data. Previous work based on the analysis of large geolocated datasets from photo-sharing platforms has focused on the identifications of landmarks and the use of tags to represent place (Kennedy et al. 2007). Our study differs from these projects not only for its qualitative methodology, more clearly based on cultural analysis, but also because of our intention to move beyond landmarks to gain a more complex account of the multiplicity of heritage approaches connected to one place.

The phenomenon of online photo-sharing introduces new aspects to uses of personal photography. First of all there is an implication of 'addressivity' (Bakhtin 1986) and dialogic stance, which is inherent in the act of sharing images with others. Furthermore, the development of online heritage practices can contribute to transnational cultural forms enabled by participatory platforms. This is particularly relevant to our research focus on European identity. Indeed, visual social media content potentially allows for different channels of circulation, comparison and discovery of place across borders.

The characteristics of Geostream significantly influenced our theoretical framework. Because it does not gather all images depicting the selected locations, but only the geotagged ones, it was important to understand the nature and motivations of geotagging practices on social media. At the same time, we looked at existing studies of online photo-sharing (mostly focusing on Flickr which is the main provider of images in our dataset) to identify behaviours which could be refocused around our topics of heritage and dialogic practice.

As noted by Van House, the introduction of camera-phones complicated and reinforced the most common social uses of personal photography, that she summarises as follow: to construct identity, narratives and as memory aid; to sustain relationships; for self-representation; and for self or creative expression (2007: 2719-2721). For instance, commentators highlight the emergence of novel forms of everyday photojournalism or personal chronicling that capture fleeting, mundane but surprising moments of their daily lives (Okabe 2004; Van House 2007). These behaviours can also be enriched by geolocation features, which can be either manually or automatically applied to the photographs taken on digital cameras or smart-phones. The act of inserting location data emphasises the link between digital and physical space and suggests the idea that the photographer was present in the place depicted. Schwartz and Halegoua (2015) introduce the concept of the 'spatial self' to describe a range of behaviours and motivations for users to geotag their social media interventions. These encompasses the articulation of personal geographies, 'spatial stories' and archives of traces of personal mobility used as memory aid or within self-tracking practices. Crucial to understand geotagging in this framework is the way place and offline experiences are harnessed to construct and perform identity. 'The spatial self refers to intentional socio-cultural practices of self-presentation that result in dynamic, curated, sometimes idealized performances of who a user is, based on where they go' (Schwartz & Halegoua 2015: 1647). Indeed, users do not share their location (or check-in) all the time they move to a different place, but mostly when they think that a given location adds something meaningful to their online identity in other people's perception. This highly curated and selective dimension of geotagging practices is particularly relevant because it explains the potential of Geostream in revealing hidden dynamics related to the nexus heritage-place-identity at the core of our investigation. Indeed, such theories are reflected in sections 5 and 6, through examples in which identities are performed by affirming the user's presence and participation in selected contexts and situations.

Online performances of self-representation can be intended as a form of dialogue, expressing the intention of saying something about ourselves. Nevertheless, this is not the only way in which visual social media content has been associated to the idea of dialogue. Tagging images for instance, can be intended as a means to associating photos with specific streams of online conversation, i.e. a contribution to existing thematic streams and social aggregations (Marlow et al. 2006; Hollenstein & Purves 2010). The idea of 'visual dialogue' has recently surfaced in discussing Flickr's role in supporting participatory approaches to heritage (Garduño Freeman 2010). The specific value of Flickr is also identified in relation to social interaction. Terras (2011) suggests

that Flickr can teach best practices to institutions of memory for fostering stronger relationships between users (or visitors) and resources, and to develop a sense of community around digital collections; while Colcuhoun and Galani (2013) experimented with the conditions that affect sense of online community on Flickr the Commons. Giaccardi and Palen discuss the social production of heritage through cross-media interactions (including experiments with locative media) that sustain 'conversations between a community and its physical and social settings that make the practice and meaning of place and heritage evolve' (2008: 283). More specifically, in analysing Flickr groups dedicated to Sydney Opera House, Freeman describes the collective process of posting images of the same building as a visual conversation consisting of a sequence of assertions, characterised by a stronger degree of ambiguity than verbal or textual communication (2010: 358). Even if thematic Flickr groups behave in their own specific way, it is also possible to extend the idea of a dialogue around heritage and identity sustained by symbolic, iconic, polysemic interventions to more individual sharing practices.

Some authors, however, suggest caution in addressing the relationship between online photo-sharing and conceptualisation of memory. Even if memory and heritage are different things, their warnings are relevant in our study due to the inevitable overlapping of the two concepts in relation to processes of preservation and manipulation of the past. Both Van Dijck (2011) and Schwarz (2014) embrace Hoskins theorisation of 'connective memory' to criticise accounts of photo-sharing as formations of collective perspectives and shared experiences. They point out how the term 'collective' is too anthropocentric and neglects the fact that memory on social media becomes the product of a combined human-machine agency, shaped simultaneously by social practices and technological protocols. Van Dijck also criticises conceptualisations of Flickr as an archive by highlighting that despite its relevance to institutions of memory, Flickr 'is a constantly changing database that lacks even the most elementary principles of an archive's ordering and preservation system' while its focus is always on the most recent activity (2011: 409). The logic of the database dominates retrieval and encounters with images in the photostream, so that these tend to happen not according to narratives established by the photographer, but on the basis of queries and searches the results of which are grounded in algorithms that behave very differently from the human mind. Thus, new orderings are performed every time, generating unique associations or groupings of images (Schwarz 2014).

These properties of memory artefacts on social media have been described by Hoskins (2011) in terms of 'connectivity'. Connective memory is disseminated and evolves across networks, is flexible and easily manipulated, and transcends the classic dichotomies of public and private, past and present. In fact memories become to be grounded in a continuous present in which they are constantly reconstructed, re-shaped and re-presented by networked technologies (Hoskins 2011: 272). In this framework, heritage and identity building processes might acquire a new dynamism and include multiple, even if fragmentary, perspectives that differ and complement official and established ones. This research adopts an empirical approach to explore

how these heritage perspectives emerge through practices of photo-sharing, tagging and geotagging in three European public spaces with multi-layered historical and heritage associations.

3. Methodology

In order to address the aims of this study and Objective 1 in W4, the Geostream aggregator was used to collect geotagged user-generated images related to three public squares in three European cities (Athens, Greece; Milan, Italy; and Newcastle upon Tyne, UK). The focus on public squares responds to the increased literature that argues that '[squares] shape the cultural identity of an area, are part of its unique character, and provide a sense of place for local communities' (Giddings et al. 2011: 203). Public squares are therefore fruitful locations where the interplay between heritage values and contemporary use, as well as private and collective meanings are likely to be present on online expressions of identity and community. The squares in the focus of this research investigation are centrally positioned within their urban setting and characterised by layered histories and mixed uses. They all express well-established relationships to notions of European heritage and identity, including connections to antiquity, WWII and war memorialisation, market and commerce activities alongside administrative functions, such as the hosting of municipal and governmental buildings. The rest of this section briefly introduces the three squares, followed by a presentation of the opportunities and challenges of Geostream as a research tool, the description of the dataset and the analytical approach of this study.

3.1 Loreto Square (*Piazzale Loreto*), Milan, Italy

Loreto square in Milan is mostly a busy traffic junction and metro interchange, marking an implicit boundary between the core of the city and its peripheral, now heavily multicultural, areas. This gateway character belonged to the square since the first half of the XX Century, being the terminus for the buses linking Milan to Bergamo and Monza. Because of the high number of people daily travelling through Loreto square, it was chosen to host two infamous events during World War II. The massacre of 15 anti-fascists Partisans by a Fascist division on the 10th of August 1944 is now memorialised through a plaque and a sculpture in a nearby street. On the 29th of April 1945 the square hosted the public display of the corpses of Benito Mussolini, his mistress Claretta Petacci and 18 high-ranking fascists, who were hung upside-down from the roof of an Esso petrol station (Wikipedia 2016). This event however is not marked on site by any interpretative sign or memorial. This might relate to the awareness that any process of historicisation or memorialisation in this event would catalyse political tension, as far-right parties still celebrate the Fascist period as a positive reference (Mitterhofer 2013). In fact, while generally praised as the beginning of a process of liberation, the death of Mussolini is claimed by neo-fascists groups as an act of barbarity. In an attempt to overcome these tensions, in 2005 town councillor

Stefano Zecchi proposed to rename the square Piazzale della Concordia but the proposal was not successful (Il Tempo 2009). Today most of the buildings around the square are from the post-WWII era, and combine residential and commercial use. The main character of Loreto square is that of a space of circulation and movement, while lingering is discouraged due to the square's design, which makes it mostly inaccessible to pedestrians, who can only cross it by moving around its perimeter or using the subway underpasses.

3.2 *Old Eldon Square, Newcastle upon Tyne, UK*

Old Eldon Square emerged as part of the 1825–40 reconstruction of Newcastle city centre; its shape was defined by three rows of Georgian townhouses, designed by John Dobson in 1824 and built by Richard Grainger, on each one of its three sides (Rogers 2001). In the 60s, as part of the redevelopment plan of Newcastle by T. Dan Smith, two rows of townhouses around the square were demolished to be replaced by a large shopping centre. This significantly affected the everyday use of the square, which has since become both a transitory area and a meeting place for a range of youth subcultures and for local elderly people. At the same time, the central focus of the city shifted towards Grey's Monument, thus considerably marginalising Old Eldon square from the official monumental core of Newcastle, while becoming informally addressed by some users as 'The Green' (Rogers 2001). The inclusion within the shopping mall also altered the 'public' character of the plaza, as the entire mall is a highly securitised and privatised system (Graham 1997: 3).

Old Eldon square features a war memorial designed by Charles Leonard Hartwell and unveiled in 1923. On the top is a large equestrian statue of Saint George (the patron of infantrymen and cavalrymen). Additionally, the memorial is the site of the Remembrance Day commemoration, observed in Commonwealth Nations states since the end of the First World War to remember the members of their armed forces who have died in the line of duty.

3.3 *Kotzia square (Plateia Kotzia), Athens, Greece*

Plateia Kotzia is a central square in Athens located in the first municipal section of the city, on Athinas Street in front of the City Hall and within walking distance from Varvakios market (the central market of Athens). The area took the current shape of the square in 1850s, with the original name Ludwig's square [Loudovikou square] (Giochalias & Kafetzaki 2012), after the name of the Hellenophile father of King Otto. In 1888 the Municipal Theatre was constructed in this area and the square was renamed to Theatre square. In the wake of the exchange of populations between Greece and Turkey in 1922 (Sandis 1972; Hirschon 2003), the Municipal Theatre became a migrant camp. Lacking proper facilities, the refugees burned the lavish theatre furniture to keep warm and used the soft furnishing for bedding. In 1939 the theatre was demolished under Mayor Kotzia, despite strong protests. After World War

II, the square took the name Kotzia square; although in 1977 the square was officially renamed to Square of National Resistance most people still refer to it as Kotzia square.

Kotzia square retains its original 19th century layout and its neoclassical architecture, including the City Hall and the Cultural Center of the National Bank of Greece hosted in a building also known as Melas Mansion. It is decorated with a fountain and the statues of two famous Athenians: Theseus and Pericles, both connected to the ideas of city and democracy. Its classical heritage identity is completed by the visible presence of archaeological traces (including a part of the ancient road from Athens to Acharnes, remains of the city's fortification, a cemetery and several houses and pottery workshops) and by the distant view of the Acropolis. The archaeological ruins were found during the constructions work for an underground car park in 1996.

The main character of Kotzia square today is that of a space of movement. During the 2004 Summer Olympics it served as the start and finish point of the Athens historic centre circuit for the road race, as well as for various artistic events. In recent years, the square has maintained a key role in the city life hosting a range of public gatherings including music performances and fireworks at every New Year's Eve.

3.4 Opportunities and challenges with working with Geostream data

The use of Geostream as part of this investigation involved its repurposing from a commercial tool to a research data aggregation tool. This aggregator aimed to offer the researchers quick access to a significant amount of data without the requirement of developing such tool as part of the research. Geostream aggregates heterogeneous content on the basis of a designated geolocation, harvesting both photo-sharing platforms and platforms that store data about Places of Interest. This research only focuses on the former. Although the repurposing of the tool is not unproblematic and required a set of epistemological and methodological adjustments, we consider that the data had significant potential to provide new and nonofficial perspectives on how individuals and communities address the relationship between heritage, place and identity through visual expression. As Geostream aggregates content from more than one platform at once also has the potential to provide insights on the networked and connected nature of the photographs, along the terms discussed in section 2.

One of the opportunities but also challenges associated with Geostream data is that there is no background information on the users. Although this allows Geostream to comply with privacy and copyright rules, it also removes a layer of contextualisation related to the behaviour of users-producers. Geostream data does not allow us to follow the paths and behaviours of specific users nor the response of others to the uploaded photographs. Thus, as contexts of production and circulation tend to be considered central within the application of visual research methodologies (Rose 2001), we tried to incorporate in our analysis speculations developed on the basis of existing studies of photo-sharing and location-based social platforms. Conversely, this algorithm-instigated anonymization of the data allows us to focus on the images and

their textual descriptions without the interference that comes from misconceptions related to user account, and look at heritage/identity depictions beyond the personal.

Geostream aggregates data on the basis of coordinates and only if photographs are characterised by users as downloadable. This means that our dataset only features the uploaded photographs of users who enabled download and geolocate features on all or some of their images. However, geolocation data on images can refer either to the location where the picture was taken or where it was uploaded. Therefore, a significant number of the images captured are unrelated to the three selected squares. This also accounts for human error or inaccuracy in the manual use of geotags. In our analysis, we only focused on images we could confirm as depicting the selected squares or their immediate surroundings.

Even if Geostream was originally developed to gather data from a considerable number of social media, the dataset only contains images from Flickr, Wikimapia and Eventful (with a large prevalence of Flickr). This reflects the fact that not all of these platforms are image-based as well as the closure of Panoramio in November 2016. The restriction on the number of different platforms analysed is however partially compensated by the analysis of tags indicating the presence of the same image on different social media, such as Instagram. As significant portion of heritage-related literature on photo-sharing focuses on Flickr, this made our study more directly grounded on previous research.

Some of these limitations, together with the qualitative nature of our approach, warn for caution and sustained awareness that there are biases in what we can infer from the dataset. Nevertheless, some of the limitations of Geostream can also offer a vantage point to focus our attention on specific aspects of online photo-sharing practices. Furthermore, by using a tool which was not customised for our research purposes we can explore and illustrate the idea that heritage processes are implicit in a variety of socio-cultural practices enabled by photo-sharing technologies.

3.5 Description of dataset

The entire dataset comprises 15,061 images, divided as follow:

- Old Eldon Square: 9,498 images (5 from Wikimapia, the rest from Flickr)
- Loreto Square: 3,373 (4 Wikimapia, 1 eventful, the rest from Flickr)
- Kotzia Square: 2,190 (2125 from Flickr, 30 from Wikimapia, 33 from Eventful)

The images span the period from 2003 to 2016, with a small number of images attributed to other historic periods. The metadata include both information automatically generated by the provider (the platform where the images were originally uploaded) and inserted by the user. Not all images have a full set of metadata, depending on user habits and actions.

The image metadata include:

Title, description, tags, provider, geolocation (latitude and longitude), dates on which the picture was taken and on which it was uploaded. (See Appendix B)

Metadata contribute to confirm or clarify the subject matter of the picture and provide a range of details and interpretative cues about the relationship between users and images (and therefore the places and occasions in which the pictures were taken). Finally, they offer information on a range of social-media behaviours, such as the use of specific online platforms and related tags.

3.6 Analytical approach

Our analysis adopts a qualitative exploration of the data-set grounded both on keyword-led queries and various levels of categorisation leading to the identification of groups of images and patterns organised in themes. Specific photographs (or groups of) are analysed in more detail within each theme.

We started with an explorative examination of all images in the dataset using a broad selection of textual queries. All queries were conducted both in English and in the local language of each square. A first set of keywords related to traditional heritage vocabulary (for instance: *culture, cultural, monument, statue, memorial, heritage, memory, identity, tourism, place, public*). Other searches addressed our focus on European crisis and European identity: *Europe, European, crisis, Greece, Italy, Britain, United Kingdom, Geordie, Brexit, national, country*). We also performed searches more specific to each square; for instance: *poppies, Remembrance, war, shopping, youth, hooligans, emo* for Old Eldon Square; *Mussolini, Fascism, anti-fascism, World War* for Loreto square; *immigrants, drachma, bank, crisis* for Kotzia square. This stage of exploration led to the initial grouping of images in the following descriptive categories:

- Heritage objects (monuments, statues, fountains, architecture, plaques and so forth)
- Historical events/documents (these mostly relate to Loreto Square WWII events)
- Historical views (documentation of old and now transformed views of the squares); we found examples of this for all three locations
- Contemporary events (protests, public gatherings, manifestations, temporary events)
- Everyday life/urban street life (characterisations of the contemporary daily use of the squares); this is the vast proliferation of images in the dataset.
- Urban 'ephemera' (graffiti, murals, signage)
- Aesthetic shots/details (means of artistic expressions of the photographer)
- Images with commercial purpose (promotional images by commercial photographers and images of products associated with specific shops in the squares)

Our initial categorisation also acknowledged the presence of both contemporary born-digital pictures and historical/archival images, originally analogue and scanned to receive broader circulation.

Subsequently, we explored the images combining text queries and visual inspection of the dataset in relation to our research questions (online visual representations of place and identity; dialogue and European identities; participatory digital practices in relation

to official heritage perspectives). This led to identifying groups of images sharing similar themes or issues that could be critically investigated as case studies to reveal new approaches to heritage-place-identity supported by social media platforms; and, to instigate further research directions and opportunities around the idea of digitally-enabled dialogue in association to European heritages and identities. In this case, we occasionally searched for the same images on Flickr to gather further contextual information on the user.

4. Locating ‘Europe’ and ‘Heritage’ in the dataset: accounting for notable absences

The core of this research is polarised between the notions of heritage and European identity. Part of our analysis therefore was directed at identifying the presence of these notions in the dataset and their relevance. Nevertheless, our findings illustrated in this section suggest how both references to the European context and to the idea of heritage are addressed in rather implicit terms, signalling a certain distance from traditional and well-defined cultural frameworks.

4.1 Locating Europe

The selected squares are located in countries with significant ties to Europe’s heritage as well as emerging new relationships with Europe through financial and political changes in progress in the last 3-5 years. Therefore, this research aimed to identify how words such as ‘Europe’ (and similar terms) were re-presented among the textual tags and descriptions that were used by the users who uploaded and geotagged the images in the dataset. The research team carried out a word search using the following terms (in both capital and small letter variations): Europe, Europa, Ευρώπη, European with the following numerical results:

Table 1 Occurrences of terms related to the word 'Europe' in the dataset

	Europe	Europa	Ευρώπη	European
Kotzia square	55	7	0	4
Loreto square	35 (4 in europeindoor)	29	0	4 (in europeantour)
Old Eldon Square	109 (21 in megabuseurope and 5 in northerneurope)	2	0	6 (2 in eastlanceuropean)

Through qualitative analysis of the results, the use of the terms Europe and Europa was combined with other location specific indicators, which provided strong evidence that the terms were used as geographical indicators. For instance, a common

combination in the dataset from Loreto square was 'Italy, Milan, Europe' and in the dataset from Kotzia square was 'Europe', 'Athens', 'Greece'. The limited use of terms such as 'Europe' contrasted with widely used national geographical terms, such as Greece/Ελλάδα/Ελλάς (c.1000 times in the Kotzia dataset), Italia/Italian/Italiano (807 times in the Loreto dataset), and England (884 times in the Old Eldon square dataset). In alignment with previous research by Barton (2015) the terms Europe and Europa co-existed among users' tags alongside the translation of other geographical terms in a variety of languages (e.g. Chinese), a tagging practice which has been connected with users' intention to address a variety of audiences. The term European was much more limited in its use and when used it was combined with terms such as tour (in one-word tag) to indicate the geographical scale of an activity. This analysis suggests a stronger understanding of Europe as a geographical reference rather than a cultural, political, social or financial context. This poses the question: why is Europe relevant as a location to these users and their audiences?

Although not explicitly mentioned in the metadata, the idea of Europe as a political and cultural reference is present in several images capturing transnational activist expressions, or commenting on topics such as the financial crisis in Greece (see section 6). One particular example deserves special attention because of the way classical heritage is mobilised within contemporary pan-European activist practices. Images 114679 and 114680 (figure 1) from Kotzia square feature the statue of Pericles gagged with a blue European flag, and are accompanied by the tags 'statue, Europe, protest, Athens, Greece, jef, belarus, gagged, Pericles gagging, freebelarus, άγαλμα, Περικλής, freebelarusjef, Λευκορωσία'. The act of 'silencing' the statue was part of a



Image by Konstantinos Koukopoulos, flickr, published under CC licence (Attribution), <http://bit.ly/2mAMAYy>

Figure 1 The statue of Pericles in Kotzia square gagged by members of JEF in January 2010

Europe-wide campaign promoted by the Young European Federalists across several years (starting from 2007) in numerous countries to attract public attention on human rights and free speech issues in Belarus (One Europe n.d.), under Lukashenko's authoritarian regime. The use of the European flag addresses the inability of the European Union to take action in foreign policy to support a democratic process in Belarus. At the same time, the association between European identity and democratic values is implicitly reinforced. The action captured in Athens is particularly meaningful because of the role of Pericles as a symbol of democracy (Kagan 1998) itself. The role

of social media and the dynamics between online and offline are also important. The action was staged not just to be seen by passers-by, but to receive global attention through photographic documentation and online sharing on different platforms (including Flickr and Facebook). Thus, these images represent an instance of *in situ* curation of the physical space in order to generate awareness, debates and further action through online international dissemination.

4.2 Locating heritage

The three squares present significantly different heritage profiles. Kotzia square is generously furnished with elements of cultural interest and is situated within a capital city and international tourist destination. Old Eldon square is in a regional city in the UK and only features the war memorial. Loreto square is also in a regional city and more specifically a decentralised position in Milan; it only features one memorial plaque for the 15 anti-fascist martyrs.

A keyword search conducted for the terms ‘heritage’, ‘culture’ (and cultural) and ‘monument’, provided limited results:

Table 2 Occurrences of terms ‘heritage’, ‘culture’ and ‘monument’ in the dataset

	heritage	culture / cultural	Monument
Kotzia square	0	5	4 (+ 3 for the terms μνημείο/μνημεία)
Loreto square	0	0	1
Old Eldon square	0	6 (1 in polishculture)	74 (11 in greysmonument)

The qualitative analysis of these results evidenced that the term ‘cultural’ is used in tags associated with the ‘Cultural Center’ of the National Bank of Greece. The term ‘monument’ in Kotzia and Loreto squares is associated with memorial plaques, statues and archaeological ruins in these locations, while in Old Eldon square the results are skewed due to the use of this term to refer to the ‘Monument’ area in Newcastle city centre (around Grey’s Monument in a nearby square). These findings suggest that traditional heritage terms have limited currency in the dataset of geotagged images.

The absence of the term ‘heritage’ in the metadata is also reflected in other significant omissions in the content of the images in the dataset. Our knowledge of the squares’ histories and uses naturally guided a set of expectations on the content of the datasets aggregated by Geostream. However, some of these expectations were not met by our findings. For instance, Old Eldon square is the site of Newcastle Remembrance Day, held in Commonwealth countries to commemorate members of their armed forces. In the period around Remembrance Day people wear red poppies, the emblem of the commemoration, or place them around the war memorial. Despite the strong visual impact of the poppies in the public space, the Old Eldon square dataset only contains

two images (115799, 116198) of this annual event. However, images of poppies in Old Eldon square are abundant on Flickr and other social media. These images do not appear in the dataset because they were not geotagged, or the download was disabled (this often is set together with copyright restrictions). Similarly, despite the high number of images of the hung bodies of Mussolini and his entourage in Loreto square on social media and popular websites including Wikipedia, only one image was gathered by Geostream. These omissions raise questions about specific online behaviours of users and the kind of circulation they plan for their photographs. They further bring into sharp attention Van Dijck's (2011) warning about the role of the algorithm in processes of memory making: as these images are not geotagged by their users their discoverability by location-driven media and services is disabled and so is their capacity to be present in the increasingly personalised everyday experience of places.

Nevertheless, we can argue that heritage is undoubtedly present in the dataset, not only in the number of images depicting the Old Eldon square war memorial and the various cultural objects in Kotzia square (buildings, statues, ruins) but also in implicit terms; for instance, in the use of 'heritage' references to comment on current socio-political affairs, and in photography practices that support community-building around past or forgotten representations of place.

An example of the former can be seen in image 113851 (Kotzia square). The black and white shot of a female beggar sitting on the floor is titled 'Caryatid' (description: 'Caryatid of modern Greece'), thus establishing an analogy between the beggar and the classical sculpted women figures serving as structure of support (like columns) in ancient Greek buildings. The tags associated with this image further enrich the commentary expressed by the user: 'streetphotography athens greece crisis greekcrisis athensphoto'. It is possible to speculate that the implicit meaning of the photograph refers to the position of Greece, suffering under the weight of the current financial crisis. The reference to the Caryatid however gives more nuances and complexity to such statement, not only by making it more Greek-specific, but also by reminding the audience of the foundational role of Greece in European/global culture.

An example that highlights community-building practices around photography sharing, is the number of images in the dataset that consist of old postcards and archival pictures of the squares. Most of these examples refer to Kotzia and Loreto squares, while the Old Eldon square set only features a small number of images of the interiors of the shopping mall from the 70s and 80s. The pictures come from scanned book pages, or from private and public archives, and portray how the squares used to look like, buildings no longer existing, panoramic views of the disappeared everyday of these places, thus highlighting transformations and enabling a comparison and dialogue between past and present (see figure 2 from Kotzia square dataset under one of the former names of the square).

Undertones of nostalgia are easily readable in this category of images, thus inserting these practices in a broader tendency on social media to develop emotional communities around amateur archives of the recent past. These communities tend to originate in the efforts of individuals but welcome contributions by other members

(through the group function on Flickr), and are characterised by a shared sense of attachment and pride for the objects of their attention.

Much has been written about the relationship between heritage, identity and nostalgia (Lowenthal 2015) particularly in terms of an affective turn in heritage practices (Gregory & Witcomb 2007), linked to a process of democratisation of history and memory. A focus on the ordinary and the everyday has been conceived as a way to reduce more didactic approaches and to allow a greater plurality of voices in heritage and historical discourses (Atkinson 2008; Macdonald 2013).



Figure 2 Ludovic Square 1900s (now Kotzia square), flickr.

Given the accompanying explanatory and informative titles, tags or description, the historical views of places in our dataset can also be described in terms of knowledge-sharing practices. The users assume a curatorial position that challenge expert-knowledge and give value to the expertise of the layman, accrued through their rootedness in the place. Further, there are signs indicating how users might identify a primary audience of like-minded people as their main recipients. For instance, some of the old images of Loreto Square are tagged with the expression 'milanlerainsci' in Milanese dialect, only used by locals. This reminds us how heritage practices are articulated alongside dynamics of inclusivity and exclusivity (Graham and Howard 2008). Therefore, these images require us to acknowledge that attitudes of love, respect and valorisation of place and community building are never neutral or unproblematic.

5. Transnational rituals

During our first examination of the dataset we encountered several groups of images depicting collective, temporary events taking place in the three squares. These events include political, activist or entertainment-oriented assemblies of people in which social media play a key role not only in facilitating the organisation of the event itself, but also in its documentation and in shaping public discourse.

More specifically, some of the events depicted are local instantiations of international movements that regularly organise events in different cities around the world. Others are one-off events or protests determined by specific political circumstances, or recurring local initiatives. Below we provide a brief outline for each event before moving on to analyse differences, similarities and their relationship with digital practices in relation to place, heritage and identity.

International ongoing movements: Zombie Walk (Old Eldon Square); Gay Pride (Loreto square); Critical Mass (Loreto square)

Zombie walks (Orpana 2011) are public gatherings of people dressed up in zombie costumes. They can be organised for a range of purposes including supporting charitable and activist causes, generating opportunities for gaming, entertainment and social interaction, capturing footage for creative expression. Originating in North America in the early 2000s, they are held in different parts of the world, typically in urban settings and usually arranged according to a predetermined route. Newcastle upon Tyne hosted a number of zombie walks since 2008 but the only one present in the dataset is from 2012.

Gay Pride (Johnston 2007) take place worldwide every year to promote equality and fight discrimination towards gay, lesbian, bisexual and transgender people. They take the form of parades, rallies, marches or street parties, often characterised by a strong carnivalesque and colourful element. The parades in the dataset took place in June 2014 and 2015 in Loreto Square.

Critical Mass (Time's Up n.d.) is a monthly activist cycling event in which groups of cyclist meet at a set location and travel through the city reclaiming the streets and promoting alternative urban practices and values. The first one was organised in 1992 in San Francisco and it now takes place in over 500 cities around the world. The images in the dataset refer to the 'Ciemmona 2015' (Italian for: the big CM), an annual, more prominent ride, enriched by a programme of connected events.

Recurring local events: ¡Vamos Carnival (Old Eldon square); Domenica a Piedi (Loreto square)

¡Vamos Carnival is a colourful dancing parade organised every year in Newcastle as part of a festival celebrating Latin American cultures (Vamos Festival! 2016).

Domenica a Piedi (Sunday on Foot) is an initiative organised by several Italian municipalities to address the levels of pollution in the city centre. Periodically, access to a portion of the city is forbidden to cars on Sunday, and a range of activities are organised to promote a positive attitude towards the initiative, particularly encouraging the use of alternative means of transport. The event presented in the dataset refers specifically to the initiative 'A Ruota Libera' (on free wheels) in which participants are parading on bikes, skates or scooters (Eco dalle Citta' 2012).

National or local one-off events linked to specific circumstances: Anti-cuts in Education protest (Old Eldon square); Atenistas candle-lit event (Kotzia square); Manifestazione Pro Egitto (Demonstration for Egypt, Loreto square)

In 2010 thousands of students across the UK demonstrated against the plans to raise tuition fees in England to up to £9,000 per year. Some images in the dataset portrays Newcastle students marching across the Eldon Square shopping centre (contiguous to the Old Eldon Square).

In November 2010, the night before the Greek local elections, Atenistas, a grassroots resident group in Athens invited the citizenship to bring and lit their own candles in Kotzia square to send a positive message to the future elected municipality about the liveliness of the neighbourhood, despite the political and economic crisis in Greece. The images in the dataset capture the suggestive and evocative atmosphere created by the candles and therefore by the active participation of the local citizens.

In 2011 about 500 Egyptians residents in Milan gathered in Loreto square to march against President Mubarak. The starting point for the march was chosen because of its proximity with the Egyptian Consulate (in Viale Porpora, one of the streets radially departing from the square). Similar protests took place in the same period in different European cities with a significant presence of Egyptian expats willing to partake to the rebellion happening in their home-country, even if at distance.

An articulated discussion of collective gatherings, protests and events in the public space exceeds the remit of this report. In their heterogeneity, all the examples analysed

reflect emerging ways of reframing the urban space and enhancing social cohesion through collective action. The visually engaging, colourful, spectacular character of these practices (with banners, costumes, masks, puppets, flags and choreographies) is not only crucial to their effectivity in the physical space, but contributes, together with their unrepeatability and liveness, to make them worth of photographic documentation. At the same time, such visual apparatus enhances their ritualistic nature. We loosely conceptualise these events as *rituals* because they involve performances, symbols, communitarian participation, celebration and the establishment of new traditions that despite their novelty, tend to be replicated in different contexts.

Much has been written on the way digital technologies contribute to shape new political subjectivities and on the reciprocity between virtual and physical space in contemporary political activism (Juris 2012). What concerns us here is, however, how the significance of the place in which these events are immortalised is affected, and what kind of heritage and identity building processes are involved in documenting them on social media.

Although the squares are temporarily altered in their use and legibility by these collective events, in most of the cases we analysed, there is no connection between the historical or cultural specificities of the location and the themes of the event; two exceptions are the march of the Egyptian residents in Loreto square, and the neighbourhood-oriented focus of the candle-lit event in Athens (figure 3). Places, in this case, tend to play the role of containers; they are empty canvases to be filled with human presence, selected primarily for their location in the city centre or in the intersection of a more articulated route. Thus, it is the experience and the temporary action that gives significance to the place, which then becomes documented and, therefore, remembered as a lived-place.



Image by Spiros Vathis, flickr, published under CC licence (Attribution/NoDerivatives), <http://bit.ly/2mUfxCI>

Figure 3 Atenistas candle-lit event in Kotzia square, Athens, 2010

The geotagged nature of this imagery, which links it permanently to the specific location, provides a novel, alternative take to traditional approaches to remembering

place and investing it in heritage value. Differently from established heritage discourses, in this case the process is initiated directly by users online and immediately after or during the event itself, without waiting for the mediation of official institutions of memory. In a nutshell, the process is accelerated and de-institutionalised; it is also open to multiple poly-authored future curations of place enabled by geotagging technology.

Collective urban rituals are sometimes intentionally planned to re-fashion the city, investing it with a sense of uniqueness and cultural distinctiveness. The latter may originate directly from a creative or cultural manifestation, such as in ¡Vamos Festival in Newcastle; however, the zombie walk, the Domenica a Piedi and the candle-lit events also partake to a similar effort, i.e. to demonstrate the value of a place and its local communities.

Even though it is not always possible to determine whether the users who took and uploaded the picture were active participants or observers, we can speculate that by sharing these images they intended to associate their identity with the movements, beliefs and values at stake. Indeed, the choice of geotagging the pictures might indicate the desire to affirm their physical presence during the event (Schwartz & Haleboua 2015).

Furthermore, the transnational dimension of social media, in these examples, can sustain a process of identity building which is also transnational. Through their images, the users put themselves in direct relation to other people and communities across borders sharing similar views. At the same time, the act of sharing the images acquires a performative value insofar it can spread the message to broader audiences and generate further resonance and mobilisation. Indeed, the promotion of the specific initiative is often the primary intention of sharing and documenting the events, particularly when the author is an institutional entity (for instance, most of the images about the Domenica a Piedi were posted by the official account of Milan Municipality).

The Pro-Egypt manifestation deserves individual attention in reference to our interest in European identity. The idea that expats coming from outside Europe were able to express themselves politically and use the local public space in different European cities to advocate issues concerning their home-country is meaningful. It says something about the way Europe is depicted as a place for democracy, in which (Western) libertarian values can be expressed and protected.

What is common to all examples is the process of providing legacy to otherwise ephemeral experiences. Such legacy is less concerned with the place than with a certain civic culture or affirmation of social groups. Nevertheless, the geotagged location is crucial to reinforcing the link between the online and offline spheres. There is a growing scholarly interest in the role played by camera-phones in documenting extraordinary events (Caswell 2009; Hoskins 2011; Andén-Papadopoulos 2013). The practice of sharing experience almost in real time can sometimes originate participative networked archives whose value might go beyond the personal instance of social interaction, to acquire documentary, historical, heritage and research relevance. We

argue that this immediacy, an almost complete contiguity between the action and its archiving, is an emerging feature of current digital culture that is becoming increasingly relevant to institutions of memory; however, its meaningful mobilisation is still unresolved.

The archival value of the images depicting transnational rituals in our dataset is enhanced by the associated metadata, which is primarily descriptive in the examples examined. Such a simple annotation approach can be a tool for retrieval of own images by the user, but also a communication mechanism to connect to other streams of content related to the same or similar events, and to enable searches and aggregation from other users (Murray 2013). Even though social media like Flickr do not guarantee the preservation of content, the mechanisms of sharing, posting, downloading, and linking connects these digital records in the network of a constantly remediated 'connective memory' (Hoskins 2011). Such process of remediation can support the endurance of the record, and at the same time it amplifies opportunities for counter-memories and parallel, conflicting narratives to emerge from the trajectories of records across different media platforms (ibid.).

6. Curating place/curating self on different online platforms

Users often curate and redistribute their photostream across different social media to project diverse aspects of their personality, make comments on current issues and maintain a dialogue with other users. This section discusses these practices highlighting their subjective, creative, narrative and affective dimensions and relating them to existing literature on photo-sharing behaviours.

As Malinen (2010: 381) asserts Flickr is based on a 'self-presentational' mode of the users, who 'present an ideal self through the internet by selecting (specific photos) to publish' (ibid: 382-383). Also, Flickr users address their audience with a series of tags that reflect 'subjective assignments between words and collections of objects, intersubjective patterns in these associations and implicit information on social networks' (Damme et al. 2007: 58). Indeed, hashtags play a vital role in arranging, distributing and maintaining messages around the web. Nevertheless, some tags are automatically generated and provide details about the kinds of manipulations effectuated on a photograph (using filters, crops, apps). For instance, many images in our dataset present the "instagramapp" tag indicating the photo was originally shared on Instagram and then disseminated on Flickr and other platforms through the namesake app.

Tags, titles and descriptions also complement the images in creating brief and instantaneous narratives inspired by the specific circumstances in which the photo was taken. In image 110140 (Loreto square), the title 'Different point of view' suggests what the photographer attempts to adopt the perspective of his subject. This is a man standing on a ladder, looking at the busy activity in the square from his higher vantage point. Such alternative point of view might have metaphorical implications, attributing

to the man, who may be a cleaner or a municipal worker, a daydreaming stance about a different life, or the achievement of a new perspective on things. The narrative mode is often expressed by attributing imaginary quotes and forms of direct dialogue to the content of the picture. This can be observed in image 110148 (Loreto square) depicting a man talking on the phone while walking down the stairs to the underground passage of the metro station. The title 'I'll call you back later(gram)' speculates on what the man might be saying on the phone when the picture was taken, proposing a reflection on today's condition of total connectedness, only interrupted and disrupted by occasional physical barriers such as being in an underground space. A similar mechanism is adopted in image 121483 (Old Eldon square), where a cup of cappuccino is accompanied by the title 'My first ever Starbucks'. Here the photographer talks to his potential audience in the first person, emphasising the importance (perhaps slightly ironically) of this moment in his life. This might suggest that he is very young, or have lived in a small town without Starbucks coffee shops, or have travelled from a foreign country where the American coffee chain is still absent. Therefore, by focusing on daily and banal experiences, these photographs, which are additionally shared via instagram, can also work as a commentary on a certain effect of globalisation or on the belonging to specific lifestyles and social groups.

These examples illustrate the role of photographs as 'narrative hooks' on social media (Lin & Faste 2012: 245-246). Furthermore, these visual narratives could be understood through the classical narratological concept of 'focalization', as they are constituted by the adamant 'relationship between the 'vision', the agent that sees, and that which is seen' (Bal 2009: 368). Consequently, Flickr users can be understood as 'focalizers', i.e. agents 'who perceive[s] and who therefore determine[s] what is presented to the reader' (Herman & Vervaeck 2005: 70). This resulting photographs are commonly understood as 'snapshots' (Chalfen 1987) and characterise a new generation of users called 'snapsr' (Miller & Edwards 2007). These users have developed a series of novel practices in taking photos, mainly by creating unstructured photo-rolls, which are intended for sharing beyond their own social networks and which they curate.

As discussed in section 4, heritage often appears as an implicit term of reference in the images in our dataset. Within a snapshot culture, archaeological remains might become the inspiration for an ironic commentary that challenge traditional and reverential attitudes to our inherited past. Image 114560 (Plateia Kotzia) depicts a set of open, ancient coffins among the archaeological remains in Kotzia square. The title 'the dead have left' playfully desacralises both the religious function and the heritage relevance of these artefacts. Classical heritage becomes here the inspiration for an improvised narrative that wishes, perhaps, to address the diffused presence of antiquities in Athens in the eye of a tourist, or suggest what is now recognised as heritage was once just part of everyday life (and death).

Indeed, irony and humour can be seen as strategies for building one's identity online. Photo-sharing and geotagging possibilities, therefore, enhance the traditional use of personal photography for self-representation precisely by expanding the dialogic opportunities of images. This strategy for self-presentation is often expressed through

the making of opportunistic associations between photographs and socio-political affairs. Image 113754 (Kotzia Square) features the iconic building of the National Bank of Greece, a symbol of modern capitalism and therefore of the current financial crisis. The title, 'Βαριά η συννεφιά πάνω από την τράπεζα #bank #clouds' (in Greek: Heavy clouds over the bank) informs the viewer that harder times for the country are approaching due to the recession. Such a pessimist comment is framed and reinforced by the analogy with the dramatic weather conditions captured by the picture, with dark clouds looming over the building. The theme of the crisis is frequently present in the Greek portion of the dataset. Another example is image 115202 (Plateia Kotzia) featuring an old man with a long white beard and worn out cloths, pushing a kart on which various pairs of socks are displayed. The physical features of the subject of this photograph inspired the photographers to ironically call it 'st.claus'. However, the fatigue visible in the man's movements, together with his poor and neglected appearance, reflect a less cheerful interpretation of the subject. We can speculate how the photographer might see in the old man a victim of the current crisis, which forces even the elderly to work on the street and perhaps conduct a homeless life.

This section sought to illustrate the multiple ways in which Flickr users curate, construct and perform their online identities including a variety of dialogical and narrative strategies in which images and short texts (descriptions or tags) are combined to tell a story or comment on current affairs. Irony and humour are adopted to reinforce or contradict the relationship between the content of the image and the photographer's public reflection and proposition to his/her audience. As photographs get associated to implicit socio-political commentary and alternative perspectives to everyday, open up opportunities for the audience to fill in the gaps and embark in the meaning-making process on multiple platforms.

7. Hot and Cold Historical Documents

Images in the dataset refer to specific historical events or, display contemporary reactions to past events in relation to current issues. Several photographs show material traces of the past still present, but often hidden, in the urban space, offering the opportunity for the resurfacing of neglected stories. In this section we wish to explore this further by relating the notions of 'cold' and 'hot' memory (Maier 2002) to online photo-sharing platforms. We speculate that it is possible to locate these images across a spectrum of politically or emotionally charged representations. Some of them catalyse conflicts and debates which are still affecting the current political climate. Others seem to frame the past in rather unproblematic terms. All these approaches are characterised by the involvement of curatorial and affective modes of presenting and sharing pictures.

7.1 Fascist Heritage between past and present

As we mentioned in section 3 Loreto square was theatre to the hanging of Mussolini and his entourage in 1945; some of the images in the dataset refer to these events in alternative ways. Our preliminary research on the square's history highlighted the absence of any intentional heritage interpretation (e.g. interpretative panels) *in situ* informing about the place's crucial historical relevance. This reflects the more general lack of an official, consistent strategy to deal with fascist heritage in Italy. Without any visible counter argument, key monuments or places 'are easily claimed by extremists groups, who use them as physical proofs of a particular, exclusivist interpretation of the past' (Mitterhofer 2013: 50–51). Most of the original photographs of the day of the hanging and public massacre of the dead fascist bodies remained hidden for a long time, and started reappearing in the public domain through social media in recent years. Neo-fascist politicians and sympathisers have explained their effort to publish these images as a way of allowing people to witness the brutality of Mussolini's execution and the lack of a proper trial. This should, in their intention, suggest a revision of the dominant historical narratives of the Italian liberation from the regime (Federici 2015). Nevertheless, the circulation of these images has since been embedded in a range of different accounts including more curatorial, archival and less evidently partial approaches. Indeed, our dataset of geotagged images only includes one black and white photograph (110791) of the hanging body of Mussolini, and one (111082) depicting soldiers in a van crossing the square and tagged with the year 1945. The associated metadata is factual, and not politically charged.

A stronger political stance can be found in a few contemporary photographs that associate recent Italian issues to the historical identity of Loreto square. One of these images (112427) portrays the UPIM department store in Loreto square with tags that include a set of references to Mussolini and the Italian Social Republic (the last incarnation of the Fascist state during the late part of WWII): 'milan grande milano departmentstore lombardia benito mussolini rsi lombardy upim emporio ilduce piazzaleloredo nokia6070 repubblicasocialeitaliana grandemagazzino clarapetacci'. Significantly, well known historical photographs of the hanging of the fascists' bodies show UPIM store in the background. This suggests the intention of the author of the contemporary picture to signal and re-inscribe the 1945 events in its physical location nowadays. The decision to geotag the picture can also be interpreted in this sense.

Furthermore, two almost identical images (110192 and 110711) depict the shutters of a shop or garage displaying a graffiti writing saying 'Berlusconi a Loreto' (Italian for: Berlusconi in Loreto) and the symbol of a gallows. Berlusconi is a controversial Italian political figure, leader of the centre-right party and Prime Minister in 4 governments between 1994 and 2011. Although we do not know if any of the users who uploaded the pictures was also the author of the graffiti, both titles ('Someone Buy Him A One-way Ticket' and 'Spontaneity of gate') express approval and support to its message. Still, it is not impossible to determine whether the picture is geotagged in Loreto square because this is the location of the shutters, or to create a stronger connection with the 1945 events, or for both reasons simultaneously. Regardless of whether the users

were aware of the comparison between Berlusconi and Mussolini suggested by the graffiti, the symbol of the gallows remains linked to Loreto square through its online circulation and remediation.

Finally, the dataset contains a 2008 picture (112429) of two posters put up by Alleanza Nazionale (a neo-fascist political party dissolved in 2009) in Loreto square, inviting to attend a ceremony and Mass in the San Fedele Church in Milan to commemorate the 20th anniversary of the death of Giorgio Almirante, founder and leader of the Italian Social Movement, which was essentially the previous incarnation of Alleanza Nazionale. The tags feature a mix of Italian and English language, and address a heterogeneous set of topics and references, including geographical information, words extrapolated from the posters, and rich and detailed vocabulary connected to the past and recent history of Italian fascism: 'italy milan church grande nokia san italia milano 1988 almirante moustache romano chiesa tribute movimento piazza secretary mass 2008 homage comrade piazzale lombardia loreto romancatholic italiano msi lombardy fedele catolico tributo nazionale messa alleanzanazionale destra sociale camerata 6070 sanfedele piazzaleloredo omaggio esempio alleanza seguire segretario nokia6070 giorgioalmirante movimentosocialeitaliano nuevadestra'. The detailed tagging, together with the mundane composition of the picture itself, can help us speculate on the dialogic intentions of the user. The picture seems to highlight the fact that fascism is still 'celebrated' by a portion of the Italian population and that this constitutes a matter of debate. Whereas some pictures are shared on Flickr simply to maintain a personal record or to share experiences with friends and family, this could be seen instead as a clear example of a picture uploaded to stimulate comments, particularly when considered in connection with the square's history.

These examples convey the idea that online photo-sharing practices can suggest new connections between past and present, and are frequently used to generate or re-invigorate debate, re-writing the past and re-inscribing it onto a variety of interpretative frameworks. Occasionally, as demonstrated by the Berlusconi graffiti, the heritage of a place can be simply instrumental to express a political view on the present. On social media, memories and their cultural meanings seem to constantly evolve from their contexts of origin, following an ecological (Brown & Hoskins 2010) or connective (Hoskins 2011) model that regulates their dynamics of transformation, latency or rediscovery.

7.2 Hidden traces, neglected stories and crowdsourced preservation

The second group of images we analyse in this section addresses issues of visibility and invisibility of the past in the current physical arrangement of the squares.

7.2.1 Bomb shelter signage

A set of images in the Loreto square dataset depict bomb-shelters signage from World War II in Milan (figure 4). These include a range of letters and symbols (arrows) to

direct civilians towards the shelters and their exit points. In recent decades, many of these signs have been erased by refurbishment or covered by graffiti. Furthermore, their meaning is often forgotten and they tend to go unnoticed by passers-by. To counter their disappearance, grassroots initiatives and amateur groups (gathered around the Italian Network Bunker and Anti-air Shelters) have started working towards the recording of existing signs. A look at the dedicated pages on social media such Flickr and Facebook demonstrate how they tend to associate preservation with a pacifistic rhetoric of remembering in which cultural heritage works as a moral message. By showing or hinting at the horrors of war, these material traces are intended to keep alive the lesson of the past. As the



Image by dan o. O, flickr, published under CC licence (Attribution/ShareAlike), <http://bit.ly/2mGLNZ3>

Figure 3 Forgotten WWII Bomb shelter signs in Loreto square, Milan

metadata of our dataset shows, however, these images are also often simply framed as ‘curiosities’. Indeed, online photo-sharing is integral to these practices of heritage identification and preservation, which seek to exploit the visibility and the sense of community offered by social media to subsequently mobilise and find support in public institutions.

The unique affordances of location-based social media allow for the proliferation and geographical expansion of the crowdsourced process of listing, documenting and archiving these traces. For instance, after encountering examples from Milan on social media, users in different cities might come to recognise similar signage in their own surroundings. Further, the fact that the images are geotagged can stimulate viewers to go and look at the signs in the physical location on the map, thus rearticulating the connection between on-site and online through the paradigm of a treasure hunt.

7.2.2 Many names, many histories in Kotzia square

The interplay between visible features of the squares and hidden histories is particularly evident in images from Kotzia square. As summarised in section 3.3, Kotzia is not the official name of the square, which has been renamed several times: Ludwig/Ludovic square, Theatre square, City Hall square, Kotzia square and Square of National Resistance; each name is connected to a different key figure or event in its

history. The succession of multiple names both reflects the multi-layered history of the place and is further complicated by the *in-situ* and online circulation of such names. In fact, the official name, Square of National Resistance, was given to the square in 1977 to commemorate the strike of the post office workers in 1942 protesting against the Nazi occupation and the killing of workers in the Municipality of Athens during the same period – both events commemorated in the square with respective plaques (image: 113295 and 114797). However, the official name of the square is not commonly used; the commonly used name ‘Kotzia square’ takes after Mayor Kotzia, who during his political career made several improvements in the living conditions in the city but he also demolished the Municipal Theatre and had an ambiguous role in the dictatorship of Metaxa (1936). This raises questions about the relationship between users of the square and memories of the WWII Nazi occupation. Is it something neglected and fully digested (a cold memory), or rather something traumatic and painful, therefore demanding forgetting (a hot memory)? It also demonstrates that global and local historic narratives often compete in their affective resonance around a place and its memory. The ambiguity among narratives is reinforced by the presence of different commemorative plaques and signage in the square, referring to the various names and moments of its history. Although these material manifestations of the past are present in the square, some of them have been object of decay and vandalism, so that the associated histories are maintained in a regime of semi-visibility, but available to re-discoveries also through the circulation of images of such artefacts on social media. In the Geostream dataset, previous names of the square are present in the descriptions and tags of depicted monuments. However, only five of the geotagged images in the dataset explicitly refer to the official name of the square.

To summarise, all families of images analysed within this section share a similar curatorial approach characterised by the act of circulating knowledge; and selecting and making visible to the public something which was previously hidden or neglected. The dialogue between past and present is articulated either through material traces; re-inscription of past events into contemporary debates; and opportunities to experience change and a sense of loss. Despite their different relevance in the present, they all express an affective mode in relating to place: through care and preservation; revision of existing narratives or focusing on specific ideologies and beliefs. Due to their affective dimension, these images have the potential to facilitate the formation of communities and the development of different dialogic opportunities: informing, suggesting comparisons, indicating and commenting on change, calling for other people's contributions, and introducing critical debates.

8. Conclusion

By analysing the broad dataset aggregated through Geostream, this project contributes to the exploration of how our relationship to place and identity is reflected and shaped by social media. Our starting hypothesis provoked us to explore how processes of personal visibility could overlap with heritage narratives, and establish

the premises for a public discussion of cultural values. To substantiate our hypothesis and gain a deeper understanding of these practices and their dialogic potential, we focused on three key themes that we associated with a range of specific images from the dataset. These themes focused on transnational, collective urban events; the articulation of photo-sharing practices across different platforms and between physical and digital space; and affective and community-oriented approaches to the historicity of place. To underline the findings of this research activity we revisit its initial aims.

- a) To explore how visual representations of place and identity are constructed/produced on geosocial digital platforms.

In our exploration place was mostly relevant as setting of **experience** (for instance unique collective events and fragments of everyday life able to inspire impromptu narratives or reflections). It was linked to processes of **identity building**, performed by demonstrating the users' physical presence in a determined place; underlying their participation to certain events; emphasising the role of place in the photographer's daily life; or addressing place as a source of creative expression. Such processes tend to take place across different platforms and intermingling physical and digital spaces (**multipresence**). Finally, place emerge as a site of **affection**, catalysing passionate political stances or nostalgic approaches.

- b) To identify the potential of geolocated social media platforms to develop forms of dialogue about the nexus heritage-place-identity in European contexts.

The analysis of individual images and groups of images in the thematic sections identified a number of dialogic forms both conceived as dynamic interaction between different factors and as communicative exchanges between users. The first category includes the coming together in a metaphorical conversation of **past and present** aspects of place, for instance by re-inscribing historical events onto contemporary views of the square, by comparing its lost and current looks, or by highlighting visible traces of past. Additionally, there is a dialogue between the **online and offline** space, as events in physical space are captured to enrich users' online profile, or to feed online discussion and circulation of ideas and values (such as in the case of public activist manifestations or political commentary elicited by the Giorgio Almirante posters in section 7).

On the other hand, users engage in a range of different communicative situations. For instance, they adopt **narrative** modalities by associating images and short texts (through tags or titles) as part of a process of self-curation and online profile building. **Curatorial** approaches are also involved in practices of **knowledge exchange**, where users – prosumers/amateur heritage practitioners – identify, select and share rare or hidden documents of a given place, thus expanding their circulation and instigating discussion and the formation of affective communities. In this context, participants might not only exchange information but **express** belonging, critique, invitations to collaborate to processes of online archiving, **ask** for clarifications of specific elements of the square. Furthermore, the already mentioned dissemination of political ideas, and the use of photographs and their metadata as **triggers for debates**, can be attributed

a **performative** character, as they are able to generate actions by making more people aware of certain movements or practices, producing awareness or reflection. A dialogic stance is also at the core of processes of **place-making** supported by online image sharing. Indeed, a characterisation of place is constructed by associating specific kinds of activities and social dynamics to such location.

- c) To understand how participatory online practices ascertain, redefine and/or counteract established approaches to heritage and identity, with reference to selected places of relevance to the CoHERE project.

Finally, we answered this question by assessing how, together with more traditional subjects and perspectives on the cultural value of the squares (depicting monuments or offering panoramic views), the visual dataset of geotagged images re-imagines these places according to a variety of factors. By associating the location with temporary, collective events (Critical Mass, Zombie Walk, Candle-lit night, and so forth), it introduces novel, experiential criteria in constructing the identity of place and its heritage value. Despite this globalised or transnational dimension though, there is no evidence of a conscious contextualisation of these practices within a European system intended primarily as a cultural framework.

At the same time, the fragmentary, personal narratives developed by users' everyday interaction with the urban environment, also contribute to building individual, unofficial perspectives on what might be remembered of a given location. As demonstrated by the images referring to Mussolini's hanging in Loreto square, historical accounts might also be subject to revisions that counter official renditions, or leveraged in association to contemporary political struggles.

In summary, the use of Geostream as a tool for aggregating data from photo-sharing platforms enabled us to identify a range of behaviours on social media suggesting the potential for dialogue and reflexivity offered by the combination of geolocation and photo-sharing in relation to heritage and identity building. Indeed, we should be careful in describing these heritage perspectives as direct and shared expressions of a collective approach, but rather remain aware of the fragmentary, partial and constantly evolving nature of memory and identity practices on social media.

Additionally, the specificities and limitations of this tool (discussed in section 3) demand for future work that could tackle precisely the factors left out by the current dataset. The development of tools for easy aggregation of visual/textual content on social media should be high in the research agenda of heritage and memory studies specialists. Furthermore, analytical tools shaped by 'big data' and 'digital creative practice' approaches are needed to allow researchers working in the technology-heritage-memory-identity nexus to meaningfully interrogate and re-imagine large scale datasets of ambiguous and multi-layered user-generated content. The research team in CoHERE's WP4 aims to push this agenda with further research activities on this field in the forthcoming years. At the same time, we will explore further methodological strategies that can bring in dialogue the micro and macro scales of user-generated materials by allowing us, for instance, to look at individual users, groups or pages and

follow the journey of specific images while maintaining the ability to look at the bigger picture of heritage-oriented photo-sharing behaviours at large.

8.1 Acknowledgements

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10. Appendix A – List of selected images analysed in the sections

The copyright of the images in the dataset remain with the users who uploaded them.

10.1 Section 4

Kotzia square

114679, https://farm6.staticflickr.com/5125/5267773217_38cc0e9625.jpg

114680, https://farm6.staticflickr.com/5041/5267773219_148924e626.jpg

113851, https://farm9.staticflickr.com/8250/8665874406_259dab6e9c.jpg

114055, https://farm9.staticflickr.com/8179/7989295795_c5532aca1e.jpg

10.2 Section 5

Loreto square:

109926, https://farm6.staticflickr.com/5624/20194775103_8ee273be98.jpg

109953, https://farm1.staticflickr.com/308/18334741396_d8a51f955d.jpg

110949, https://farm6.staticflickr.com/5251/5415710619_7659a837b7.jpg

110950, https://farm5.staticflickr.com/4138/5416323520_2ac8957550.jpg

110951, https://farm5.staticflickr.com/4138/5415710385_ae60806d72.jpg

110271 https://farm3.staticflickr.com/2865/9408029371_498c2bef3c.jpg

110272 https://farm3.staticflickr.com/2805/9410789750_ecb202aef9.jpg

110273 https://farm8.staticflickr.com/7422/9410789652_23f989a5bc.jpg

110274 https://farm4.staticflickr.com/3747/9410789628_7b2122ff0e.jpg

110275 https://farm8.staticflickr.com/7412/9410789552_2b48e44796.jpg

110276 https://farm4.staticflickr.com/3789/9410789490_cbd87299ee.jpg

Kotzia square:

115227, http://photos.wikimapia.org/p/00/03/11/78/53_big.jpg

114956, https://farm2.staticflickr.com/1078/5157812496_9e937ab2fb.jpg

114947, https://farm2.staticflickr.com/1412/5151470083_991ea2cf0b.jpg

114722, https://farm2.staticflickr.com/1255/5153427969_881963254a.jpg

114698, https://farm2.staticflickr.com/1098/5153425671_0c10173588.jpg

114692, https://farm2.staticflickr.com/1160/5157812758_704b2241eb.jpg

Old Eldon square:

123212, https://farm9.staticflickr.com/8403/8619253461_a7d353a9b4.jpg

123213, https://farm9.staticflickr.com/8522/8620352106_e82b854474.jpg

123214, https://farm9.staticflickr.com/8536/8619242515_600dabb3cb.jpg

123215, https://farm9.staticflickr.com/8244/8620341104_64fe5c50d0.jpg

10.3 Section 6

Loreto square:

110140, https://farm4.staticflickr.com/3667/11976988313_a975b3c457.jpg

110148, https://farm4.staticflickr.com/3761/11461363866_683835bccd.jpg

Kotzia square:

113207, https://farm1.staticflickr.com/650/23330539675_ff5e5ff20d.jpg
113754, https://farm8.staticflickr.com/7129/14066440053_1c9c48d190.jpg
115202, https://farm3.staticflickr.com/2164/2082140784_196db8fe16.jpg
114680, https://farm6.staticflickr.com/5041/5267773219_148924e626.jpg

Old Eldon square:

121483, https://farm4.staticflickr.com/3893/14231619658_7682aa0067.jpg
119294, https://farm9.staticflickr.com/8328/29135927384_ba70a268e9.jpg
119506, https://farm2.staticflickr.com/1615/24961551104_674495a789.jpg

10.4 Section 7

Loreto square:

110709, https://farm8.staticflickr.com/7220/6945148824_d952c2a56c.jpg
112556, https://farm4.staticflickr.com/3554/3812489606_4beec3020c.jpg
112666, https://farm3.staticflickr.com/2640/4108319343_89ccedbd71.jpg
112826, https://farm4.staticflickr.com/3535/3781134493_40c9f3a65e.jpg
112828, https://farm5.staticflickr.com/4099/4940545739_61e7e08f80.jpg
110192, https://farm6.staticflickr.com/5474/9587497335_ac35da0294.jpg
110791, https://farm7.staticflickr.com/6011/6011432820_b96cbe6cfa.jpg
110711, https://farm6.staticflickr.com/5326/7057086021_274266be5d.jpg
112429, https://farm4.staticflickr.com/3101/2590890638_b6b9ec3489.jpg
109750, https://farm8.staticflickr.com/7477/29508652154_72eb7210c7.jpg
109748, https://farm9.staticflickr.com/8640/30195447515_8e1d20c5ea.jpg
110819, https://farm6.staticflickr.com/5027/5633986595_c66452fc16.jpg
110508, to 110518, https://farm9.staticflickr.com/8283/7677281484_d609b104db.jpg
110645, https://farm8.staticflickr.com/7206/6976002559_32bd1fea53.jpg
110649, to 110652, https://farm8.staticflickr.com/7186/6885824203_16eca4bfd3.jpg
110787, to 110792, https://farm7.staticflickr.com/6139/6011433100_bcbf919a44.jpg
111075, https://farm6.staticflickr.com/5217/5387120368_d9f9494512.jpg
111092, to 111115, https://farm6.staticflickr.com/5163/5228525219_b74f155036.jpg
111215, to 111217, https://farm6.staticflickr.com/5044/5228522231_d9097b3f7a.jpg
111820, https://farm3.staticflickr.com/2742/4281665519_ac38e01694.jpg

Kotzia square:

113295, https://farm4.staticflickr.com/3694/19804587361_88898d0598.jpg
115228, http://photos.wikimapia.org/p/00/03/11/78/88_big.jpg
114055, https://farm9.staticflickr.com/8179/7989295795_c5532aca1e.jpg
114028, https://farm9.staticflickr.com/8359/8257906725_7c0e994f6a.jpg
114009, https://farm9.staticflickr.com/8328/8413432533_689c432401.jpg
114053, https://farm9.staticflickr.com/8169/8065119549_109c34006a.jpg
114105, https://farm9.staticflickr.com/8004/7420399332_c751263ccf.jpg
114797, https://farm4.staticflickr.com/3212/2395954599_0fe51837d3.jpg

11. Appendix B – Detailed explanation of metadata in Geostream dataset

All photos are uploaded by users. Geostream does not distinguish the content of the photographs, which means that photographs unrelated to the squares but uploaded while the user was in the area of the square or actively pinned the image on the square will also feature in the dataset.

1. **Id** = internal reference code, geostream creates this reference and it is unique for each photograph.
2. **PhotoURL linked to the thumbnail of the image** = link to the place the image is stored in the given platform (e.g. flickr)
3. **Title** = user generated, free text or default recording of the system (e.g. file names)
4. **Description** = as above. User generated, free text or default recording of the system (e.g. file names). Different platforms record this information in different ways so each record/image is likely to have either title or description.
5. **Tags** = user generated tags. Geostream considers only single word tags. This means that even if some of these tags might have been entered as a two-word tag when downloaded via geostream they have been recorded as a separate tags.
6. **Provider** = self-explanatory. This refers to the platform of origin.
7. **Latitude** = self-explanatory. This can be either generated by a device through a location service or by a user manually dropping/pinning an image on a map.
8. **Longitude** = self-explanatory. This can be either generated by a device through a location service or by a user manually dropping/pinning an image on a map.
9. **Date_created** = self-explanatory. Geostream cannot distinguish between timestamps that have been generated by a camera and timestamps generated by the editing of an image in a computer.
10. **Date_uploaded** = self-explanatory.