University of Wisconsin Milwaukee **UWM Digital Commons**

Theses and Dissertations

May 2018

Facets of Graffiti Art and Street Art Documentation Online: A Domain and Content Analysis

Ann Marie Graf University of Wisconsin-Milwaukee

Follow this and additional works at: https://dc.uwm.edu/etd



Part of the <u>Library and Information Science Commons</u>

Recommended Citation

Graf, Ann Marie, "Facets of Graffiti Art and Street Art Documentation Online: A Domain and Content Analysis" (2018). Theses and Dissertations. 1809.

https://dc.uwm.edu/etd/1809

This Dissertation is brought to you for free and open access by UWM Digital Commons. It has been accepted for inclusion in Theses and Dissertations by an authorized administrator of UWM Digital Commons. For more information, please contact open-access@uwm.edu.

FACETS OF GRAFFITI ART AND STREET ART DOCUMENTATION ONLINE:

A DOMAIN AND CONTENT ANALYSIS

by

Ann M. Graf

A Dissertation Submitted in

Partial Fulfillment of the

Requirements for the Degree of

Doctor of Philosophy

in Information Studies

at

The University of Wisconsin-Milwaukee

May 2018

ABSTRACT

FACETS OF GRAFFITI ART AND STREET ART DOCUMENTATION ONLINE: A DOMAIN AND CONTENT ANALYSIS

by

Ann M. Graf

The University of Wisconsin-Milwaukee, 2018 Under the Supervision of Professor Richard P. Smiraglia

In this dissertation research I have applied a mixed methods approach to analyze the documentation of street art and graffiti art in online collections. The data for this study comes from the organizational labels used on 241 websites that feature photographs of street art and graffiti art, as well as related textual information provided on these sites and interviews with thirteen of the curators of the sites. The goal of the research is to demonstrate the existence of a coherent domain of street art and graffiti art documentation that may in turn be used to inform the formal design of systems to record evidence of the art movement and the works.

Open coding was applied to the organizational text used by the websites to reveal a set of four categories of descriptive facets. The categories are related to general aspects of the websites themselves, the supports upon which works are created or placed, the various types of works, and location information. There are several facets included within each of these four categories. When a website shared information about the site itself, most frequently on an about sub-page, this was analyzed for audience, explicit organization methods, motivations for creating the site, and art style vocabulary used. Audience and explicit organization methods were rarely shared. Motivations were coded as internal, external, or mixed with emphasis on

internal or external. Art style vocabulary varies and is tied to motivations, but the most commonly named style is graffiti or a variant thereof. Sites that feature work from internally motivated sites feature the widest variety of art style terminology and tend to avoid use of graffiti and graffiti-related terms.

All website curators that could be contacted were offered the opportunity to participate in an interview regarding website organization for graffiti art and street art. Thirteen interviews were conducted: one by phone, one by Skype, and eleven by email. The interview data reveals varying opinions on what terminologies or categories should be used to organize photographic collections of graffiti art and street art online, but there is general agreement that the name of the artist or crew (if known), the year of the work, and the location of the work are the most important facets. The curators demonstrate that the size of the collection, geographic focus, and scope of works featured will have an impact on how the site should be organized. The ontological formation of the domain of street art and graffiti art documentation is evidenced by the combined results of the website analyses and interviews.

© Copyright by Ann M. Graf, 2018 All Rights Reserved То

Bert Hartinger

TABLE OF CONTENTS

ABSTRACT	ii
TABLE OF CONTENTS	vi
LIST OF FIGURES	xii
LIST OF TABLES	xiii
ACKNOWLEDGEMENTS	xiv
Chapter 1. Introduction	1
1.0 Introduction	1
1.1 Background - Knowledge Organization	2
1.7.1 Graffiti and Graffiti Art	5
1.2 Background - Street art	6
1.3 Local Urban Environment as Contextual Organization – Place, Ownership, Sur	face 10
1.7.3 Public Art	13
1.4 Organic Organization Practices: An Ontology of Street Art	14
1.5 Social Organization and the Hierarchy of the Streets	16
1.6 Social Semantics	18
1.7 Definition of Terms Used in This Research	19
1.7.1 Tagging	20
1.7.2 Discourse Community	20
1.7.3 Curator	21
1.7.4 Documenter	21
1.7.5 User	21
1.7.6 Collection	22
1.7.7 Metadata	22
1.8 Summary and Conclusion	22
Chapter 2: Literature Review—The Research Problem	25

	2.1 KO Studies of Specific User Communities	. 26
	2.2 Organization of Online Collections and Websites	. 28
	2.3 Street Art Studies Useful for Description of Artworks	. 31
	2.4 Problems Specific to Street Art Documentation in Contrast to Traditional Art	
	Documentation	. 33
	2.4.1 Ephemerality	33
	2.4.2 Little to No Institutional Support	
	2.4.3 Context - From Onsite to Online	36
	2.5 Justification of the Use of the Term "Community"	. 41
	2.6 The Proliferation of Media - Precursor to Online Collections	. 42
	2.7 Taxonomy of Terms	. 45
	2.8 Summary	. 48
C	hapter 3: Methodology	. 50
	3.1 Research Questions	. 50
	3.2 Methodological Paradigms: Domain Analysis and Content Analysis	. 51
	3.2.1 Domain Analysis	. 51
	3.2.2 Content Analysis	. 51
	3.3 Quantitative Analysis of Website Capture Data	. 52
	3.3.1 Selecting Websites	. 53
	3.3.2 Selecting Data from Websites	. 61
	3.3.3 Coding of Website Capture Data	. 65
	3.3.4 Coding and Analysis Instrument	. 72
	3.3.5 Intercoder Reliability	. 72
	3.4 Qualitative Interviews with Website Curators	. 73
	3.4.1 The Interviews	. 74
	3.4.2 About Text	. 76
	3.5 Summary of Methodology	. 76
C	hapter 4: Text Analysis and Website Code Categories	. 78
	4.1 Analysis of About Text	. 78
	4.1.1 Audience and Organization	. 79
	4.1.2 Art Style	. 81

4.1.3 Motivation	82
4.1.4 Art Style Terminology and Purpose Relationship	83
4.2 Analysis of Navigation Labels: The Six Code Categories	84
4.3 General Website Codes	86
4.3.1 The Contact Code	88
4.3.2 The About Code	88
4.3.3 The Shop Code	89
4.3.4 The Videos Code	89
4.3.5 The Disclaimer Code	89
4.3.6 The Interviews Code	90
4.3.7 The ContributeFlix Code	90
4.3.8 The Guestbook Code	93
4.3.9 The Forum Code	93
4.3.10 The History Code and Glossary Code	94
4.3.11 The HowTo Code	99
4.3.12 The Map Code	99
4.3.13 The MyAccount, Subscribe, and Poll Codes	111
4.4 Other Media Codes	112
4.5 Summary of Website Code Categories	114
Chapter 5: Work Code Categories	116
5.1 General Facet Codes	116
5.1.1 The Artist Code	118
5.1.2 The Event and Gallery Codes	119
5.1.3 The Old Code	120
5.1.4 The Chronology Codes: Decade, Year, Month, and Day	120
5.1.5 The New, Featured, and RatedHigh Codes	121
5.1.6 The RIP Code	123
5.1.7 The Inside and Outside Codes	124
5.1.8 The Legal and Illegal Codes	125
5.1.9 The Color Code	125
5.2 Support Facet Codes	126

	5.2.1 The Canvas Code	. 127
	5.2.2 The Walls Code	. 129
	5.2.3 The Train Type Codes: Trains, Freights, Subways, and Subway Cars	. 130
	5.2.4 The Other Vehicles Codes: CarsTrucksVans and Buses	. 131
	5.2.5 The Blackbook Code	. 131
	5.2.6 Billboards, Highways, and Signs Codes	. 132
	5.2.8 The Rooftops Code	. 133
	5.2.9 The Tunnels Code	. 134
	5.2.10 TrashBins, and Shutters Codes	. 134
5	.3 Type Facet Codes	. 136
	5.3.1 The Sketches Code	. 137
	5.3.2 The Graffiti Code	. 138
	5.3.3 The Other Code	. 138
	5.3.4 The CommercialDesign Code	. 141
	5.3.5 The StreetArt Code	. 142
	5.3.6 The Murals Code	. 142
	5.3.7 The Tags Code	. 143
	5.3.8 The 3D Code	. 143
	5.3.9 The Characters Code	. 144
	5.3.10 The Pieces Code	. 145
	5.3.11 The Stencils, Wheatpaste, and Posters Codes	. 145
	5.3.12 The Bombs Code	. 146
	5.3.13 The Throwups Code	. 146
	5.3.14 The Letters Code	. 146
	5.3.15 The Productions Code	. 147
	5.3.16 The Stickers Code	. 147
	5.3.17 The Digital Code	. 149
	5.3.18 The Train Codes: TrainWholecars, TrainEtoEs, TrainTtoBs, and TrainPanels	. 149
	5.3.19 The Action Code	. 149
	5.3.20 The SprayPaint Code	. 150
	5.3.21 The Political Code	. 150

	5.3.22 The Projections Code	151
	5.3.23 The Collaborations Code	151
	5.3.24 The Silvers Code and Wildstyle Code	151
	5.3.25 The Handstyle Code	152
	5.4 Location Facet Codes	152
	5.5 Tagging as Post-Coordinated Grouping	154
	5.6 Size of Collection and Need for More Categories	157
	5.7 Summary of Work Code Categories	158
C	hapter 6: The Interviews	160
	6.0 Introduction	160
	6.1 Contacting Participants	160
	6.2 Responses to the Interview Invitations	161
	6.3 The Participants	161
	6.4 Interview Results	162
	6.4.1 General Facets Discussion	163
	6.4.2 Support Facets Discussion	170
	6.4.3 Types Facets Discussion	176
	6.4.4 Location Facets Discussion	182
	6.5 Summary of Interviews	185
C	hapter 7: Summary and Conclusions	188
	7.1 Results	189
	7.2 Size of the Collection, Scope, Motivation	189
	7.4 Future Research	194
	7.5 Contribution of this Study to KO Research	195
	7.6 Conclusion	196
R	EFERENCES	197
Α	PPENDICES	206
	Appendix A: Inter-coder Agreement by Presence or Absence in Case	206
	Appendix B: IRB Exempt Status	208
	Appendix C: Email Interview Invitation	209
	Appendix D: Interview Instrument	210

Appendix E: The Websites (Super Sites are highlighted in green)	213
CURRICULUM VITAE	220

LIST OF FIGURES

Figure 1 Homepage of 50mmlosangeles.com showing architectural sub-page labels and about information	
Figure 2 Gallery page of 50mmlosangeles.com showing linked categories	64
Figure 3 Screen shot of photo submission form for site Miami Graffiti (http://www.miamigraffiti.com/submit.php).	92
Figure 4 World map from site Bombing Science (https://www.bombingscience.com/graffitimap/)	101
Figure 5 Bristol Street Art Map (http://www.bristol-street-art.co.uk/map-of-bristol-street-art	•
Figure 6 Huh? map of Poland with hotlinked cities as circles and text	103
Figure 7 Intergraff home page map navigation (http://intergraff.com/)	105
Figure 8 Intergraff Europe map (http://intergraff.com/pages/eu/eu.html)	106
Figure 9 Intergraff France map (http://intergraff.com/pages/eu/fr/eufr.html)	107
Figure 10 Map of site FatCap at the New York state level (https://www.fatcap.com/usa/new-york.html)	
Figure 11 FatCap details for United States map (https://www.fatcap.com/usa-graffiti.html)	110
Figure 12 Poll from site Location Twelve (https://www.graffiti.org/dj/index-l12.html)	112
Figure 13 Browse by Color, Mr. Stack's Graffiti (http://keusta.net/blog/index.php/Graffiti)	126
Figure 14 Rooftop graffiti, Chicago, photo by Ann M. Graf	134
Figure 15 Works on Shutters, Rio de Janeiro, photo by Ann M. Graf	136
Figure 16 Examples of Sticker Art: Obey Giant by Shepard Fairey, Pittsburg (left) and Have Goals, Milwaukee (right). Photos by Ann M. Graf	148
Figure 17 Trains subpage of Double-H site (http://www.double-h.org/english/trains/index.ht	
Figure 18 Image of work by artists A squid called Sebastian and Caratoes with tagged categor (http://globalstreetart.com/images/31mknlz)	

LIST OF TABLES

Table 1 Common graffiti art terminology defined, from Graf (2016)	48
Table 2 All websites examined for inclusion in the study	62
Table 3 Website Code List	71
Table 4 Art Style Terminology: Frequency of Occurrence	82
Table 5 Code Categories	85
Table 6 Code Categories as Percentage of all Codes Applied to All Sites	86
Table 7 Occurrences of the Sites Codes, ranked by most sites using	88
Table 8 Occurrences of the OtherMedia Codes	113
Table 9 General Facet Codes	117
Table 10 Support Facet Codes	127
Table 11 Canvas code terminology	128
Table 12 Types Facet Codes	137
Table 13 Other Code Text by Sites, Showing Super Sites in Green	140
Table 14 Vocabulary Coded CommercialDesign with Variations and Number of Occurr	ences. 141
Table 15 Locations	153

ACKNOWLEDGEMENTS

I would like to acknowledge my sincerest thanks to my chair, Richard Smiraglia, for seeing me though this entire arduous process, beginning with your Comparative Bibliography course at UWM in 2009 during my master's studies. You saw potential where I initially did not and you have stood by my work even after I insisted on switching my topic two years into the PhD program. Thank you for putting up with my sometimes irreverent, stubborn, and annoying questions when I just could not grasp a concept or two, or twelve. I am honored to have you as my advisor.

Thank you to my committee members: Hur-Li, Jane, Nadine, and Joe. You have added to my academic experience and often made the painful parts easier to bear by your extensive support, encouragement, feedback, and belief in my work. I cannot forget Hope Olson and your positive influence on my studies. I enjoyed each of your classes and continue to value our chats about power, classification, work, and life. I promise to visit soon with purple spray paint in exchange for some broken pottery. Thank you as well to Lynne Howarth, who met with me in a coffeeshop in 2011 before I applied for the PhD. You listened to my concerns and helped me make the decision to go forward, and you have been a guiding light and mentor to me ever since.

No list of acknowledgements would be complete without mentioning dear friends who went through this process with me. I cannot name you all, but owe thanks to Jenny Stevenson, Inkyung Choi, Jihee Beak, and Melissa Davey Castillo especially for the fun times, the races, the

heavy lifting, the writing sessions, and all the encouragement as we struggled together. I wish you all the best in your future work and in life. You deserve the best!

Thank you to my children, Laura, Sam, Sarah, and Gibby, for your faith in your mom, for putting up with everything that goes along with not only being a mom raising you four extremely creative, intelligent, and talented kids, but especially for listening to me rant and rave and share my research, for being excited for me at milestones along the way, and for enduring my obsession with the image – your images, your selves, your experiences as viewed through the lens of a camera. I was paying attention to you in the most intimate way I knew how, even when it seemed I was just playing on my phone during dinner. I love you all forever.

My final acknowledgement, and the most personal, goes to my parents, Bert and Barbara Hartinger. You met in library school in Madison, Wisconsin in the 1950s and therefore without libraries, I would not be here completing this PhD. You were always supportive of my education, intellectually, socially, and economically. Mom passed away months before I successfully defended my proposal, but I know she would have been very proud of my accomplishment. Dad, you continue to be my single most valued source of encouragement and love. You taught me to appreciate art, nature, photography, literature, language, and a slew of other important things. This is for you.

Chapter 1. Introduction

The purpose of this research is to contribute to the forms of knowledge organization required by the process of documentation and sharing of street art. Specifically, this research is an examination of how this process is being carried out with particular attention paid to the textual information associated with photographs of the artwork in online, non-institutional collections, the methods being used to document the street artworks, and the organizational practices of collectors that serve to make the collections available to users. Operating on the belief that street art is valuable historically, artistically, and culturally, and realizing that numerous websites exist that are devoted to documenting and sharing street art, this study represents a first step toward determining the structure of the domain of online street art collections.

1.0 Introduction

Street art, artistic and otherwise, ancient and modern, has been studied across disciplines (Olberg 2011, Bruce 2014, Phillips 2002, Valesi 2014). It has been considered as art (Daichendt 2013), as social statement (Hagen et al. 1999), as activism (Wallace 2012) or political commentary/discourse, as historical artifact (Forster, Vettese-Forster, and Borland 2012; Graves-Brown and Schofield 2011), as criminal act (Young 2012, Alpaslan 2012), as urban spacemaking (Visconti et al. 2010), and even as "a potential enhancement to everyday urban life" (Austin 2010, 34). Reactions to street art are as varied as the approaches to studying it. It has been valorized as outsider art, urban expression and beautification, and often humorous interjection. It has also been demonized by association with gang activity, vandalism, dropping

property values, dirt and disorder, and the general disintegration of societal values (Mieszkowski 2010). Regardless, the practice and product are ubiquitous parts of modern urban culture. An ever-increasing number of websites dedicated to street art and street artists around the world testifies to the popularity of the medium, or what can be called an art movement (Masilamani 2008, Bowen 1999, Armstrong 2005, Wacławek 2008, Bengsten 2014).

Street art is being documented in numerous ways around the globe, by those who create street art documenting their own works and often the works of others, those who do not make street art but enjoy it, and those who simply happen upon it and take photos of it. Often these photographs of street art end up online in blogs, Flickr or Instagram streams, or websites set up specifically to share street art collections. Whether intentionally or not, these collections serve as models of preservation for what are notoriously ephemeral artistic works.

1.1 Background - Knowledge Organization

The documentation of street art requires several forms of knowledge organization (KO). Smiraglia (2011) defines KO as "the arena in which the heuristics of ordering knowledge are studied. More narrowly, within information science, KO is the arena in which classification and ontology, thesauri and controlled vocabulary, epistemology and warrant are studied and in which applications are developed and tested" (1). KO as a discipline concerns itself with the study of the "semantic relations between concepts" (Hjørland 2003, 107) and with the organization and representation of "documents for effective retrieval and to build systems for this" (Mai 1999, 547). Because of its common application to bibliographic systems and classification of information, KO is foundational to the field of Library and Information Science

(LIS), but its application is much broader, encompassing any and all domains, whether academic, corporate, scientific, or social. KO principles underlie classification, indexing and abstracting, cataloging, archiving, metadata and metadata schema creation, and information search and retrieval, functions that are valuable in any system that deals with information in various shapes and forms, from physical to digital.

Many KO scholars emphasize the relationship between the ontological nature of KO, or the study of what is, and the importance of epistemology to inform the understanding of domains (Smirgalia 2012, Hjørland 2013, Mai 1999). A postmodern view of KO places importance on the differences in the way that groups and individuals approach, contextualize, and use information. To design systems that best serve groups or individuals with specific needs, researchers study the relevant backgrounds of the users, the types of resources they use, and any specialized vocabularies or ways of talking about information associated with them. Such research is considered domain-specific and as such, domain analytical methodologies are often utilized to reveal particularities among what may be called a community of users (Hjørland and Albrechtsen 1995, Hjørland 2002).

One such community is examined, that of those who photograph street art and share collections of it on the Internet. Careful consideration must be given to aspects of this work, including but not necessarily limited to the definitions for street art, community, and collection. I begin with the belief that there is an actual cohesive community, or what can be seen in more formal terms as a domain within KO, the members of which share certain ways of approaching, talking about, and organizing access to collections of street art online. "A domain is best understood as a unit of analysis for the construction of a KOS. That is, a domain is a group with

an ontological base that reveals an underlying teleology, a set of common hypotheses, epistemological consensus on methodological approaches, and social semantics" (Smiraglia 2012, 114). To be considered a domain within KO, the members of (or practitioners within) a street art community will cite each other, or if not writing academic papers, they will discuss things using a common language and citing conceptual norms (Ma 2015), which may be evidenced by analyzing text across street art websites for common uses of language and methodological approaches to the art form. Such mutual semantic content, if present, is one indicator of a shared ontological base that can serve as a source for ordering the products of the community.

An interesting problem for research is to discover the extent to which websites documenting street art can themselves be seen as documentary evidence of a domain. No one has yet conducted a domain analysis to determine whether this domain exists, and if it does, what constitutes the intension and extension—depth and breadth—of the domain. Examining how the street art community itself talks about street art processes and the artworks is one way of revealing the existence or non-existence of a coherent domain of street art websites.

Domain analysis can, in this way, allow for a post-modern definition of an individual domain by way of allowing the actors within the domain to define the boundaries of the domain itself instead of relying on outside perspectives, such as that of the traditional or "institutional" art world, to impose a definition on what they may view as a sub-domain of their own purview.

Street art has often been heralded as democratizing traditional art, bringing art out of the institutional setting of the museum and putting it out on the street to be viewed and "owned" by all. I argue that this democratization is carried further into issues of access in the

online environment where descriptive practices of street art curation are carried out by those who produce the works themselves or photograph the works, thus bypassing the institutional gallery or museum use of standardized vocabularies designed by librarians, art specialists, and those who are (likely) neither street artists nor street art community participants. The fact that street art is being photographed around the world and shared online also provides a democratizing effect on access to the works. Most traditional museum artworks are portable and can be physically shared in traveling shows, or they can be gathered into one remote show, making their collective access easier than is the case with street art. Street art is, by definition, "produced illegally in the shared public spaces of the modern city" (Austin 2010, 34), and while there are instances where certain pieces have been physically removed from their place of creation and preserved, they by and large must be visited in situ or viewed as photographic representations.

The science of the conceptual order of knowledge is concerned about, in this case, the specific order a community is applying to street art. In a background discussion of street art, I will provide a brief framework for understanding the actors within a community for whom their specific conceptual order is meaningful.

1.7.1 Graffiti and Graffiti Art

The common conceptions of graffiti and graffiti art overlap and often appear interchangeable, yet several scholars have striven to make a distinction between the two. The definitional distinctions and restrictions for this research are based on the views of Austin (2010), Riggle (2010), and McAuliffe (2012). While all note the possibilities of overlap, they all

also agree that there are differentiations. Riggle introduces the differences between what he calls mere graffiti and artistic graffiti, situating these forms on a sort of continuum from graffiti through artistic graffiti to street art. Austin takes a slightly different approach that raises graffiti art out of the law enforcement standpoint of graffiti as vandalism and asks us to consider it for the art form that it is, a public visual statement that relates less to the art gallery than to graffiti art itself. "Graffiti art is a face-to-face, social practice with clear aesthetic intentions and unlike traditional graffiti, the semantic content of graffiti art is secondary to its visual aspirations" (Austin 2010, 35). A more detailed discussion of these distinctions is found later in this chapter.

1.2 Background - Street art

According to Loeffler (2012, 75),

Graffiti and street art is sophisticated in its concept and execution, whether that is spraying, stenciling, paper cutting or yarn bombing. It poses questions to the stringency of the urban environment structured around social control and aesthetic regulation and creates a sense of beauty, whether in galleries, spaces like car parks, vacant lots and abandoned buildings, or bang in the middle of the street.

The modern graffiti movement began in Philadelphia in the 1960s and soon spread to New York City. This was a time of intense social, cultural, and economic upheaval in the US. Researchers have associated the birth of the graffiti movement with limited venues for socially acceptable youth expression and with high youth unemployment rates (Baca 1995, Austin 2001, Macdonald 2001). Writers, as they are called, chose a name for themselves, in the early days often using their given name and including some reference to the writer's street or neighborhood. Early known writers include names such as Taki 183, Topcat 126, and Eva 62 (Cresswell 1992, Austin 2001). Writers initially wrote these names or "tags" all over to saturate

their presence in a city or specific area of the city (Castleman 1982, Austin 2001, Wacławek 2011). The tags consisted of plain lettering, usually written with a marker, on public or privately owned property in the urban environment, but they soon evolved into more elaborate, stylized creations as more writers began to tag, necessitating new ways to capture attention and stand out among the increasing number of names (Castleman, 1982). The tag and the style in which it was written became a representation of the writer and as such it was carefully crafted and the design often manipulated. The chosen letters do not always result in words that make sense according to the rules of Standard English, but they may be used for how they sound together and often for how they work out stylistically in the design of the tag. Artists often drop letters out of their name or change a letter, even choosing an entirely new name as "self-protection and a tool for stylistic innovation. Name-switching provides writers with a fresh combination of letters to explore and contort, while letter-dropping allows them more time to paint their tag and make it more visually appealing" (Wacławek 2011, 15).

Over time the names remained but became larger, extremely stylized, intricate, and colorful. The practice moved from simply "getting up" – getting one's name out and saturating an area with it – to making a statement about the writer him or herself, or about the city, politics, institutions, or society in general. To the names were added characters, animals, people, brand names, designs, and textual statements. The now traditional spray can soon bypassed in popularity the black marker of the early taggers (those who wrote simply their pseudonyms anywhere and everywhere), and writers honed their skills developing styles, which were copied and passed on to newer writers. They experimented with different spray paint caps to give various types of application and line quality, affording writers more varied and

refined artistic and expressive capabilities and thus not only capturing the attention of other writers, but that of the general public and even the institutional art world by the 1980s (Lydiate 2010, Snyder 2009).

A break from simple tagging and the emergence of a true urban art form became visible in what is variously spoken of as graffiti art, street art, or the post-graffiti art movement (Bowen 1999, Riggle 2010, Austin 2010, Visconti et al. 2010). Wacławek (2011) confirms this distinction, concluding that "the post-graffiti art movement boasts greater diversity and includes art produced as an evolution of, rebellion against or an addition to the established signature graffiti tradition" (29). Street art is "less concerned with letters (although they may be used) but emphasizes the visual image, contextual use of space, and uses a wider range of materials that extend beyond the spray can" (Daichendt 2013, 8).

Austin (2010) highlights the difference between graffiti and art, also using the term graffiti art. He asserts there is a generally poor understanding of graffiti art as vandalism, a view commonly held by urban officials who see graffiti art "as an urban problem confronting the city-state" (34). This definitional problem is mediated by the addition of the word art to the term "graffiti," bringing the historical process of scratching words or drawings onto public surfaces into contrast with what Austin stresses as "spontaneous and unauthorized public art" (44) and "a valued addition to contemporary urban life and a new kind of urban art that has already spawned a second, more expanded variety: street art" (34). He critically notes the importance of place and context in graffiti art by describing the city as "an artistic material" in and of itself (38). At the same time, he sets up oppositions between pop art and graffiti art, and between modern art and graffiti. Modern art "is authorized, expected and posed in shared public spaces"

while graffiti art is "an unauthorized artistic act that collectively and illegally 'takes place' in shared public space" (40). He notes a lack of any institutional acceptance of graffiti as public art. He goes on to point out that "graffiti art appears in public space, and is in dialogue with the city's legal public sphere, but it is not public art" (40). Graffiti art is artistic, but its practice on private surfaces in public places is still illegal and therefore limits acceptance of the art form in broader, institutionalized circles.

Several authors tend to use the terms *graffiti* and *street art* interchangeably. Riggle (2010) provides a useful discussion of the two terms:

... street art and graffiti are *different arts* that sometimes meet in a single work. Some street art is graffiti; some artistic graffiti is not street art. There is no essential connection between the two. This is not to deny that graffiti and street art have a strong *historical* connection. In fact, a case can (and should) be made that graffiti culture was *the* driving force behind the development of street art. But this strong historical connection does not imply a connection in essence. This shows that street art is just one form of postmuseum art – a category that includes artistic graffiti. (253, emphasis original)

He sets up a series of parameters that can be applied to street art, including meaning tied intrinsically to the environment of the streets (not literally on the street itself, though it can be there) and the acknowledgement that such space is "primarily for the public," its nature as "illegal, anonymous, ephemeral, highly creative, and attractive," and as normally "cheap to make, free to experience, and owned and overseen by no one (or, rather, everyone)" (Riggle 2010, 255, 246, 249). He also disambiguates two basic kinds of graffiti, mere graffiti (not art) and artistic graffiti (art). Artistic graffiti is often street art, but not all artistic graffiti is street art, owing to the definitions he presents earlier in the article. Riggle here states that graffiti is also known as tagging, but others, myself included, would further differentiate these two terms, the

latter being more of a simple saturation technique and the former more complex. Again, the definitions are fluid and overlapping.

While graffiti, graffiti art, and street art share many similarities, it is generally agreed that there are differences as well. MacDowell (2015) states that "[i]n definitional terms, graffiti can either be subsumed under the larger category of street art or graffiti itself becomes the primary category" (35). Instead of trying to nail down the distinctions in each of these related art styles or movements, the term 'street art' will be used throughout this research. This is appropriate as well because the websites that will be studied do not follow neat distinctions or limitations in art styles or movements themselves. The websites include images representing a range of artistic street art/graffiti art/graffiti practices that cannot be pigeonholed into one style or another. Bengsten (2014) found disagreement on terminology among street art community members themselves, evidenced in online forum discussions (57). Descriptive difficulties are of course not limited to these art forms, but are common among those who try to define what is, and is not, art (Danto 1981).

1.3 Local Urban Environment as Contextual Organization – Place, Ownership, Surface

Graffiti and street artists use the street as a canvas and in so doing they inherently enter into a discourse with the environment in which they create (Wacławek 2011). Operating within local urban spaces the artists contend with expectations of parents and other adults, educators, law enforcement, and the general public that most often come to side on the normative criminalization of their creative and artistic expression. There is an obvious paradox: writing on a surface that you do not own is illegal, regardless of how beautiful, complex, or creative such

writing might be, but the transgressive nature of these practices aside, there remains the aesthetic value of the works. The location – the context – of the work, nonetheless, provides a force for positive or negative reception (Riggle 2010, Austin 2001).

Several scholars have studied graffiti, graffiti art, writers, and writing culture and highlight the struggles of urban youth, reactions against societal pressures and norms, and desire to claim space and agency in the midst of a powerfully mediated environment that too easily criminalizes youth culture (Austin 2001, Wacławek 2011, Snyder 2009, Castleman 1982). Urban space is not lacking sanctioned images and text; quite the opposite is true.

Transportation and street signage, advertisements, municipal directives, and brand names abound (Austin 2001). The more money and power, the bigger, more colorful, and more ubiquitous a marketing message can be. Street art and graffiti art appear in the midst of these other texts and images, yet they do not have the sanction of these legal and societally accepted expressions. Street art can be found in the same places as these other messages, but its adjacency highlights reaction against what may be viewed as corporate, commercial, and political hegemony (Visconti et al. 2010).

The reclamation of space and the exploration of various dualisms are seen: what is public and what is private, what is art and what is crime, what is allowed in public space and what is prohibited (Dickens 2008). Graffiti and street art often are seen as disrupting the heterogeneous look of the streets that has come to symbolize order, control, and safety (Austin 2001). Those in society who have power and agency, namely adults in law enforcement, municipal or educational leaders, or corporations, dictate these standards. Cresswell describes several typical media responses that have formed historically in connection with graffiti, and

graffiti art by association: dirt, disorder, disease, pollution, obscenity, epidemic, insanity, and anarchy (1992). These particular discourses surrounding graffiti summon ideas that the work is out of place, immoral, unsanitary, unwanted, deviant, out of control (Iveson 2010, Lasley 1995), and signifying "assaults and riots waiting to happen" (Austin 2001, 146).

Along with the intellectual and emotional motivations and limitations, the context of public spaces as physical structure influence not only the size and shape of the works, but the materials and tools used, the length of time allowed to produce them, their public reach and reception, longevity, and level of recognition and acceptance for their creator or creators. Using public space as a sort of gallery means the artists are aware of, and must take into account, the ephemerality of the works. They will most likely be exposed to the elements and will be at much greater risk of being defaced, being destroyed, or of decaying than artwork in a museum or gallery. If the spot chosen is in a high traffic area, the time available to complete a work may be very limited. Often, the artist will often have to work under cover of darkness, another challenge that will limit what he or she can accomplish. A piece in a popular high traffic spot will gather a larger audience, and often more respect from other writers and those who appreciate the work, than one completed under an out of the way train bridge, but at the same time it might not last as long before being altered or removed.

Graffiti and street artists operate outside the rules of property ownership, law, commercialism, and the formal art institution. They do not get paid to show their work, nor is their work for sale. In this way they do not share in the economic structure and benefits of the museum or art gallery, although some see their work as a reaction against the commercial art world and what may be commonly accepted as constituting "art." Their works are not

commonly protected nor are efforts formally made to preserve evidence of their existence other than by the artists themselves and those individuals who value and photograph the works for their own enjoyment (Forster, Vettese-Forster, and Borland 2012). These facts act as limitations, but also as freedoms for the artist who pursues graffiti or street art and as such they influence and shape their performance and reception.

1.7.3 Public Art

Also excluded from this study, public art, like graffiti art, is art that is in a public place, but is sanctioned. Someone pays for it to be there, or designs a specific place wherein the art will be performed, will be shown, or will reside. It does not take place illegally. Visconti et al. (2010) specifically exclude public art, including street performance, street theater, clownery, parkour, and flash-mobbing, within a definition of street art (514). The practice of creating visual art by projecting images onto public buildings, for example, might be legal and takes place in public, but if unsanctioned would still be considered street art, not public art. Some see mural art, the painting of large outdoor murals, as street art because of its location, but using the qualifier "mural" usually indicates that an authority has sanctioned the work and therefore it is not street art.

Definitions for graffiti, graffiti art, street art, and public art – among other terminologies – are porous and fluid, often overlapping in myriad ways and subject to change. The community examined for this research may not agree on the strict use of these terms. Some curators will collect and include murals, for example, on their websites, not making the distinction concisely between what is sanctioned and what is illegal. I am noting this difficulty here and attempting

to develop definitions that will suit this study and allow framing and discussion of this particular research. Other scholars and artists themselves may disagree with my chosen terminology, but these definitions, however debatable, will stand for use within this dissertation.

1.4 Organic Organization Practices: An Ontology of Street Art

As described above, graffiti and street artists create art, but the context, the ephemeral nature, and the illegality of their work differentiate their experiences and ways of knowing from those of the "recognized" art world. Many of their processes are the same as or similar to those of more traditional artists, but like any group of specialists, they use categories and classifications, the intrinsic application of KO processes, that are specific to their artistic domain. Those who work on the street, like other artists, usually keep a sketchbook of ideas, what writers call piecebooks or black books. These are used to play with ideas and are important for getting a design down on paper so that the execution can be planned out in advance, given the cost of paint and supplies and the limited amount of time that will be available to carry out the creative process in public. Graffiti artists will often share what they are working on in their black books and bounce ideas off of each other (Ferrell 1993). Black books or works from within them are also sometimes shown on street art websites in conjunction with their owner-artists.

Graffiti art, as a particular street art style and as an example that can be used to discuss organization and classification within a specific art community, is commonly described using terminology that is distinct from that used within other art domains (Macdonald 2001). There are broad terms used to describe types of graffiti art, such as bombs, throw-ups or throwies,

burners, and pieces. Each of these different types of graffiti art includes specific tools, numbers of colors, lettering styles, time required, and may be carried out best solo or with a crew. Lettering styles also have names within the graffiti art community, such as Philly Wicked or Pichação used in tagging, and Bubble, Blockbuster, 3-D or Dimensional, or Wild Style letters used in pieces (Gottlieb 2008). Graffiti art on trains may be referred to as T-to-B (top to bottoms) and E-to-E (end to ends), depending on how much of a train car the work covers (Whitehead 2004). Such specific terminology largely is not to be found in popular art vocabularies used in the institutional art world. Graf (2016) showed this to be true with an examination of the Art and Architecture Thesaurus (AAT), which revealed only very general terms such as graffiti, mural paintings, and black books.

There are popular stylizations often seen in graffiti art pieces, such as arrows, stars, quotation marks, crowns, bubbles, or paint drips. When a writer steals an idea from another writer and uses it in his or her own work, he or she may be said to be "biting" the original writer. Writers may also bite from commercial designs or characters (Ferrell 1993). Several books exist that go into detail about graffiti art style conventions (Snyder 2009, Wacławek 2011, Felisbret and Felisbret 2009). Gottlieb (2008), as part of her doctoral research, developed a classification system for graffiti art styles intended for use by those who catalog images in archives or libraries.

Forms and styles differ between graffiti art and street art, but there is a lot of overlap as well. Graffiti art can be considered a narrower domain or a subdomain of street art (Riggle 2010, McAuliffe 2012), or as a precursor to street art (Austin 2010). These two domains share a use of public space, often illegality and a resultant desire for anonymity, some styles such as

textual messages and/or designs, some tools such as spray paint or markers, and a consciousness of working outside the dominant, socially accepted art world or museum culture. "The complexity of letter styles, which often renders graffiti illegible to the wider public, supports a position that graffiti is an egocentric form of private communication among writers—an appropriation of public space. In contrast, street art as a wider set of artistic practices often presents a more public address, less tied to the subcultural practices and conventions associated with graffiti" (McAuliffe 2012, 190). There exists a broader range of tools, materials, and styles that fall within the realm of street art, compared with graffiti art. Street art includes, but is not limited to, forms other than straightforward painting or spray painting, such as reverse graffiti (removing dirt, for example, to reductively create words or images), scratchiti (scratching words or images into paint or other surfaces), stenciling (with various materials including paint or mud), cup-rocking (pushing colored cups into chain link fencing to create patterns), yarn bombing (or knit/crochet bombing), sticker art, environmental art (nature art, earth art, or ecological art), shadow painting (outlining cast shadow forms in chalk or paint so they remain when the shadows are gone), and invisible graffiti (using paint that remains invisible during daylight but shows up at night under lights) (McAuliffe 2012, Riggle 2010, Wacławek 2011, Randazzo and Lajevic 2013).

1.5 Social Organization and the Hierarchy of the Streets

Early graffiti artists organized themselves, beginning at first with a gang-like structure, but soon evolving to an artistic crew where members were often loyal to each other and close knit, like family (Austin 2001). Newer writers who do not yet have a lot of skill are known as "toys." These beginners watch the more experienced writers and try to copy them. A more

talented writer might mentor a beginner and let the toy prime walls with plain paint or fill in the outlines of their letters. Making the outlines is considered a job of higher skill and left to the better writers. On the other end of the writer hierarchy are the "kings," (or "queens," though the majority of graffiti writers are young men) those who had the greatest name saturation, experience, and recognition in a city or area (Ferrell 1993, Austin 2001, Lachmann 1988).

Lachmann describes a three-stage typography of the graffiti writer: the novice, the tagger, and the muralist, though his chronological organization reverses the first two stages in comparison with what is discussed above (1988). The last stage is in general agreement across the literature, that of muralist or piece-maker, the realm where graffiti becomes graffiti art or street art (Austin 2001, Lasley 1995, Lachmann 1988, Riggle 2010).

Crews are a form of organization for graffiti artists; their members collaborate on elaborate pieces. The crew can saturate an area – get their names and artworks up in greater concentration – because they are a collective, but they can also create larger, more intricate pieces that a lone writer would not have time or resources to complete. Individual crew members often sign pieces alongside the name of the crew. Crews remain an integral type of organization for graffiti artists across the country and around the world.

Socially a writer gains recognition by getting up and by becoming more skilled in design, lettering, and what is known as can control, the ability to control the spray paint for different effects. Painting in popular places where one's work will be seen increases a writer's recognition, as well as painting on trains that will travel and therefore display one's work across the city or even the country. Working in hidden away places may afford writers or crews more time to complete large, time consuming pieces, and such works may last longer without

disturbance, but there is no guarantee of this. These types of secret works may only reach a very limited audience of other writers (Austin 2001). Locations may be chosen for a variety of reasons: for saturation or recognition, large and varied audiences, or for specific audiences (such as municipal leaders or commercial enterprise). Writers sometimes chose a location that is very high or looks impossible to reach as way to achieve recognition. "The value placed on the daring necessary to write in these inaccessible locations is similar to the more standard public fame given to explorers, discoverers, and daredevils. It is a sign of collective admiration for their skill, ingenuity, and courage" (Austin 2001, 54).

1.6 Social Semantics

The preceding pages have introduced the organization of street artists based on styles, skill, crew membership, location, and recognition. Another aspect of organization can be found in the ways that community members talk about the processes used to create street art, the materials and styles, and the organizational divisions that street art website curators use when sharing collections with the public. This last type of organization, the navigational structures or design architectures of the websites, are used to group artworks often in ways that are similar to the organization discussed by artists. Commonly seen facets for organizing the artworks include style, surface, artist or crew, location, and date. These kinds of information regarding the artworks are in turn similar to the common parts of a bibliographic record for a more traditional document: author, date, and publication location. Data for this study will come from textual descriptions of street art works on a selection of websites and the descriptive categories into which these works are placed, as well as from interviews with website curators.

1.7 Definition of Terms Used in This Research

To begin this discussion, it is important to distinguish between what is commonly referred to as graffiti and that which will be defined as graffiti art or street art, the digital preservation and organization of which is the focus of this research. Other labels are often used as well, obliquely referring to similar public artistic practices, such as ephemeral art, public art, and murals. Being specific with terminology is important because of the social, legal, and artistic perceptions of what will be argued are different forms of expression. In this research, when the term "street art" is used, this is meant to include "graffiti art and street art".

Street Art is a broad term that indicates art that is, in very simplified terms, made on the street. It can include graffiti art, and several other forms of visual art, but it is understood to be non-sanctioned, often on private or public property without permission, and therefore most often illegal (Riggle 2010). For the purposes of this research, the term 'street art' will be used to include graffiti art and other forms of visual art "that has been produced illegally in the shared public spaces of the modern city" (Austin 2010, 34). Austin adds that it is a "social practice with clear aesthetic intentions ... practiced collectively within skilled, locally organized subcultures" (35). This may include forms such as stencil art, paste-ups, reverse graffiti, yarn bombing, and even glued down mosaics, welded works, and light graffiti. The term "street" may be construed as literally the street, or walls, or trees, on or inside buildings and other structures such as on train cars or inside subway cars. It will not be used to include performance art, public art, or simple graffiti tagging, but it is understood that the community in question photographing street art does not always draw such formal boundaries and therefore art and mark-making outside this definition will occasionally turn up in the collections studied. To draw distinctions

between these terms, a number of them require definition for exclusionary purposes before turning to those that will be used within this study.

1.7.1 Tagging

Graffiti tagging is the writing of one's name in public space, usually done in volume over an area of a city. Taggers tend to try to get their names – usually not their real names but names chosen for their own purposes – to be as visible as possible, which means a specific tag, or stylized signature, will saturate an area. Tags commonly appear in cities on things like street signage, bus shelters, railings, and garbage bins. Tagging may incorporate small designs, but is not normally considered art. It is often conceptualized as a precursor to graffiti and graffiti art, though most taggers never become graffiti artists. Tagging also may be done on stickers, often using "free" US Postal Service mailing stickers or purchased stickers. Graffiti artists look down upon those who practice simple tagging, which is associated with claiming space or territory and not with making art (Lachmann 1988). Tagging in reference to graffiti is not to be confused with tagging as metadata added to online documents in the form of tags, which will be discussed in later chapters.

1.7.2 Discourse Community

Specific communities will be named in this research, such as a street art community, and a photo-sharing community, but it is understood that the communities discussed are constructed and defined by the researcher for the singular purpose of this study and should not be taken to represent actual communities of practice as they might exist in the real world, if they could exist at all. The use of the term "community" will be used here to indicate groups

with characteristics that appear alike to the researcher, not necessarily to those within these researcher-constructed communities themselves. In KO, such groups are often evidenced by use of a common vocabulary that is specific to what is commonly called a discourse community, or simply a community. Working parameters herein will include graffiti artists and street artists, curators, documenters, and collection users.

1.7.3 Curator

A curator is defined as someone who has created or is curating an online gallery of photographic images of street art. The curator might be an individual or a group of individuals, a street artist or not, a documenter or not. Curators might collect photographic images of their own street art or of the street art of others, either by taking the photographs themselves or by soliciting for photographic contributions that are added to the image gallery from others.

1.7.4 Documenter

A documenter is someone who submits work to a curator for inclusion in the curator's photographic image gallery of street art. A curator may also be a documenter, a contributor to his or her own image gallery. A documenter might be a street artist contributing images of his or her own street art or contributing images of the street art of another person.

1.7.5 User

A user for purposes of this study is a person who makes use of the photographic image gallery of street art. Such use might consist of browsing and enjoying the images, using the images as the basis for research, or following the work of a particular artist or geographic area,

for example. A user might also be a curator or a documenter. A user might be a street artist or anyone who stumbles upon the image gallery.

1.7.6 Collection

The term collection herein indicates the contents of a street art image gallery found on one internet site or one platform, such as a Flickr or Instagram stream, or a blog devoted to street art. A collection will have a curator (individual or group) and at least one documenter, and it is assumed that each collection, if the collection is public, will have multiple users of unknown number.

1.7.7 Metadata

Metadata herein refers to the information that relates to description of the images found in online collections of street art that is not limited to what may be attached digitally to an image by a camera, such as the architectural labels of a website used for organizational purposes and data added by curators to describe, categorize, and organize images.

1.8 Summary and Conclusion

Photographs in digital form have metadata that is automatically generated and attached to them, with varying levels of detail depending on the settings of the camera used and the permissions allowed by individuals using the technologies. The parameters of an image sharing website may be such that titles are required for digital uploads, authorship credentials (account registration, etc.), or other meaningful data. Software or human preference for folders or pages, sub-pages, galleries, or other named sections may dictate the architecture of a website. Additional metadata may be automatically included or may be optionally requested, such as GIS

information, art style information, artist or crew names of those responsible for the photographed work, or the assignment of category names such as stencil, paste-up, or piece. These complementary aspects of the uploaded image become valuable knowledge to be used in the description of works, their disambiguation, their collocation based on authorship, location, style, or context, and as ways to create, maintain, access or use an online archive of street art through an organic knowledge organization system, or KOS.

There is little institutional support for the documentation of street art, and because of its value not only as art, but as historical, social, and cultural record, it is important to understand how the street art community as defined herein is undertaking ad hoc efforts to preserve records of this work. Most tools available to information professionals for the organization and access of art images are created with vocabularies that, for reasons of economy, represent traditional art forms and materials as opposed to terminologies used by members within specific outsider art movements (Graf 2016). Processes and systems for KO are used when making these collections available to the public online, but it is not yet evident what these systems and processes are and whether they share any similarities across collections and among curators. A domain analytical approach to analyzing these collections and the methods used by their curators will reveal valuable information about the domain of street art, what aspects or facets of street artworks are important to record, what terminology is being used, and how much contextual information would be beneficial to capture all according to those within the domain so that these extremely ephemeral works can be documented, remembered, and made available for study and appreciation. It may also serve to provide at least one answer

to Austin's question, "What is it that we (academics) have to offer writers and their art worlds that might be useful to them? (2013, n.p.)

Chapter 2: Literature Review—The Research Problem

2.0 Introduction

Numerous websites exist that have the stated or assumed purpose of sharing images of graffiti art and street art, but it is not evident whether the curators of these sites share any coherent principles, motivations, or standards for their seemingly similar work. I have labeled those carrying out similar work on similar collections as members of a community, yet does this community and the material record of this work reveal a domain, a "knowledge [base] of specific, definable contexts" (Smiraglia 2015, 1)? Domain analytic research has up until recently focused on academic disciplines, but studies are emerging that examine KO work carried out by specific domains of users, including what is represented by the work of the street art/graffiti art community in this study.

KO research is an interdisciplinary endeavor, applicable to any area of interest that relies on knowledge for maintenance and growth. Domain analysis in knowledge organization has often been described within one of the eleven approaches discussed by Hjørland, which includes producing literature guides or subject gateways; producing special classifications and thesauri; indexing and retrieval research; empirical user studies; bibliometrical studies; historical studies; document and genre studies; epistemological and critical studies; terminological, language for special purposes (LSP), database semantics, and discourse studies; studies on structures and institutions in scientific communication; and studies in scientific cognition, expert knowledge, and artificial intelligence (2002).

The domain at hand is that of art, and graffiti art and street art in particular, so it makes sense that a review of relevant art literature will be in order, but the foundation of this research remains in knowledge organization. Literature that is relevant to domain analysis of specific user groups is examined, the organization of collections online, user-generated resource description and ontology formation, and studies that specifically focus on graffiti art and street art that may usefully inform this research.

2.1 KO Studies of Specific User Communities

Following in the aforementioned trend in KO that values the ways of knowing of those sharing interests, endeavors, labor, and thought (Hjørland and Albrechtsen 1995, Smiraglia 2012), there have been a number of studies that examine organizational practices of specific domains or user communities. Hartel's dissertation (2007) examined the ways that hobby gourmet cooks approach their use and organization of culinary information. She relied on ethnographic interviews with twenty individuals in their homes and cooking spaces to develop an understanding of their use of specific cooking resources and processes surrounding their information searching, use, documentation, organization, and creation. Her interviewees comprise a group in a leisure pursuit, not a professional or work activity, which might have similarities to those in the street art online community. She based her study on that of serious leisure and specifically on an activity that falls under the "Making and Tinkering" class, one of five hobby classes described by Stebbins (1994). Another of these five hobby classes is that of "Collecting," which could be considered the type of focus of the online community of interest for this study. While originally of interest to me as a methodology for exploring the organizational practices and needs of a user community—the gourmet cook hobbyist—Hartel's study presented a broader ethnographic review of the hobby itself, the information, spaces, and activities of its members.

There have been many LIS studies along the lines of Hartel's that examine various communities, hobbies, and collections, from record collectors (Margree et al. 2014) and rubber duck collectors (Lee & Trace 2009), all of which fall under the study of users as collectors of physical artifacts, to online museum visitors (Skov 2013) and amateur photographers (Cox, Clough, and Marlow 2008). Such studies have much to contribute to the ways of knowing of various groups of like-minded information users, yet they focus more closely on the activities of the community members in interaction with their respective hobby pursuits, collection expansion, and group interaction, whether physical or virtual, than on the ways they seek to describe and organize their respective collections.

McTavish (2015) examined how people understand a domain, in this case healthy eating, by how they classify food in their everyday life. She compared what she found regarding her participants' understanding of healthy and unhealthy foods via their own classifications with a large Canadian government food guide publication and found that users tended to have a conception of healthy food that differed somewhat from the government standard. She concluded that domain analytic techniques that are often used in LIS against scholarly fields or actors need to be augmented by other methodologies to capture the intricacies of "lay domain knowledge" (957). Her research is a useful example of applying domain analysis to a non-academic user group.

2.2 Organization of Online Collections and Websites

One of the more frequent ways that online collections have been examined is via art institutions that make photographic representations of their holdings available to the public. There have been many studies that have looked at how controlled vocabularies can and are used to describe works of art or cultural heritage. Benedetti (2000), addressing folk art terminology, emphasizes the importance of language used to describe artworks considered on the fringes of the institutional art world because such description reflects upon not only the works themselves, but the people who create them. As she states, "Language influences our preconceptions and can be used to assist understanding or aggravate mistrust," which is easily applicable to the contested arena of street art and street artists (17). Complexity also arises from the fact that the language used to describe art, art processes, and theories of art are "often imprecise or ambiguous" (Harpring, 1999, 840).

Scholars describe the practice and efficacy of user tagging of artworks and photographs online, such as Trant (2008, 2009) who examined the steve.museum's work with user tagging of museum works. She discusses the folksonomy resulting from these user tagging efforts and how it compares with documentation done by museum professionals. She found very different vocabulary resulting from user input via tags than that applied by museum professionals, evidencing a distinct perspective on the artworks that could not be easily reconciled with controlled vocabularies in use by steve.museum. Cairns (2013) took a broad look at opening up general museum collections to other modes of description and access, concluding as well that descriptive museum user input, such as tags, can have benefits, such as higher engagement and access to materials, yet is not sufficient on its own without professional vocabularies. Such

studies indicate the value as well as problems of community input of descriptive vocabulary for institutional, professionally curated collections, but do not approach collection user description outside of the museum environment, nor organizational behavior of non-professional collection curators. These studies generally are predicated on the use of, or comparison with, formal systems, schemas, and vocabularies. The current study differs in that the websites encountered have developed their own vocabularies and systems for organization.

To determine how non-institutional online collections that are driven by amateur contributions are able to contribute to the documentation of cultural heritage, Terras (2010, 2011) conducted interviews with a "high-quality" selection of website creators (2010, 427). She found the websites to focus on specific and carefully scoped content, often featuring material lacking or uncommon in institutional collections, often part of the impetus for creating the websites. The collections are also very often immaterial, meaning that historical poison labels might not actually be owned by the curator when their images are featured, mirroring characteristics of street art images in online collections. She also found these amateur websites or museums did not follow the examples of professional archives or institutional collections. Curators interviewed often use blogging platforms to host their endeavors, sometimes also using Flickr or other photo sharing and archiving sites to store images. Details about specific items, examples or resources are most often included with added textual information about provenance or description, revealing what she calls an "intuitive metadata" as opposed to formal elements or controlled vocabulary. Such collections are very similar to street art image collections in aspects of actual resource ownership, media platform preferences, and added textual information. She calls for further examination of amateur curation websites and

discussion with their creators and users to ascertain practices, functions, and motivations that can be of use to both institutional collections of cultural heritage and other individual or collective online projects.

The "intuitive metadata" as described by Terras (2010) can be seen on all sorts of noninstitutional websites, blogs, and collections as the creators and curators use language that is familiar and deemed appropriate to describe posts and images. Such language can be seen to form an ontology for the blog, site, or series of sites when shared vocabulary begins to coalesce and is examined to reveal a linguistic fingerprint of an individual or group, a knowledge structure or way of knowing. Instead of imposing a professional knowledge structure on resources outside of the library, Srinivasan (2005) explored the benefits of allowing such "fluid" ontology to develop from within and to continue and evolve as a tool to guide the further development of website architecture for the Somali refugee community in the Boston area. In essence, the Somali refugees recorded video stories of things that were important to them and to their community and then curators used the stories together to form a concept map, which in turn was used to design the website to host these stories. The ontology guided contributors in their selection of terminology by providing category options to choose from for the individual videos during upload. Using simple computer technologies, the website curators can update the ontology as it grows and changes, based on the addition of more stories. While the goal was to develop this ontology from the beginning of the project, it is a useful call to acknowledge and value how such knowledge structures develop "in the wild" (Dallas 2016).

Beaudoin and Menard (2015) carried out research on the online organization of video collections with numerous similarities to this author's own proposed research. Because

previous work has found great variation in the way users of pornography sites categorize sexual content, the authors deemed that further examination was worthwhile. They examined the commonly encountered concepts for organizing pornography on freely accessible websites, comparing categories used for grouping videos and conceptual terminology via content analysis. They also planned to seek information directly from website curators, but received no response to their inquiries for survey completion from this group. This is not unexpected considering the nature of the collections being curated and it may be reasonable to expect that street art and graffiti art collection curators may have some reservations about participating in interviews with a researcher due to the legal issues involved in the creation of such artworks. This remains to be seen, but will have to be taken into consideration.

2.3 Street Art Studies Useful for Description of Artworks

Among the numerous books that have been published on graffiti art and street art, a few are academic works that address description of artworks, the processes used to create them, and the styles, materials, and surfaces used, all of which may contribute to an understanding of organizational practices used on collection websites. In his seminal work on train graffiti culture and the political and social milieu in which the early graffiti movement developed in New York City, Austin (2001) describes an artistic community and provides ample evidence of the use of domain specific vocabulary and community practices that will be useful in the present study.

Wacławak (2011) provides equally valuable insight into forms, materials, styles, and terminology, but approaches the art movement from an art history background and with a

more general, global geography. Writing a decade after Austin, she has the benefit of a longer view of the migration of works from the physical streets to Internet photo galleries and websites. Just as the zines began broadening the audience of the art form in the 1980s, the proliferation of photographs of graffiti and street art online widened the reach further still to the point where most street art is experienced outside of its original context of the street. Echoing the writings of several scholars of street art and photography (Riggle 2010, Benjamin 1939, 1992, Austin 2001, 2010, et al.) Wacławak addresses the problem of lack of context found within most photographs of street art. The loss of physical context, as well social and historical context, reduces the quality of documentation information regarding a work, but it easily overlooked by those who find the works and are simply interested in obtaining a picture of the design itself. Loss of context will be discussed in greater detail later in this chapter. Despite the inadequacies in recording street art photographically, this remains the most common and efficient way of documenting the art form and has been the way that a historical record has survived in the face of inherent ephemerality (179).

Gottlieb (2008) contributed research on graffiti art styles based on her dissertation work (2006) that, while limited to style vocabulary in particular, is helpful as framed within structures for librarians that may need to classify photographic representations of graffiti art. She bases her classification system on the often-cited work of Erwin Panofsky (1939) and his model for iconographic analysis, which has been explicated extensively and applied to image indexing in LIS, most notably by Shatford Layne (1986, 2002). Gottlieb's research resulted in a faceted classification consisting of 14 different graffiti art styles and corresponding notation, along with thirteen facets and forty-one foci that differentiate number of colors, types of letter outlines,

stylistic icons such as the inclusion of arrows, and fill effects, to name a few (175-198). She made extensive use of knowledge gained by a set of questionnaires filled out by 11 graffiti practitioners and/or historians (1), which adds to the richness and quality of her data.

In one of the most recent academic books on street art, Bengsten (2014) examines what he terms the "street art world" from several perspectives. He presents the street art movement from his experiences of it on the street, in discussion with artists, and within and alongside discussions on public street art forums online. He situates his writing within social, artistic, academic, theoretical, and physical geographies with fewer examples of street art-specific terminology, but numerous references to specific street artists and examples of their work.

2.4 Problems Specific to Street Art Documentation in Contrast to Traditional Art Documentation

While studying the practical challenges and implications of preserving political street art, Cowick (2015) enlisted the input of archives professionals who have worked with street art documentation. She learned from her participants that the most common problems in regard to such documentation deal with ephemerality, followed by anonymity that affects metadata quality, legality, and accurately describing a resource that is outside its original context (41-42).

2.4.1 Ephemerality

The often-ephemeral nature of street art may not be construed as a problem at all to those who produce the artworks (see Riggle 2010 for a "commitment" to ephemerality), but for those who want to continue to enjoy them or study them, ephemerality may be mitigated through photographic preservation and the collection of any associated knowledge about a work. Wacławak hasgone as far as to say that the graffiti art movement would have

disappeared without the photographic collections of the works on the Internet to keep it alive, preserving its history and compelling it ever onward (2011, 178). A short discussion follows of the details contributing to issues of ephemerality that inform this study.

2.4.2 Little to No Institutional Support

An art movement operating in the streets or in public (and sometimes private) spaces outside the museum or art gallery will face obvious challenges if there is any drive to preserve it or a record of it. Using the list of artist websites included in the back of Wacławek (2011, 197) the names of the artists were searched in the Getty Research Institute's Union List of Artist Names (ULON), a controlled vocabulary utilized by libraries, archives, museums, and researchers (Getty Research Institute 2015). Of the forty-five individual artist names listed (their works and images having been cited in her book), only six were included in ULON as of February 2, 2017. These include Banksy, Jean-Michel Basquiat, Ron English, Shepard Fairey, Keith Haring, and Dan Witz. This list is a very small selection of some of the most well-known street artists, but also those who could be said to have crossed over into more mainstream artistic acceptance for work that has moved from street to gallery. This is by no means a representative selection from what is available in the ULON, but as many other street artists on Wacławek's list are well known to the street art community, it may be seen as an example of the continued marginalization of street artwork and artists in the face of the traditional art world, the lack of warrant for inclusion of street artist names based on lack of work records or formal documentation, or a combination of both. These artists simply are not largely recognized in this example of an institutional artist indexing tool. As mentioned earlier, the

inclusion of style, processes, and materials terminology common to the street art community is absent from professional vocabularies (Graf 2016).

Lack of institutional support goes beyond inclusion in descriptive tools for professional catalogers, archivists, and researchers. The artworks themselves are not being methodically collected physically due to their situated nature. They are not normally moveable like a traditional artwork most often is, and if they were, they would lose the aforementioned context so closely tied to the meaning of the work. When a formal institution does happen to collect street art, whether as a scheduled activity or an ad hoc opportunity, it is often in the form of posters or other such more easily acquired media, or as photographs of the original works.

Google Arts & Culture is one example of a collaborative effort among the Google Cultural Institute, archives, and museums to share art and culture exhibits curated online in virtual space. The Google Art Project on street art (https://streetart.withgoogle.com/en/) has begun to collect street artworks, street art stories, interviews, and virtual tours of popular street art areas around the globe. As of this writing, they have amassed over thirteen thousand images. Google notwithstanding, documentation of graffiti art and street art is most prolifically found online in non-institutionally sponsored, ad-hoc photography collections. Do such distributed efforts share any similarities, standards, or best practices for photographic capture, context information, metadata, or description? This question remains to be answered by analyzing the current state of street art photographic collections and their associated documentary information and organizational structures.

2.4.3 Context - From Onsite to Online

If the work was taken out of its urban context, placed on a canvas, given a hefty price tag and hung up in a gallery, it is likely those same people who viewed it as vandalism would see it as art. Although to take the work out of its urban context means the work nearly always loses something in transition, part of the creativity is how it integrates within the environment, the chosen spot which gives it the finishing touch. There is something missing about the interaction and conflict of the work in location (Hundertmark/C100 2003, 6).

What happens to the production and reception contexts of the local streets when the art is transformed into a web presence, essentially translated from direct experience to representation? A common sentiment regarding the response of the general public to street and graffiti art when it is viewed somewhere other than the streets is related in the quotation above by artist C100. What is interesting is that those making these observations also commonly feature photographs of street and graffiti art along with their written commentary, examples of the works essentially out of their original context. A contextual comparison for reception is often from street to art gallery, which illustrates not only a site change, but an institutional and therefore social change in reception as well. This institutional shift is not the same as the shift to the Internet, but it has similarities in that the break is from the street to a secondary representation.

A number of scholars have discussed the concept of replicating originals for the web, very often in regard to textual documents, meaning texts written or printed on paper, not painted on walls (Levy 2000, Lynch 2000). A concept or a work, once translated into text and

put to paper can be seen as residing within the boundaries of the page on which it is printed, or within the book of which it may be a part. A painting hanging in a museum very often is executed on a canvas or other such portable surface and can also, but not always, be seen to belong to the canvas, representing another scene yet knowingly removed from the reality it represents. Where graffiti or street art is concerned, the canvas is most often part of the street itself, or part of the environment of the streets, and as such is not moveable, or at least not easily moved. The context, the geographic location and surroundings – from neighborhood or city and even to other artwork located next to it or nearby, is integral to the work itself and may cause very different reactions from different viewers because of its specific location.

Walter Benjamin wrote an oft-cited essay that discusses the evolution of the reproducibility of artistic works (1939, 1992). He outlines the history of artistic reproduction, beginning with the basic process of simply copying one work by hand in the way the original was created. Reproduction became easier with the advent of certain processes, such as lithography for printing, but it really exploded with the invention of photography. Later the recording of movement began with film and later still sound was added to make mechanical reproduction extremely fast and very much like reality. Such technical reproduction "enables the original to meet the beholder halfway, be it in the form of a photograph or a phonograph record. The cathedral leaves its locale to be received in the studio of a lover of art; the choral production, performed in an auditorium or in the open air, resounds in the drawing room" (1992, 299). This "meeting halfway" occurs when a graffiti or street art work is photographed and placed online, though Benjamin himself did not live to make the leap from the photograph to the digital web representation.

Due to the inherently ephemeral nature of graffiti and street art, and also because of the fixedness of the works in space – they are not portable or moveable from their location of creation - it was a natural expectation that some would want to preserve a record of their existence, a collection of the corpus, so to speak. Artists themselves often photograph their completed works, though sometimes this is impossible because of the location, the darkness of night, or the fact that the works disappear before the artists can return at an appropriate time to do so. Early graffiti periodicals, or zines, such as IGTimes, Can Control, and 12ozProphet were produced by writers beginning in the mid-1980s. They solicited and featured photographs of especially interesting or skilled works and were printed on paper and run off for distribution on copy machines (DeNotto 2014, Austin 2001). By the time the digital camera became readily available, the Internet was the perfect place to upload photos and share them with a wider audience than ever before, not just locally, but around the world. Today numerous websites exist for the specific purpose of sharing graffiti and street art, such as ArtCrimes.com, 12ozProphet.com, 50mmLosAngeles.com, WoosterCollective.com, and GraffitiPlanet.com. Sites exist for specific artists, crews, and geographic areas around the world as well.

The desire to collect, preserve, and share these artworks is understandable, yet it cannot be said that viewing a work that has been digitally photographed and shared online is the same as experiencing the original work in situ, especially graffiti and street art that depend on their place of execution to add meaning and context. Benjamin bemoans the disappearance of "aura" in mechanical reproductions of both art and life that came about through the emergence of photography and film. Aura to Benjamin is related to the authenticity, history, aesthetic and cultural value of a work of art. An original work of art, before this age of

mechanical reproducibility had value in its history, its use in religious location or life, and in its authority as original and immediate, even in the fact that it was not something that could be experienced by the masses. Once photography developed, art could be shared quickly and widely and the masses were able to view artworks that were once inaccessible. Benjamin notes a concomitant shift in value placed on artworks, from a cult value based on aesthetics, history, and originality, to an exhibition value, open to critique from individuals of all social strata and suddenly attended by an "art world" and therefore economic framework. For Benjamin, the online sharing of photographs of street and graffiti art would surely equate to the loss of aura attached to the original works (Benjamin 1939, 1992).

Even when an art institution that holds original artworks itself takes photographs of their collections, it is recognized that such photographic images are not perfect copies of the originals without bias or interpretation entering into the representation in multiple seemingly small ways (Walsh 2007). Where a photographer stands, the lighting, the angles chosen, and the equipment itself all have an effect on the resulting representation. The photograph also commits the artwork to a moment in time by preserving it during the short exposure required to save its digital image while the original continues to live on as a physical object (Baudrillard 1999). "Whatever the noise and the violence around them, photographs return objects to a state of stillness and silence. In the midst of urban hustle and bustle, they recreate the equivalent of a desert, a phenomenal isolation" (Baudrillard 1999, para 29). This illustrates a possible distinction for place as well as image in photographic reproduction. More than simply photographing an artwork that is itself already taken out of a prior context, such as a landscape or portrait, this statement further addresses the photographing of something like a street or

wall that has an infinitely broad context, depending on how far back one stands to capture the image. The photograph, as framed within the camera's viewfinder, is bounded therein and limited, thereby either adding or subtracting meaning depending on the selection chosen.

"Every photographed object is merely the trace left behind by the disappearance of all the rest" (Baudrillard 1999, para 12).

While Benjamin's famous essay and Baudrillard's views have influenced many scholars and critiques in the discussion of reproducing artworks, there are other opinions that differ. Walsh claims that exactly the opposite of Benjamin's aura argument is true, that there was not the present value placed on the original, hand-crafted work of art *until* mechanical reproduction made the original more valued than ever before. "Far from diminishing the 'aura' of works of art, these endless photographic reproductions have vastly added to their significance, ultimately converting the museums that hold them from the Imperial warehouses and curio cabinets of pre-photography to the vast, echoing temples of post-photography" (Walsh 2007, 30).

Speaking from the domain of cultural heritage and museums, Cameron (2007) compares several views on materiality and immateriality, including that of Benjamin. The digital historical object is the focus of her discussion. While Benjamin and Baudrillard, among others, have treated photography as a type of threat upon the original and authentic, Cameron advocates following the course of photography from its early form as replicant maker through to the present day where it is accepted as an art form in and of itself. Instead of focusing on the differences between the original artifact and the copy and instead of lamenting the fact that the digital image can never truly replicate the original, she suggests accepting the digital as an

artifact itself, a primary work though related to another. This is qualified by the admission that provenance, authorship and aesthetic attributes are still important to the museum setting when dealing with digital artifacts that are representations of material originals (Cameron 2007).

All of these points of view can be applied to street art as well, following the works from the street to a photographic representation. One difference concerning street art in comparison to artworks in a museum is the specific context that the streets provide. When graffiti art or street art is removed from its place outside, on the street, it is "devoid of its distinctive meaning. It has literally been stripped of its spirit" (Riggle 2010, 248). That fact that these artworks are created and situated where they are is intrinsic to their meaning and to their reception. Riggle goes on to succinctly explain how graffiti and street art should not, cannot, be considered without their surroundings.

The very thing whose use contributes essentially to the meaning of street art, the street, itself has meaning. The doorways, windows, alley walls, dumpsters, sidewalks, signs, polls, crosswalks, subway cars, and tunnels—all have their own significance as *public*, *everyday* objects. These are shared spaces, ignored spaces, practical spaces, conflicted spaces, political spaces. To make sense of street art, the critic is forced to discuss the significance of a work's use of these inflected spaces. This violates the formalist principle, derived from the principle of aesthetic autonomy, that to appreciate a work of art the critic must attend to its aesthetic features alone. According to our definition, making sense of street art requires attending to a nonaesthetic feature of the work, namely, its material use of the street. (Riggle 2010, 249)

2.5 Justification of the Use of the Term "Community"

The work habits, language, media use, and understanding of what may be called a community, or more specifically an online community, are under consideration and because of

the constructed – or imagined (Anderson 2006) - nature of such a concept as community, it is necessary to explain what is meant when using this term. While many definitions of community exist in the literature depending on the field of study, my chosen sense of community comes from a work-based background described by Durkheim (1984) as the division of labor in society, expanded upon with KO research by Birger Hjørland (1998, 2003), specifically recognizing the differences among, and needs of, different "discourse communities" (2003, 94). The use of the word community is common in studies in KO, especially in studies that focus on postmodern, epistemological models of KOS informed by specific user groups. This can be seen in Hansson (2013) in the "collected understanding" of social media communities (389), Mai's (2011) "already there language" (713), the *masse parlante* or linguistic community of Saussure (1986, 77), the photo-sharing communities of Konkova, et al. (2014), and the purposeful conceptualization of a community of users evidenced in an ontology (Jacob 2003, 19).

2.6 The Proliferation of Media - Precursor to Online Collections

Benedict Anderson (2006) notes that the emergence of media, specifically the novel and the newspaper, enabled the rapid development of nationalism, a form of constructed community, in the eighteenth century (25). A sense of community is often discussed from one of two unifying hubs, that of geography or physical proximity, and that of interest or relationship. The latter is not dependent on a shared physical location, but rather on a relational basis wherein community members experience a sense of belonging to a group because they share interests or experiences (McMillan and Chavis 1986) and are also differentiated from other groups in the same way, by the shared attributes, interests, and even non-interests of members (Cohen 1985). This shows that as media outlets expanded the ability

of those sharing such relational characteristics to communicate over greater distances, the sense of community did not necessarily diminish. There are several studies of web-based communities that are composed of individuals who have never met in person, yet their shared interests and activities permit them the sense of belonging to a virtual community (Rheingold 2000, Wellman and Gulia 1999, and Obst et al. 2002 as examples). "Just as the Net supports neighborhood-like group communities of densely knit ties, it also supports personal communities, wherever in social or geographical space these ties are located and however sparsely knit they might be" (Wellman and Gulia 1999, 186). Wacławak (2011) has also discussed the slippery definition of community in direct relationship to the street art community, highlighting aspects such as the similarity and dissimilarity with the mainstream art community, and the relationship between what may be considered a community of local street artists and their audience, or more physically defined community in a sense closer to a conception of neighborhood or city (79-80).

Anderson (2006) is well known for his writings on the imagined community in relation to nations and nation building, but the sense of community he evokes can be seen as well in the use of the term in this study. A community, especially an online or virtual one, may be considered bounded by how the members, though they might have never met, feel they are connected by similar work, language, and materials. The street art community, having grown out of the graffiti art community of the 1970s in Philadelphia and New York, could be seen to have congealed with the publication of *The International Graffiti Times* in 1984, which was soon followed by numerous other graffiti zines (Austin 2013). Once the zines became available on the street, styles, methods, and individual works by individual artists or crews could be shared

over a larger geographic area, thus enabling a type of community formation through the dispersion of media. This is echoed and greatly expanded today with the proliferation of street art websites, blogs, and Flickr and Instagram feeds. Such widespread diffusion of the labor, the works, the styles, language, and images allows the street art community to grow across national boundaries and has quickly become a worldwide phenomenon.

The street art community, to be defined as such, is comprised of people who share an interest in street art, not only as a commonly conceived form of artistic expression, but also as a form of social commentary, a grassroots push-back against large corporate, political, and institutional bureaucracy that seeks to normalize a particular response, reaction, or acceptance from the general public by minimizing the impact of dissenting opinion, marginalized voices, or the otherwise disenfranchised segments of society. A street art community member in the context of this study would likely share an interest as well in the styles, materials, techniques, and locations of works. Unlike a narrower conception of a street art community limited to those who actually produce or help to produce works of street art themselves, the community of interest in this study has a broader foundation that includes not only the artists, designers, and actors involved in creating the works, but those who may do no more than photograph the works and share them online. Howard Becker (2008), in speaking of the art world, notes that there are not only artists within this world or community, the obvious or assumed members, but also those trained in art but not practicing it, those training in art (students, etc.), and those who are "serious audience members" who know more than the average ("well socialized") person (47-54). Photography of street art is a form of documentation, and the collected effect of this documentation is an archives, though a distributed and non-institutional one or a type of

community archives when taken as a shared identity or process among members of the graffiti and street art world (Flinn 2007; Flinn, Stevens, Shepherd 2009).

2.7 Taxonomy of Terms

The following taxonomic table is taken from Graf (2016) and is used to introduce and define terminology common to those who practice, discuss, or write about graffiti art styles.

Graffiti: "Typically refers to words, figures, and images that have been written, drawn and/or painted on, and/or etched into or on surfaces where the owner of the property has NOT given permission" (Ross, 2016, 476).

Piece: "(short for 'masterpieces') Large, colorful, elaborate, detailed, and stylistically intricate rendering of letters and images. Pieces require a greater amount of time and expertise to create than 'throw-ups' and 'tags'. (Usually deserving of more respect from other graffiti artists/writers)" (Ross, 2016, 477).

Bombing: "The prolific writing of one's tag [chosen name]. Bombing usually involves saturating a given area with a large number of one's 'tags' and/or 'throw-ups'. Often regarded as an important avenue for achieving recognition among other graffiti writers" (Ross, 2016, 475).

Throw-up: "(also known as throwies) ... Produced with spray paint, throwies spell out a graffiti writer's name in bubble-style letters. These letters are usually produced and filled in quickly with a single color, and then outlined with a second color of paint. Throwies may also be done with a single can of paint, in which case the graffiti writer will produce a quick series

of letters. In the more recent history of graffiti, throwies have increasingly come to be recognized as a distinct and valuable part of a graffiti writer's repertoire, often leading to the production of multi-colored throw-ups. Unlike masterpieces, throw-ups allow graffiti writers to cover more surface area relatively quickly" (Ross, 2016, 478).

*Whole car: A large piece that covers an entire train car. This references the size of the piece and is related to 'end to ends', 'top to bottoms', and 'window-downs'. (Snyder, 2009)

*Aerosol: Aerosol can refer to spray paint (see below) or it can be used instead of the word graffiti, as in an aerosol artist or an aerosol artwork. While a writer or artist may refer to a piece as aerosol art instead of graffiti art, graffiti art remains illegal, while aerosol art could be carried out legally on a canvas or other legal surface.

Character: "A term used to describe pictorial elements of graffiti works, especially renditions of creatures or personas. Characters are often used in conjunction with elaborate pieces of a graffiti writer's name/tag, and often incorporate gestures that draw the viewer's attention to the name" (Ross, 2016, 475).

Spray paint: Paint in a can that is applied using internal pressure and aerosol spray caps of varying sizes to change how it behaves when leaving the can.

Mural: "Large paintings on walls, sides of buildings etc. where the artist/s have been given express permission by the owner, and/or has been commissioned to do the piece (e.g. the work of Diego Rivera). Often depicting historical and/or religious events, themes, individuals, etc." (Ross, 2016, 477).

Top to bottom: A top to bottom (T-B, T2B, T-to-B) is a piece that covers a train car from top to bottom. (Snyder, 2009)

*Piecing: Piecing refers to the making of pieces, or "masterpieces." See the definition for piece above.

*Wildstyle: "Energetic pieces of graffiti with interlocking, highly stylized and often cryptic lettering" (Ross, 2016, 479).

Burner: "A graffiti piece that is regarded as high quality. To 'burn' is to outdo the work of others" (Ross, 2016, 475).

Graffiti art: "Graffiti art is a face-to-face, social practice with clear aesthetic intentions and unlike traditional graffiti, the semantic content of graffiti art is secondary to its visual aspirations. The identity of the individual (name and/or signature) is a crucial component of both, but graffiti art developed and is practiced collectively within skilled, locally organized subcultures" (Austin, 2010, 35).

End to end: An end to end (E-E, E2E, E-to-E) is a piece covering a train car from one end to the other. (Snyder, 2009)

Black book: "Writers carry sketchbooks that they call blackbooks which they use to practice outlines and to get autographs from other writers" (Snyder, 2016, 211n3).

*Insides: The insides of subway trains. Graffiti artists can paint insides or outsides. There are many different ways to describe outsides, but insides are not commonly places to bomb or to

piece, but rather to simply tag, which is to quickly write one's stylized name, usually in black marker. Graffiti writers speak of doing *insides* or *outsides* as a type of work.

*Subway art: Another way of referring to graffiti art that was typically practiced on the subway cars in New York City in the late 1960s to 1980s.

*Production: These are larger and more involved pieces that involve several artists (often from the same crew) to work together. They are done on legal walls, where permission has been granted or the work commissioned. They require a larger amount of time, supplies, and people, all of which are prohibitive without permission. (Snyder, 2009)

2.8 Summary

I have examined the KO literature for studies that focus on domain analysis of specific user communities and the value of such studies for the information of KOS development and design. I have also looked at specific domain analyses within KO that examine user organization practices and terminological studies that may serve to inform the development of ontologies or controlled vocabulary. I have made use of literature from general art and photography, and more specifically from street art and graffiti art, to place this research within the context of not only KO, but the world of art, graffiti art, and street art as well. I have addressed problems specific to the documentation of an ephemeral and largely non-institutionally supported art form and I have sought to explain and describe what is meant by the term 'community' within this research. It will be seen that these indicated community members, in photographing and sharing street art

^{*}Not specifically mentioned herein, but common and likely to be encountered in the research.

Table 1 Common graffiti art terminology defined, from Graf (2016)

images online, have used technologies that specifically support the identification and organization of descriptive information, again whether intentionally or unintentionally.

Chapter 3: Methodology

This dissertation features domain and content analytic methods in an explanatory mixed-methods design. The state of photographic street art collections online, the methods used to document the street artworks, and the organizational practices of curators who make the collections available to users are considered. The goal is to determine the structure of the domain of the online street art community, its intension, extension, and ontological formation. To do this, sources examined for this analysis include website text and architectural categories, data later augmented by interviews with website curators.

3.1 Research Questions

The goal of this research, restated briefly, is to identify how online collections of street art are organized. This is explored in relation to the process of gathering images, how images are being organized and shared, and the types of textual documentation accompanying the works. To address these goals, the following research questions are posed:

- 1. What types of information about street artworks are found on street art websites?
- 2. What types of organization are being used on street art websites?
- 3. Based on findings from websites analyzed for questions 1 and 2, do website curators confirm or deny these as important facets of information regarding street artworks to be recorded, and why or why not?

This research can be divided into two phases of data collection and analysis, 1) a quantitative capture of website information; and, 2) an exploratory qualitative set of curator interviews.

Each phase of the research is outlined below.

3.2 Methodological Paradigms: Domain Analysis and Content Analysis

3.2.1 Domain Analysis

In knowledge organization, domain analysis as a method is based upon the need to carefully examine any and all domains, including academic domains, but also all other areas that constitute users and uses of information. According to Smiraglia (2015) "it is imperative that knowledge organization as a science turn its metaphorical microscope to look at every possible domain from the workplace to the neighborhood to the household to the academic disciplines and beyond" (19). There is plenty of work to be done in domain analysis and much of it must be done manually as the data is not clean nor consistently formatted for easy computer analysis. He adds that not only do we need more domain analyses, but we also need to further and more deeply analyze domains already studied. Beyond the specific goals of this research, the results of this study also serve to inform knowledge organization in general.

3.2.2 Content Analysis

Content analysis is summarized by Stemler (2001) as "a systematic, replicable technique for compressing many words of text into fewer content categories based on explicit rules of coding" (1), noting also that it is particularly useful as a means to support other methods of research. Content analysis, like domain analysis, often involves noting how often popular words occur and in what context within large bodies of text. While commonly used to examine textual resources, content analysis can also be applied to images. La Barre (2006), for example, used content analysis to study websites for evidence of the use of faceted analytico-synthetic design

theory. Content analysis pairs well with domain analysis and is useful to reveal commonalities of organization, terminology, content, and intent across websites using text and interview data.

A basic content analysis was conducted on text from the home pages, about pages, and history pages of sites. QDA Miner software was used to reveal and compare popular terminology between the site sources and the coding schema. This type of analysis reveals how language is used by curators to talk about the works and the activity taking place around the creation, documentation, and organization of the works. Coding interview data was deemed redundant as the interview instrument included a large number of the codes already used in the research. Solicitation of opinions regarding the codes provided information better suited to qualitative analysis.

3.3 Quantitative Analysis of Website Capture Data

Website capture relates to research questions 1 and 2—and particularly to discovering the extension of a domain of street art websites. In traditional KO domain analysis, "extension" defines the ontological boundaries of a domain. In this research, the extension will be defined by the collective content of street art websites. To discover consistencies, if they exist, in the textual descriptions attached to records of street art it is necessary to examine the records themselves along with any associated descriptive text. These records are found in a number of sources that can be considered for inclusion in such a study and include websites that are devoted to collecting photographs of street art, of which there are many. Currently street art is commonly collected and shared on sites such as Flickr streams, Instagram galleries, Facebook pages, individual artists' websites, websites of non-artists who collect the work of others, and a

great number of websites that are collaborative efforts of graffiti and street artists, photographers, and anyone else who has images to contribute.

Some websites offer tags attached to records and/or an organizational scheme of different pages for individual styles, locations, or artists. The website New York City Trains hosted by popular graffiti art website ArtCrimes.com offers historical graffiti art images displayed according to the New York City subway line on which they appeared in the mid-1980s (https://www.graffiti.org/nyctrains/index.html). This collection provides metadata about location through the type of organization used, as well as through the use of artist name titles. Other sites organize works by form, such as stickers, stencils, or wheat paste-ups; by surface, such as walls, trains, subways, or vehicles; by style, such as murals, pieces, productions, or wildstyle; or in many other ways that will be described in more detail in the pages that follow. The website architecture often is used in such a way to serve as a type of faceted organization system that adds descriptive information to records based on such navigational structure. Granularity in terminology describing street art will help to define the intension, or depth, of the domain of street art websites.

3.3.1 Selecting Websites

The empirical material analyzed in this study includes online collections of graffiti and street art photography that can be found on websites and blogs. I did not examine works found within online art museum collections or those curated by academic institutions because the goal is to understand how street art community members themselves, as previously defined, are approaching, describing, and organizing the photographic records. By including in the

examination collections curated by art museums or academic institutions, the organizational practices would more likely be influenced by professional standards for material description, metadata, controlled vocabularies, and other previously studied and formalized domains and KOSs.

Blog-type websites are chosen for inclusion in this study while excluding certain specific other types. This is because various other content sharing platforms use software or architecture that limits the presentation of records, such as allowing only limited image sizing (Instagram), favoring the sharing of images and the limiting of text (Instagram, Flickr), and offering only hashtag conventions for grouping, which leads to some strange collocations in the uncontrolled tag environment (Instagram, Flickr). Although there is no strict delineation between what is considered a website and what is considered a blog, there are some basic attributes of structure to weblogs, or blogs, that can be expected such as the use of discrete entries or "posts" typically displayed in reverse chronological order (the most recent post appears first). An example of a graffiti art collection in blog style is 12oz. Prophet (http://www.12ozprophet.com/), entries of which are discrete and displayed in reverse chronological order, though there are other organizational facets to the site, such as a page for individual blogs by a dozen named contributors as of this writing. Even among websites or blogs curated by an individual, there is often an associated collaborated effort such as pages for external contributors or images uploaded from any number of outside sources.

Blogs might also be differentiated from other websites by their use of a known blog platform, such as Blogger.com or Wordpress.com. The street art blog "Graffiti Lux and Murals" is a blog hosted by Wordpress (http://graffitiluxandmurals.com/) that follows a standard blog

photographic images of street art as the stated focal point. Websites or blogs may might refer to the works they collect and display by terms other than street art, such as graffiti or graffiti art, but it was determined by looking at the content if the bulk of the works contained on the individual sites are considered street art according to the definitions outlined in previous chapters of this research. Some websites that focus largely on graffiti that does not fall under the definition of graffiti art, such as those that largely document tagging, are excluded, though it is noted that the definitional boundaries of the concepts of tagging, graffiti, graffiti art, and street art often overlap. Some of the included websites featured graffiti and street art photographic galleries alongside other types of galleries, but as long as there was at least one website gallery dedicated to the type of artwork researched, they were included. For the purposes of this study, the websites and blogs that will be used as data for analysis will be referred to hereafter as sites.

More and more street art photography from websites and blogs is showing up on other online media platforms. It has recently become very common to find members of the street art community using Instagram and Flickr feeds to post photographs of work from the street.

Mobile technologies make this very easy to do as many are documenting street artworks using smart phone cameras and uploading images to these online platforms immediately after they are taken by using apps specifically for this purpose (i.e. Instagram). Often a site dedicated to street art will have other associated platforms for sharing works from their collections and will offer visitors links to accounts on Instagram, Flickr, or Facebook, among others. While increasingly common, collections of street art found only on social media feeds are not included

in this study because of the limitations inherent in the most common of these platforms as already stated.

The types of descriptive text attached to these records ("records" will refer herein to photographic representations of street art) vary depending on who is doing the documentation – artists themselves, non-artist contributors, or experienced photographers, for example. When a collection is part of a collaborative environment, accepting submissions of images from various sources, there may might not be the ability to attach consistent descriptive text to the records since because information that comes with these submissions may can be very limited. Relevant record information may be found in titles for individual images, as well as in captions when provided. Some records include the names of artists or crews as part of the artwork, but this is inconsistent and sometimes, even when it is included in the artwork itself, the style of the signature renders it unreadable. Artists are known to change their working names and tags as well, making the positive identification of one person or group as the same entity over time highly uncertain (Austin 2001, 56 and 121).

Clarification of the term "tag" is warranted. Tag, and the verb to tag, or the act of tagging, are used in two related but different ways in a graffiti context and in an online context. Graffiti tagging is discussed briefly earlier in this study, but tags and tagging are discussed here as a descriptive and collocating device used online. Hashtags, or simply tags, are terms or unspaced phrases that are preceded by a hashtag symbol, sometimes called a pound sign, and are added typically to social media posts to describe, label, classify, or group material. They are used often as a type of personal organization scheme, but they also allow others to easily find

tagged topical content. Once the hashtag precedes the term or phrase, clicking on the tag will return all items on the platform that have also applied that same tag (Chang and Iyer, 2012).

Instagram users often make use of tags that serve the purpose of broadening the audience for not only the image, but the user's feed. Collecting tags from Instagram, for example, might highlight these tendencies if enough weight is given to particular tags that indicate specialty gallery inclusion, some of which might be assumed to be for the audience-broadening purpose, but this is another line of inquiry that could take one off in several disparate directions. There are numerous differences between sites and Instagram or Flickr feeds and how each can be used to share collections of street art. Sites answer to themselves and their own systems of organization that are, for the most part, controlled by the site administrator. Instagram and Flickr feeds are part of the larger community of users within each platform and are influenced by the tagging habits of this larger community as well as by the constraints of the platforms themselves, which are narrower than what is normally available on a blog site. The study of social media examples of street art image collections will be set aside for future research.

What is interesting to note in previous academic research on street art, specifically discussing the photographic documentation and online sharing of street art images (see Bengsten 2014) is that many of the websites that are listed as sources are no longer being updated or are gone altogether. Just as the artworks themselves are ephemeral, often so are the websites that seek to document the artworks. For this reason, the original list of websites that was chosen to form the basis for analysis had to be examined carefully to determine which were still available for study, as well as which met the criteria for inclusion according to details

outlined above. The content and even the overall accessibility of some of the sites changed during the course of this research as well. The careful conditions for inclusion in the research were applied at the time of data collection, during the summer and early fall of 2017, and some sites have since disappeared, changed slightly or completely, deleted or added English translations. There have been a number of instances where a site was revisited months later, during the coding phase or writing phase of the dissertation, only to find earlier site versions, text, or architecture gone. When this happened, only the text and navigation labels were used for analysis as gathered originally.

Street art is a global phenomenon, found most commonly in urban areas. For this reason, no attempt was made to limit websites for the study to those that focus on US street art only. As will be shown, many online street art photography collections are the result of collaborative efforts by contributors from around the world. Websites that are not in English were excluded, and for the second phase of research, interviews were conducted in English only, which may might have excluded some curators. Certain metadata or image information is occasionally provided in a language other than English, but this does not exclude such a gallery. Navigation labels must be mostly in English, as well as at least an English translation provided by the website itself for "about" information, which will be explained in more detail below.

It must be noted that sometimes a site will use a combination of English, casual English, trendy vernacular or made-up words, and foreign language words. An example is seen with the site for 187 Crew (https://www.graffiti.org/187/main.html). The navigation labels on this Croatian graffiti site's homepage are: Kodeone, Ghost, Haste, Case, Skat, Sly, History, Linx, E-m@il. The first six labels represent the crew members' graffiti names. Linx refers to links to

other sites, a common feature included in sites in this study. It may be spelled various ways across the list of sites, such as links, linx, or linkz. A subpage for graffiti sketches may be labeled as "scetches," which may might just be a typo or alternate spelling. Graffiti artist Deace had this text on his homepage with a list of navigation labels: "Home, Deace Graffiti, Expositions, Medias Graffiti, Medias Tekno, Non Classé, Subscribe, BIO DEACE. Hi, Hello, Hallo, Salut! Welcome on this new version of my site." As can be seen by the language used, it is not strictly all English, but the site is completely accessible to English speakers and the use of non-English words does not get in the way of the meaning of the navigation labels. Sometimes a visit to the sub-pages indicated by the navigation labels was necessary to clarify the meaning of the label, but this happened on sites that were only using English as well. The Dr. Revolt Graffiti Page, a subpage of his website that documents his graffiti as well as other aspects of hip-hop culture, uses the main navigation headings Earaches, Migraines, Eyesores, and Cramps. Earaches indicates a section for a music band, Migraines indicates other artistic conversation and reviews (including a sub-page here titled simply "weird stuff"), Eyesores includes the graffiti art section, and Cramps leads to the interactive area of the overall site, with a chat room, links, and guestbook. Graffiti artist Ger uses the navigation labels 1. Espionage, 2. Attack!, 3. Surrender, 4. Retreat. Along the bottom of the same page are these navigation labels as well, which duplicate the previous ones with more descriptive names: Outlines, Flicks, Email, Art Crimes. Outlines on these sites generally indicates sketches or drawings while flicks indicate photographs. Flicks may also be spelled flix, flixx, or fliks. These variations may might not look like English at times, but serve to demonstrate the variability in spelling that was still considered acceptable for inclusion under a requirement for English language.

About is a term commonly used on blog-type websites as a navigation label, taking users to an area where information is given about the website. The textual information given on an about page may might be about the website and what the curators are trying to do with the site, about the artist or artists featured on the site, or about graffiti or street art in general. Sometimes there will be information given on the history of the artforms or artists themselves, often beginning with the story of graffiti and graffiti art. Some sites go into a lot of detail with this type of information, using several site sub-pages to explain the history of the graffiti art movement. Some sites include separate pages for a history section that is separate from the about area. Still other sites that focus more on an individual artist or crew will share biographical information about the artist or crew, often including a list of art shows, gallery shows, events, and sometimes with a complete curriculum vitae or resume. This depends on the overall aim of the site. A site that is collaboratively fed, with images from various users and sources, will generally provide more information about the site itself and the art movement, while sites devoted to the professional goals of artists and crews, often available for contract work, design, murals, and other services, will commonly include personal biographical information and CVs. If a site only features professional work, with no gallery that at least featured street art or graffiti artworks, it was excluded from this study.

To clarify the use of the term "about" within this research, it must be noted that this is different from "aboutness" as used in studies of image description. When speaking of what a website is about, the focus is on what a curator says a website is about, or the textual contents of an area on a website that is labeled "about," and not what the actual website itself may appear to be about to the researcher. The units of analysis herein are textual in nature,

emphasizing the terminologies used by curators to describe what they are doing, to describe works they are collecting and sharing, and to organize the works. What is conceptually contained within the sites, the categories for organization, and especially within individual works themselves is a different study altogether.

3.3.2 Selecting Data from Websites

Websites were included in phase I of the study if they were listed as links on the Art Crimes website. Curators at Art Crimes state that they were "the first graffiti site on the net," appearing online in 1994, and it is generally accepted that they were the first comprehensive site to feature graffiti and graffiti art (About Art Crimes 2015). The website features works and sites from around the world and is used as an individual website in phase I and also as a source for all other websites. Gottlieb (2008) used the Art Crimes website as a starting point for identifying the experts she interviewed for her dissertation research on the classification of graffiti art styles. The site offers a curated link collection of "Best Graffiti Sites" that included 709 websites, all of which were mined for about text, history text, navigation label text, and contact information of curators during the summer of 2017. Of these 709 websites, 241 were ultimately kept as the data for this study. As explained in more detail above, 468 of the websites were excluded because the links to them were no longer active (the sites were dead, empty, or had moved), were in a foreign language, were dedicated only to an artist's professional work, were not relevant to the study, were only links to an excluded social media platform (such as Instagram or Flickr), or, in one instance, were only a collection of works by an individual artists featured on Art Crimes instead of a site hosted by Art Crimes. This breakdown of the original 709 sites is shown below.

Websites	Explanation
241	Live sites included for study
318	Dead, empty, or moved
64	Other languages
57	Artist's professional site (not graffiti or street art)
20	Not relevant (music group, advertising, etc.)
8	Other social media only (Flickr, Instagram, etc.)
1	Art Crimes sub-page, not website

Table 2 All websites examined for inclusion in the study

All 709 web links were visited and of those the 241 live sites that qualified for inclusion in the study were examined for about information, history information, website navigation labels, website curator contact information, and any other relevant information that might be useful. For example, if the website used a map of any kind to organize their photographs, that information was noted, and whether the map was hotlinked or static. A hotlinked map is one where the names of areas on the map can be clicked on and photographs of works from those areas are collocated. A static map would not have hotlinks, but would somehow indicate areas of the world featured in photographs on the site. Textual about information on the homepage was harvested, as well as any information from designated about pages, history pages, gallery pages and the like as long as the text provided relevant information about the background, purpose, or history of the site; the artists; the artworks; or the organization of the site, all as deemed relevant and useful by the researcher. Often such introductory material will provide insight into how the collection came to be, who is curating it, why it is being curated, and

possibly guidelines for contributors, all of which can add to the overall description of the website itself and organizational practices behind the scenes. Homepages, as opposed to other sub-pages, most often show any available organizational architecture such as names of pages, menus, or sub-galleries. Acquiring data related to architectural organization often necessitated visiting several pages of each website, depending on the individual architectures used. Some sites were nested several levels deep, and contained galleries for individual artists that numbered into the thousands, while others were very basic with few labels.



Figure 1 Homepage of 50mmlosangeles.com showing architectural sub-page labels and about information

Figure 1 above shows the homepage of 50mm Los Angeles, a large and popular graffiti art website. The architectural labels can be easily seen across the top of the page: Gallery, Articles, Events, L.A. Legends, Blackbook, Links, Forum, About Us, Submit an Event. What is not ascertained from this homepage is the detail within each of those sub-pages. The next figure

shows the individual artists and collocated collections available on the Gallery sub-page. There were 3102 hotlinked categories listed on this page at the time of data collection.

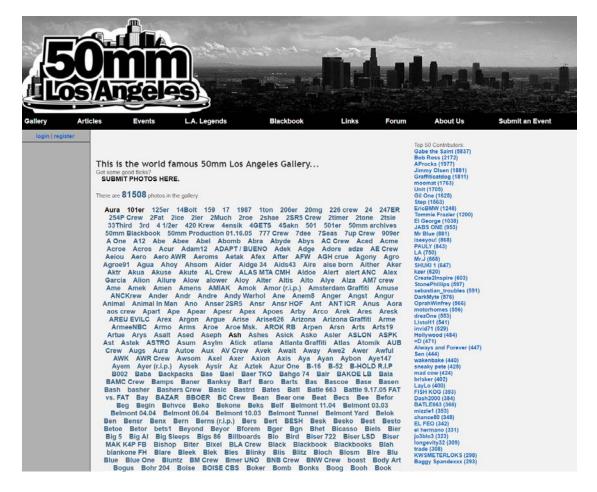


Figure 2 Gallery page of 50mmlosangeles.com showing linked categories

A distinction must be made here between the use of hotlinked tags as descriptors, tag clouds, and more organized looking category lists such as that shown in Figure 2 above. Many sites that use a blog-type format take advantage of the ability to add tags to individual posts or even to individual photographs of works. These tags form an organic, folksonomic organization scheme in that a visitor to the site can click on any hotlinked tag and be taken to a list of entries that have been identified with that same tag. Research by Kipp and Campbell (2006) has shown

the problems inherent in this type of organization, wherein a lack of consistency in tag terms often does a poor job of gathering like items together, especially without a large number of taggers and tags. This is exemplified by tag use on the website éiresol: Irish Graffiti, which uses the similar and undifferentiated tag sets of Traingraffiti, Graffiti on trains, and trains; and Irishgraffiti, Irishtrains, and Irish (http://eiresol.com/). To set definable boundaries for what would be considered navigation labels for inclusion in this study, and to avoid tossing a net into the murky waters of user-contributed tags, sites that shared their category lists explicitly, with enabled navigation, were considered part of the architecture of the site and were used as data. If a site used tagging on individual posts or individual images, those tags were not included for analysis herein; tags for individual works were not included. On a site like 12oz Prophet, the tags applied to posts and images were visible upon visiting individual posts and images, but were not available as an aggregate list provided to the user. A site like 50mm Los Angeles has applied tags to individual posts and images, but has also taken their tags, gathered them into one directory page for users, and called attention to this page as a separate sub-page that they call the Gallery.

3.3.3 Coding of Website Capture Data

Once all data were gathered, either by copying and pasting or by transcribing various levels of architecture labeling by hand, they were imported into QDA Miner software for coding to determine which facets of the street artworks are being documented, as well as other relevant information. The coding list was initially developed based upon common facets of documentary information that were seen during the data gathering stage, and further codes were added and existing codes modified as warranted by closer examination of the data during

the coding process. A complete list of the 97 codes used in the analysis phase of websites along with brief definitions is provided below in Table 3.

FacetsGeneral

Artist Image gallery dedicated to the work of a particular artist or crew.

Color Works organized by dominant color.

Day Gallery featuring works from a specific day, but not a specific event

or festival.

Decade Gallery featuring works from a specific decade or group of years.

Event Gallery featuring works from a specific event or festival.

Featured Works set aside in a featured area to highlight an artist, event, or

other reason for special focus.

FemaleArtist Works by female graffiti or street artists.

Gallery Works featured in a gallery or museum. These are usually on canvas.

Illegal Gallery described as illegal works, most likely all graffiti art.

Inside Works completed inside, usually commissioned work inside buildings,

homes, or other private property, though sometimes this refers to graffiti art inside trains, subways, tunnels, or other structures.

Legal Gallery described as legal, which usually refers to murals or other

commissioned work, or work on legal graffiti walls.

Month Gallery featuring works from specific months of a named year. Does

not get down to day level.

New Records described as new, newer, or recent uploads to the site.

Old Records described as old or older work. Sometimes referred to as

"old school," which may refer to old styles or classic works.

Outside Gallery featuring works done outside, which usually means they have

a greater chance of being graffiti art or street art, but they may also

be murals or other commissioned works as well.

RIP Rest in peace abbreviation denotes an artist who has passed away.

This is most often seen next to an individual artist's name, but may (rarely) also represent a collection of works of artists who have died.

Year Gallery devoted to a specific year.

FacetsLocations These facets describe geographic location information.

Address A specific location identified by a city address

Cities Named city

CityParts Named part of a city, such as the Bronx or South LA. Can be confused

with cities at times as some may actually be their own named cities.

Continents Named continents. Also used for locations in between countries and

continents when there was an obvious grouping, such as for a group

of island nations, for example.

Countries Named countries

CountryParts Smaller than a country, but bigger than a state or territory. The

Maritimes in Canada, or Northern Italy are examples.

Intersection The intersection of 2 named streets as location.

SpecificLandmarks A gallery devoted to works at a specific landmark, such as a named

park, a named business, or known area of a city that is more specific

than a neighborhood.

States A US state, Australian state or territory, or Canadian province, for

example.

Undisclosed This is a gallery that is specifically undisclosed, where the curator

says they are not going to say where it is, for various reasons.

World This type of gallery is devoted to works that fall outside the main

area of the geographic focus of an individual site, and are described as such. It is also a catch-all category for miscellaneous works from

around the world whose location may not be known.

FacetsSupports These codes refer to the surfaces or supports for the works.

Billboards Usually graffiti art, these are works done on advertising billboards.

Blackbook Gallery dedicated to works done specifically in blackbooks, a graffiti

artist's sketchbook. Not coded as sketches.

Buses Usually graffiti art, these are works done on buses.

CarsTrucksVans Often, but not always graffiti art, these are works done on cars,

trucks, vans, and other similar vehicles.

Clothing These galleries are devoted to graffiti style art on clothing, most

often hats, t-shirts, jackets, and shoes. May be original or printed and

sometimes for sale.

Freights Works done on freight train cars. While trains, these are coded

specifically as freight trains.

Rooftops Gallery devoted to work done on rooftops, a popular graffiti spot.

SubwayCars Gallery devoted to work done on subway cars, as opposed to just

trains or freights. Some galleries specifically use the words subway

cars instead of just subway or subways.

Subways Gallery devoted to art in subways. May include the subway cars, the

subway tunnels, or other aspects of the subway. If subway cars are

not mentioned, this is simply coded subways.

Trains Gallery devoted to works on trains. May include subway trains or

freight trains, but is not specific beyond simply trains.

Tunnels Gallery devoted to work in tunnels, whether subway tunnels or other

tunnels.

Walls Work on walls, most often outside, and most often indicating graffiti

or street art.

FacetsTypes These codes describe the works themselves.

3D Work that is described as 3D, sculpture, or objects, such as when

artwork is applied to 3D surfaces. Not all objects are type 3D.

Action These are galleries devoted to photographs (sometimes including

videos) of artists in the process of making art. This is often graffiti art and artists may have their faces covered or blurred, but not always.

Bombs Gallery for works described as bombs or bombing

Canvas This type of gallery is most often described using the word "canvas,"

meaning works done on canvas or what I coded as studio work.

These are works that are not done on the street.

Characters Gallery for works that include characters or are works of characters.

CommercialDesign Gallery for commercial designs, custom work, or other non-

graffiti/street art works.

Digital Gallery for works done digitally, electronically.

Graffiti Gallery specifically for graffiti works.

Latrinalia Gallery specifically for graffiti and graffiti art in public restrooms.

Gallery devoted to lettering, letter styles, hand-lettering, graffiti

fonts, and/or typography.

Murals Gallery described as murals, which may be legal or not,

commissioned or not, usually bigger works.

Other This is a catch-all category for other named surfaces, styles, or

themes. This group of codes was reviewed after all coding was done and appropriate new codes were created if warranted. Those still coded here did not occur often enough to warrant a specific code.

Pieces Gallery devoted to the graffiti style known as Pieces, which are

larger, more colorful, and complex works, short for masterpieces.

Political Gallery for works with a political theme.

Posters Graffiti or street art posters. May be printed and posted or wheat-

pasted up outside, in a gallery, or for sale.

Productions Gallery of graffiti style called a production, which is usually carried

out by more than one artist, or a crew, or more. These are usually

larger works, more colorful, and more complex.

Projections Using light projected onto a surface instead of permanently marking

with paint, for example. Could be called light graffiti or light painting

(Rezine69, for example).

RatedHigh These are works described as most popular on a site, most-viewed,

or highly rated. Some sites allow users to rank or rate works and

these may be gathered via algorithm into a gallery.

Rollers

Sketches Works not specifically in a blackbook, though they may be, these are

referred to as sketches, drawings, and sometimes as outlines.

Stencils Gallery dedicated to stencil work.

Stickers Gallery dedicated to stickers.

StreetArt Gallery simply described as street art or street. Very general.

Tags Gallery devoted to graffiti tags, a specific, simple type of graffiti

consisting of a stylized rendering of a name, usually in black Sharpie

marker, but not always.

Throwup Gallery of graffiti style artworks known as throwups, throw-ups, or

throwies.

TrainEtoE Graffiti artwork on trains that goes from one end of the car to the

other.

TrainTtoB Graffiti artwork on trains goes from the top of a car to the bottom.

TrainWholecars Graffiti artwork on trains that covers a whole car.

Wheatpaste Gallery of works that are either stenciled, painted, or printed on

another surface, then glued onto another surface in public using wheat paste or other fixative. Commonly referred to as wheat paste-

ups.

Wildstyle Gallery devoted to graffiti art style Wildstyle, which features

complex, colorful, interlocking letters that are often difficult or

impossible to read.

Sites This code category relates to what is offered on the sites.

About This refers to a general about page and may include information

about the site, about the curator of the site, about an artist or crew, about the type of featured artworks, or any combination of these.

Contact Contact information for the website curator, such as an email, a

phone number, and sometimes an address.

ContributeFlix This code is used when a site solicits and/or accepts photo

contributions from users.

Disclaimer This code is used to denote when a site offers a disclaimer indicating

that they do not condone any illegal aspects of graffiti or street art.

FAQ This code is used when a site offers a section for frequently asked

questions.

Forum This code is used when a site offers discussion forums for users.

Glossary of graffiti and street art terms. Only a couple sites offered

this, but it was considered valuable for terminology definitions.

Guestbook This code is used when a site offers a guestbook where users can sign

in and comment.

History Information on the history of the site, the artist or artists featured on

the site, or the art forms themselves. The information could overlap with what is sometimes on an about page, but it is specifically listed

as history.

HowTo This code is used when a site offers any kind of instruction on any

aspect of the art.

Interviews This code is used when interviews are specifically offered, usually

with graffiti or street artists, but sometimes other people as well.

Map This code is used when a site offers a map, static or interactive, to

denote where works on the site may be found. Some maps are general, such as only offering locations to the level of countries,

while others mark locations at specific GPS coordinates.

MyAccount This code is used when a site offers users personalization, such as the

ability to create their own account on the site. Then users can upload their own images and/or videos and keep track of favorite images or artists, for example. They may also be able to comment or tag on images or posts or participate in a forum not available to non-

registered users.

Poll This code is used when a site asks users their opinion in a poll or

survey and then shares the results.

Shop Many sites offer an area for shopping, often including graffiti art

prints, posters, or clothing.

Subscribe This code is used when a site offers users to subscribe to a blog feed

or to receive email notifications.

Videos This code is used when a section of a site is set aside for videos.

OtherMedia These codes are for links to other media related to the sites. Except

for the Links code, all are accounts associated with the site itself.

Blog The site links to its own blog or a blog related in some way to the

site.

Book The site may have produced a book, such as that done by site Global

Street Art. It may be featured and for sale.

Facebook Link to a site's associated Facebook account.

FLKR Link to a site's associated Flickr account.

IG Link to a site's associated Instagram account.

Links A section devoted to outside links that usually relate to graffiti, street

art, or other artists, but can be about anything.

Pinterest Link to a site's associated Pinterest account.

Tumblr Link to a site's associated Tumblr account.

TW Link to a site's associated Twitter account.

YouTube Link to a site's associated YouTube account.

Table 3 Website Code List

3.3.4 Coding and Analysis Instrument

QDA Miner data analysis software was used for coding of text, website architecture labels, and word analysis for term extraction. Qualitative examination of collected text was carried out to determine the expressed facets of street art information across websites.

Content analysis was also applied to reveal commonalities in vocabulary used to describe graffiti art. The results of this examination expose facets of street art that are being described consistently as well as descriptive terminology used, and this information formed the basis for questions posed to curators in phase II of the research.

3.3.5 Intercoder Reliability

The coding schemes used in analysis of text and website architecture labels of records were tested for inter-coder reliability. It is useful to have inter-coder input on the application of codes for analysis to make sure categories developed are clearly defined and therefore easily applicable, as well as the best possible conceptual categories to be used to meet the goals of the research. A random sample of 10 percent of the 241 sites, or 24 sites, was chosen for coding by another person who holds a master's degree in Library and Information Science. His coding of the sample revealed inter-coder reliability of 96.9% based upon presence or absence of a code in each of the coded cases. This percent was factored automatically by the QDA Miner software. The details individual codes used for inter-coder agreement are shown in Appendix A. The inter-coder agreement was very high for this research, but this was expected because the codes are very descriptive of what is present in the data.

3.4 Qualitative Interviews with Website Curators

A second data source is the information gathered from those who collect the artworks and post them online, otherwise known as curators for the purposes of this research. When curator contact information was available on a website, it was used to introduce the research and to solicit further participation in Skype, telephone, or email interviews during phase II.

Providing these three means to complete the interview was intended to broaden participation.

IRB approval was sought and obtained via exempt status for the interview portion of the study (see Appendix B).

Careful development of interview questions elicits knowledge from these domain creators and users that is specific to their experiences with the phenomenon at hand and is used to triangulate data gathered from the descriptive facet and terminological analysis.

Comparing emerging vocabulary and themes from the two types of data lends validity to the research process (Cresswell 2014). Gathering knowledge from collection curators and users is useful to determine whether these groups taking part in the domain of street art are using consistent methods to describe and access records or whether there exist different views on what types of descriptive information are important and why. Approaching those who are familiar with the artwork, from creation through documentation and online exhibition, situates the phenomenon under study from within the community. The examination of textual data sources is carried on from outside the domain, but the additional information provided by domain insiders valorizes "indigenous" cultural knowledge over that of simple outsider observation.

These explorations demonstrate the vocabulary used for street art documentation, as well as revealing which aspects of description, or facets, are of value to domain users. Teasing out the role of graffiti art and street art culture in the generation of such art as contextually important for the evolution of domain-centric knowledge organization systems (KOSs) requires a sensitivity to the history of the art forms and their attendant practices, careful attention to the terminology and language used by the creators of these artworks as well as by those who collect and use them, and analysis of the descriptive text associated with the online records themselves. Providing space within the research for domain insiders to explain their practices and describe how they approach their collections adds contextual knowledge that cannot be gained by simply dissecting text associated with works.

Phase II addresses research question 3. This phase of the research was designed on the basis of knowledge gained from Phase I. The list of descriptive facets resulting from Phase I analysis was used to inform questions for curators during the interviews. This information could be determined from several points of view; the two considered here are that of the members of the street art community, and that of the researcher, informed by library and information science and by KO in particular.

3.4.1 The Interviews

While it is not known precisely whether or which curators are practicing participants in the making of graffiti art or street art, it must be acknowledged that the secretive nature of the community and the often-illegal aspects of the work render access to insiders complicated for interview purposes. Such difficulties may depend on whether the curators are only collecting

and sharing works, if whether they are artists carrying out illegal work, or artists seeking more professional commissions. The worldwide distribution of curators added another level of complexity for interview access as well. For these reasons, participants were offered flexible ways to participate in the interview process, including by phone, Skype, or email. The same questions were posed and follow-up questions asked as necessary regardless of medium. It is acknowledged that the differences in medium likely have an effect on the quality of information gathered during the interviews, though the depth of responses varied greatly despite the asynchronicity of email. Scholars such as Burns (2010) and Ratislavová and Ratislav (2014) have reported on the differences between email and face-to-face interviews, citing not only the challenges inherent in the email methodology, but the many possible benefits as well. Such benefits include convenient time management and greater focus for participants, savings of time and money as physical travel is avoided, the comfort of indirect and written response, and the benefits to the researchers who could broaden their data collection by offering the interview via email.

Burns (2010) questions the difference between email surveys and email interviews and shares that "Email to and from one person seems much more like an interview, whereas an email broadcast to substantial numbers of participants has most of the hallmarks, and often the actual label, of a survey" (para 5.2). He further qualifies this not very neat definition with examples where more survey-like methods can combine with technology to conduct a multi-layered exchange more easily considered an interview and richer for all the complexities that may might come to bear on the process. The initial contact emails sent out to curators for this

research could in this way be considered surveys in which further participation was elicited for either phone, Skype, or email interviews.

When presented with the results of Phase I during the interviews, curators were asked if whether they agreed that these captured facets are were indeed important to them and their perceived audience, and why. Questions are designed to determine what are considered the important facets of information regarding street art documentation, what is missing now that we know what is being documented, and what is considered important to document according to those who are doing it. Questions were also included to address what would in the traditional art world be assumed as important, such as the size of works and real names of work creators, despite their exclusion as categories for organization among curators. The interview instrument is provided in Appendix C.

3.4.2 About Text

Qualitative analysis was carried out on the text from about pages. QDA Miner software was used to code for stated purpose, audience, art style, and organization methods. This type of analysis reveals how curators to talk about their reasons for curating, who they are curating for, how they describe the general style of works they curate, and if whether they apply any specific method of organization or organize for any particular reasons.

3.5 Summary of Methodology

Domain analysis of this user community and these specific collections has not been undertaken and therefore indicates a gap in the literature that will be filled by this study. The organization of photographic street art collections online represents various aspects of art,

community, and description that deserve further exploration and that can be used in the future design of formal systems for the preservation of a record of these important works. The methods used in this study are designed to show what has been done so far to document the history of street art and graffiti art production through the textual evidence of those who are sharing such collections.

Content analysis of website material and qualitative analysis of curator interviews supports and adds depth of insight to domain analysis through closer examination of the work practices of participants evidenced by their organizational practices, stated goals, and terminology. Through these combined methodologies it may be shown not only how online collections of street art are being organized, but why. This study differs from others that examine graffiti art and street art practices, motivations, challenges, and history of the art movement because exploration herein focuses on the organization of the works in online collections and the descriptive text that supports such organization. Curators of the collections provide information on how and why they organize their own collections, and offer insight on best practices for their own and other collections.

Chapter 4: Text Analysis and Website Code Categories

Beginning with the full list of 709 links on the Art Crimes website, each was visited and included or excluded from the study based on the parameters explained in the preceding chapter. The goal of this chapter is to provide an overview of the websites, their stated goals, what they offer users, and to give a series of more detailed examples of sites that were structured and organized in more complex ways. Textual analysis of about information, along with detailed coding of general navigation labels serves to illustrate the motivations, goals, and techniques that are being implemented to group records according to various descriptive facets.

4.1 Analysis of About Text

When a site provided an about area or page, the text was collected and analyzed to determine any stated purpose of the site or motivations for collecting the works, the art style terminology the curator uses to describe the works on the site, the intended audience for the site, and any information loosely related to how works are described or organized. Not all sites provided such information, and many sites simply used an about area to introduce a particular artist and the artist's work instead of the purpose of the site. Further related input was gained from the interviews conducted with curators that add to the about text findings, which is discussed in chapter six.

4.1.1 Audience and Organization

While coding for both an intended audience and organization information in the about text was desired at the outset, these types of information were rarely encountered. There were only three instances that warranted the Audience code. The text for these three ranges from very vague to rather specific. Starting with the vague audience information, 12oz Prophet states: "If you don't get it, this isn't for you" (https://12ozprophet.com/pages/about). This statement implies that the site is designed for insiders, or those who already understand the types of work that are featured on the site. The Hull Warehouse states: "given time i hope the site will eventually reach the right audience: those representing hip hop (and themselves) all over the globe..." (http://www.angelfire.com/in/warehouse/Editorial.html). Graffiti is one of the four commonly accepted pillars of hip-hop, which also include break-dancing, DJ-ing, and rapping (Chang 2007). The third site is the most specific. FatCap states: "The average FatCap visitor is between 15-35, has great chances to be a man, and is most likely to live in a big city" (https://www.fatcap.com/about.html). This last audience statement could be said to describe who their audience is instead of who they set out to attract as an audience. The surrounding information on the page demonstrates that this audience demographic data attracts possible advertisers on the site. After this analysis of the about text, it is clear that neither prescriptive nor descriptive audience demographics are normally explicit.

Only three sites explicitely offered organization methods within about information. Like the Audience code, the depth of information regarding explicit organization and description varied. Super site Art Crimes was very detailed in its explanation of what terminology the founders chose to use to describe the style of works they feature. "This site uses 'graffiti,'

because we think this word still has the most recognition and precision and using it makes Art Crimes more findable with search engines" (https://www.graffiti.org/index/story.html). This points to a conscious choice of terminology to affect greater visibility of the site, though choice of terminology will be examined in more depth in the section regarding art styles later in this chapter.

Double-H provides this information on their about page:

For safety reasons, all illegal pieces remain untitled, except a few from the history section. For all other pieces, artist and year are stated where known. For pieces from outside of Hamburg, the location is specified as well. For canvases, title, size (in centimeters) and technique (acrylics, spraypaint...) are specified where known. As a rule, sketches remain untitled (http://www.double-h.org/english/impressum.html).

This demonstrates the site's value of artist, year, and location information when it is available.

Another issue that will be addressed further during the interview discussion in chapter six is the omission of location information for works when it is known that they have been produced illegally. This is done to protect the artist or artists from law enforcement using this information for prosecutions.

The last of the three sites to provide any type of organization information within about text is super site Miami Graffiti, which states: "Anyone can browse flicks by writer, crew, location, or date, and also submit updates on existing submissions so the information becomes more accurate on the site" (http://miamigraffiti.com/about.php). Again, the importance of artist, date, and location data is evident, as well as the welcome invitation to site users to provide additional information, if they have it, to maintain a more accurate record of works.

4.1.2 Art Style

Most of the sites with about text use terminology to describe the style of art that they are featuring. Terms most often used include graffiti, street art, murals, or other styles and combinations of styles. Sometimes the about information is describing the work that an artist has experience with instead of making a direct correspondence with the actual works featured on the site. When it was possible to discern these two, emphasis was given to the latter as the websites themselves are the focus of this research.

There are 105 sites that provided art style terminology within about text. The normalized terminology and frequency of occurrence are shown below in Table 4. Variants of graffiti are the most commonly used terminology, including graffiti art, graff, train graffiti, freight train graffiti, and 3D graffiti. These terms occur 86 times. Murals is used 22 times and street art 15 times. A total of 31 art style types is revealed in the about text analysis, with slightly more than half (16) occurring only once. Further discussion below addresses the correlation of motivation and selected terminology.

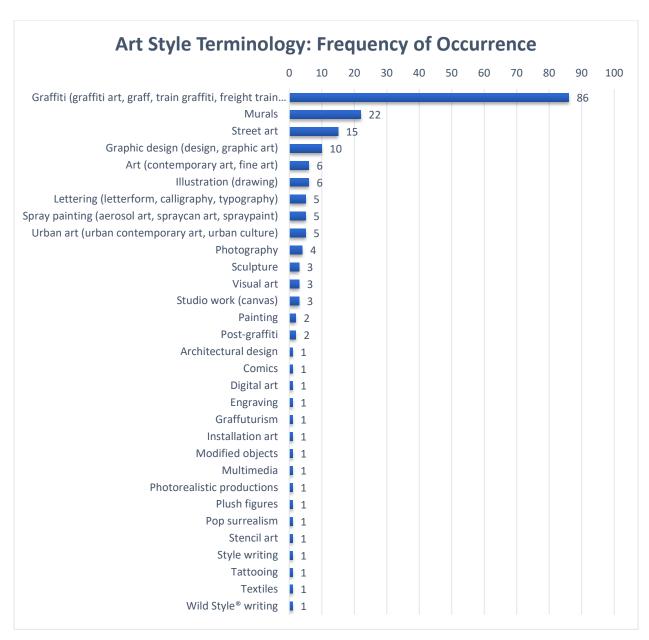


Table 4 Art Style Terminology: Frequency of Occurrence

4.1.3 Motivation

On the about pages two main types of motivation were noted. When a specific artist or crew was curating a site, personal gain was the most common implicit purpose, such as to provide a working portfolio and garner further exposure for more commissioned work, gallery exhibitions, or other economic benefit. This was coded as Internal. The other main purpose

encountered for a site was to feature, gather, and preserve a record of ephemeral works for public use and enjoyment. This was seen more often from super sites and from sites not curated by an individual, active artist. This was coded as External (see Kipp, Beak, and Choi 2017).

In this way, motivation information was gathered from 112 sites. Of these, 72 were coded as Internal and 40 coded as External. There were four sites that were also coded as Mixed. Two of these were Internal, Mixed and two were External, Mixed. Each of these four had a tendency toward either Internal or External motivation, but also had indication of the other motivation so they were not coded only Mixed. For example, a site was coded as Internal, Mixed when it was curated by an artistic crew and featured the work of the crew, but also added in the work of others when an image was made available. Their motivation was seen as promoting the crew, yet also to feature the works of others in a less focused capacity. All 11 super sites within the about text analysis were externally motivated.

4.1.4 Art Style Terminology and Purpose Relationship

There is a correspondence between terminology used and whether a site is internally or externally motivated. Before normalization and grouping of terms as described for art style terminology above, the words used by the sites were tallied by super sites, by all External sites, and by all Internal sites. Externally motivated super sites used the following art style terminology: graffiti, graffiti art, post-graffiti, street art, stencil art, urban art (6 terms).

Including all externally motivated sites added six more terms to the previous six: graff, train graffiti, freight train graffiti, photography, graphic design, and aerosol art (for a total of 12 terms).

Internally motivated sites used the widest variety of art style terminology: graffiti art, graphic design, street art, fine art, urban contemporary art, post-graffiti, studio art, murals, spraycan art, digital art, canvas, engravings, sculpture/s, modified objects, photorealistic productions, letterform, lettering, illustration, design, visual art, art, aerosol spray paint, painting, drawing/s, installation art, urban culture, spray paint, canvas, 3D graffiti, calligraphy, photography, plush figures, gallery art, spraypainting, contemporary art, architectural design, textiles, multimedia, Wild Style writing, abstracted typography, comics, pop surrealism, graffuturism, tattooing, style writing, and urban art (a total of 46 terms). When a site is internally motivated, it likely benefits the artist or artists to use a broader range of art style terminology to advertise a wide range of skills and expertise that may be of interest to business clients or galleries. The term graffiti, by itself, did not occur as an art style descriptor on any of the internally motivated sites. Graffiti art, post-graffiti, and graffuturism were the only terms that employed the word graff or graffiti in them, but these terms distance themselves from graffiti, which may be seen as a benefit for artists interested in commercial work and wishing to distance themselves from illegal activity.

4.2 Analysis of Navigation Labels: The Six Code Categories

The following analysis moves into the coding of navigation labels used across all sites.

There are six broad categories of codes, two of which focus on the websites themselves and

four of which focus on the works on the websites. The categories are listed below in Table 5, showing how often each code category was applied, the percentage each category represents of all categories, how many sites warranted the application of each category, and the resulting percentage of all sites to warrant the same. They are ordered by how many sites used each code category, from most frequently used to least frequently used.

Code Category	Count	% Codes	Sites	% Sites
Sites	701	3.50%	200	83.00%
Types	824	4.10%	163	67.60%
Supports	746	3.70%	145	60.20%
General	15090	74.40%	137	56.80%
OtherMedia	214	1.10%	129	53.50%
Locations	2705	13.30%	60	24.90%
Table 5 Code Categories				

A graphic representation of this same data shows the percentage of code categories across all applications of the code categories, including multiple applications within one site.

This represents the Code, Count, and % Codes columns in Table 5.

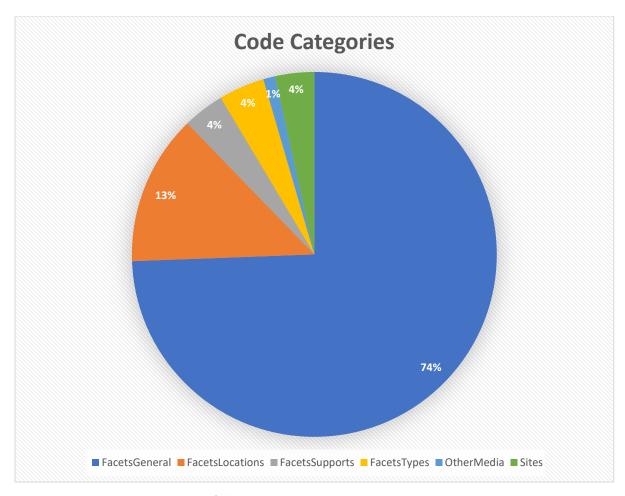


Table 6 Code Categories as Percentage of all Codes Applied to All Sites

A subset of coding will be examined herein, focusing on general site information. This includes the general facets and other media code categories. This chapter forms an introduction to the more detailed analysis of general, support, type, and location codes for works applied to navigation labels across all sites in the next chapter. There are 97 individual codes and a total of 19,582 instances of these codes applied to the data.

4.3 General Website Codes

Coding for this research can be divided into those that describe the sites and those that describe the works. Attention is now given to the former, which include two categories of

codes: Sites and Other Media. The Sites category is further divided into the codes About,

Contact, ContributeFlix, Disclaimer, FAQ, Forum, Glossary, Guestbook, History, HowTo,

Interviews, Map, MyAccount, Poll, Shop, Subscribe, and Videos. The category name Sites was used because this group of codes is used for material found on the sites that does not directly relate to describing the works themselves, but relates to the structure of each site in general.

A breakdown of how often each of these Sites codes occurred is shown below in Figure 4.1, arranged from most common to least common by the number of sites warranting the code. The code name is given in the first column, the total count of how many times that code was applied across all 241 sites in the second column, the percentage of all codes that this code represents in the third column, the number of sites that had material coded with this code in the fourth column, and the total percentage of all sites that had material coded with this code in the fifth and last column. The list is in order of the most sites including a code, not by the total number of times the code appears. For example, the HowTo code appears 77 times, but is only used across 8 of the sites. A limited number of sites provide HowTo information, but they provide several different kinds of this information in different areas of the sites. Sometimes the same code is applied to different subdivisions of a site.

Sites	Count	% of Codes	Sites	% of Sites
Contact	147	0.7	133	55.2
About	145	0.7	110	45.6
Shop	77	0.4	60	24.9
Videos	61	0.3	43	17.3
Disclaimer	33	0.2	26	10.8
Interviews	51	0.3	22	9.1
ContributeFlix	18	0.1	16	6.6
Guestbook	21	0.1	15	6.2
History	18	0.1	9	3.7

Мар	10	0.0	9	3.7
MyAccount	13	0.1	9	3.7
Forum	9	0.0	8	3.3
FAQ	7	0.0	7	2.9
HowTo	76	0.4	7	2.9
Subscribe	6	0.0	6	2.5
Poll	3	0.0	3	1.2
Glossary	6	0.0	2	0.8

Table 7 Occurrences of the Sites Codes, ranked by most sites using

4.3.1 The Contact Code

A page for contact information is coded as Contact. Nearly all of the sites had contact information, but not all of the sites had a specific sub-page for this type of information.

Sometimes contact information is given at the bottom of the homepage or elsewhere within the site. Over half of the sites do have a specific sub-page labeled for contact information, and at 55.2% of total sites, this is the most used navigation label in the Sites category.

4.3.2 The About Code

If the site has a page dedicated to explaining what the site is about, who the site is about, or the aims of the site, this is coded as About. Often this type of page is labeled simply About, but sometimes it is labeled according to the name of the site, the artist or crew, or with a short phrase such as "who we are." An about page may focus solely on the site and guidelines for using the site, encapsulating many of the other codes described in this research. An about page may also focus more on an artist or crew and include biographies, resumes, lists of exhibitions or gallery shows, and contact information.

4.3.3 The Shop Code

It is very common for a site in this study to offer an area for sales of graffiti or street style art. This may be works on canvas, prints, posters, or other items such as clothing, digital downloads, design services, or supplies. A quarter of all sites offer a sub-page or sub-pages for shopping.

4.3.4 The Videos Code

Videos are another common offering on the sites. These may be recordings of artists at work, interviews with artists, or videos of walls or other areas of one or more works. They may also be recordings of events, travels, and other things sometimes not related to graffiti art or street art. Just under one fifth, 17.3%, of the sites offer an area dedicated to videos.

4.3.5 The Disclaimer Code

A disclaimer is often labeled as such directly, but at times the word disclaimer is not used. If a site includes text that explains that the site does not condone the destruction of property, or any type of illegal activity, this was coded as Disclaimer. The site St. Louis Freights states, "This site is dedicated to the freight train graffiti movement. Vandalism of railroad property is illegal. This site does not condone or promote vandalism. The purpose of this site is to document this movement for those not able to view these trains first person"

(http://www.graffiti.org:8080/stlouis/freights/index.html). On a sub-page labeled Info and coded as About, site Intergraff includes this text: "Intergraff does not condone the act of vandalism of any sort nor does it promote any illegal activities. Intergraff serves exclusively as an archiving database to document photos about graffiti and the communities it derives from"

(http://intergraff.com/info.html). The Lame Face Crew site states: "DISCLAIMER: Lame Face Crew does not condone vandalism or the making of graffiti. We are only here to provide pictures of beautiful artwork that just happen to be done on walls, trains, vans, trucks, etc... We do not support vadalism [sic] in any way" (https://www.graffiti.org/lf/). 26 sites, or 10.8% of all sites, offer some type of disclaimer.

4.3.6 The Interviews Code

Twenty-two sites, almost ten percent of all sites, offer an area for interviews. Interviews may be videos or text, or a combination of these. Videos may be offered directly on the site, embedded within, or may be hosted on a link external to the site, such as YouTube.

4.3.7 The ContributeFlix Code

Some sites welcome and even actively solicit contributed photographs from users. This was seen in 16 of the 241 sites. There may be an entire sub-page dedicated for this purpose, or there may be text included on a different page with information on how to submit photos.

Often guidelines for formatting, file size, and appropriate content of submitted images is included. The Graffiti Network offers these rules for submitting photos:

If this is your first time submitting flicks to GraffNet DO NOT send black book sketches, tags, simple throw-ups or fill-ins. You will not get a reply and your files will not be used.

If you have already sent in a piece or a burner and it has been posted to the site feel free to submit any graffiti-related art.

SENDING BY EMAIL

Please include the following information with your email:

WHAT THE PIECE SAYS

THE ARTIST

DATE IT WAS DONE

LOCATION (COUNTRY & CITY)

THE PHOTOGRAPHER

Images should be high quality jpegs, at least 300 pixels high for horizontal flicks.

(https://www.graffiti.org/graffnet/index-frames.html)

Many sites build their photographic collections with submissions from users. Site Intergraff highlights the importance of this collective effort: "Intergraff continues build a comprehensive archive of everything that would otherwise be erased from history. Our team of archivers try to identify each and every photo we get, however we rely on your knowledge and experience coming from your own community to construct an accurate archive" (http://intergraff.com/archive.html). Site Miami Graffiti states that they are an

openly submittable picture database of graffiti history for a specific part of the world. It is a site composed of a massive collection of pictures of various graffiti art done in and around the South Florida / Miami / Ft. Lauderdale areas. Users can submit their own flicks with relevant information attached. Anyone can browse flicks by writer, crew, location, or date, and also submit updates on existing submissions so the information becomes more accurate on the site. (http://miamigraffiti.com/about.php)

The site has specific rules as well and offers a form for submissions that includes specific metadata to be included with each image.

***PLEASE read the guidelines for submitting flicks on the Rules Page** ONLY upload flicks from South Florida writers & crews (Dade, Broward, WPB only). No flix that are sketches, paper, toyed, too small, crappy, blurry, or unfinished. No marker bombing, outline throwups, half-assed junk. Nobody wants to see that. Please don't type in all CAPS (except for the crew abbreviation). Choose your file photo	Submit a flick
photo Choose File No file chosen Select the photo you want to submit. Only JPEG or PNG, not larger than 3MB. The photo should be decent sized, color corrected, and cropped to only the graffiti. Photo details Please fill out as much info as you can about this photo (Do not seperate with commas). Writer The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege") Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	 ONLY upload flicks from South Florida writers & crews (Dade, Broward, WPB only). NO flix that are sketches, paper, toyed, too small, crappy, blurry, or unfinished. NO marker bombing, outline throwups, half-assed junk. Nobody wants to see that.
Select the photo you want to submit. Only JPEG or PNG, not larger than 3MB. The photo should be decent sized, color corrected, and cropped to only the graffiti. Photo details Please fill out as much info as you can about this photo (Do not seperate with commas). Writer The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege") Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Choose your file
The photo should be decent sized, color corrected, and cropped to only the graffiti. Photo details Please fill out as much info as you can about this photo (Do not seperate with commas). Writer The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege") Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	photo Choose File No file chosen
Please fill out as much info as you can about this photo (Do not seperate with commas). Writer The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege") Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	
Writer The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege") Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Photo details
The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege") Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Please fill out as much info as you can about this photo (Do not seperate with commas).
The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege") Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	
Crew Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	11.1.0
Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK") Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	The main tag that this writer or writers goes by (i.e. "Alot" or "Beno Sege")
Location The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Crew
The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Please put the abbreviation for their main crew, and use all caps (i.e. "WOW" or "FS BSK")
The location the graffiti was done (i.e. "Hialeah Penit", "Freight", "NW 1st Ave. & 21st St.") Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Location
Date The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	
The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998") Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	The location the gramma was done (not malean reme / mergine / my 15t //er a 21st 5tr /
Submitter Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Date
Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	The most accurate date that you know (i.e. "February 1st, 1992", "June 2003", "1998")
Whatever tag, name, or alias, you want to go by for submitting this flick to get your props.	Submitter
Send It	
	Send It

Figure 3 Screen shot of photo submission form for site Miami Graffiti (http://www.miamigraffiti.com/submit.php).

A few sites specifically ask that users do not send in photos. The site BurnerzOnly asks that users do not submit any new photos because the site is an archive only and no longer being updated (http://burnerz.pl/). @149st states that they do not accept photos of clean trains, those that have been buffed of graffiti writing (http://www.at149st.com/clean.html).

4.3.8 The Guestbook Code

A guestbook is an area where visitors can leave a greeting or a comment for the site administrators or other users. Website Toronto's Unauthorized Permanent Artifacts offers this information on their Guestbook page: "What did you think of the site? What do do [sic] you want to say about Toronto graff? Want to shout out your crew? Do it in the GuestBook and be heard!" (http://www.angelfire.com/mo/tupa/start.html). They offer links from this page to either sign the guestbook or view the guestbook, but neither of these links are active any longer as of this writing, displaying an error messages that the guestbook has been made unavailable as of March 31, 2015. Of the sites that offer a guestbook, only two of these actual guestbooks were accessible to the researcher. A related, but more active way to leave a comment or ask a question of a site is through the forums when offered. Fifteen sites offered a guestbook, or 6.2% of all sites.

4.3.9 The Forum Code

A forum is like it sounds, a place where users can post comments, share information, and ask questions of the site administrators or other users, who can then comment on others' posts. There are eight sites in this research that offer forums and five of them are currently active. Three of the sites offered a forum as a navigational label, but the links did not work. Of the five active forums, all had been used within the last six months of this writing, most of them within the last week, and all required users to register for an account with the site and to log in to that account before participating.

4.3.10 The History Code and Glossary Code

There are nine sites that offer an area dedicated to history information, but there are also several places where the history of graffiti, street art, specific artists or crews, or other related topics are offered on the sites. Some sites include their stated purpose with an emphasis on providing such historical information, such as site FatCap, which stated at the time of data collection: "FatCap ... is a photo, video sharing community and an online media which provides information and historical data about street art and graffiti. The purpose of FatCap is to inform about a cultural and artistic movement" (http://www.fatcap.com/register.html). This text has since changed and now similar information can be found on the bottom of the site's main pages as "FatCap is a web-based resource on graffiti and street-art culture. Here you will find pictures, videos, and articles, classified by artists, and updated daily. All our content is geolocalized, so you can quickly discover main artistic trends from all over the world" (https://www.fatcap.com). Words underlined in the quote are hotlinked to named areas of the site.

There are three sites that provide extensive historical information that will be described here in more detail. @149st offers the most granular and comprehensive text on the history of graffiti writing (http://www.at149st.com/history.html). A section devoted to history is linked from every page on their site. The main history page offers several sub-pages including two for general history (Part 1 and Part 2), Women in Graffiti, Tags, Throw-ups, Wild style, Writers' tools, Clean Trains, Tunnel Bombing, Scratchiti, Yards and Lay-ups, Graffiti Photographers, The Fun Gallery, and a Glossary of graffiti terms. The two pages of general history tell the story of the graffiti writing movement beginning in 1966 in Philadelphia and quickly moving to New York

City. Specific pioneering writers are introduced, as well as the areas where they worked and the styles they developed. Part 2 takes the reader up to the move to the Internet, where images of the works are now very readily and widely shared. The Art Crimes site, which seeded all the sites used as data in this study, is "credited as being the first organized web site focused on the documentation of Writing" (http://www.at149st.com/hpart2.html).

The @149st site does a thorough job of presenting several facets of graffiti writing history. The site includes a sub-page specifically for women writers, featuring details on several of them and highlighting the challenges uniquely faced by women in a male-dominated sub-culture. A very basic introduction is given to three popular types of graffiti writing on three separate sub-pages for tags, throw-ups, and wild style. Images are provided as examples for each type. A sub-page exists to describe the concerted efforts of the New York City Metropolitan Transit Authority (MTA) to crack down on subway graffiti by removing any marked subway car from service immediately, otherwise known as the Clean Train Movement (see Austin, 2001). The Clean Train Movement spawned other concerted writing efforts, such as tunnel bombing and scratchiti, each also afforded their own sub-pages in the history section and each illustrated with at least one image. The Yards and Layups sub-page of the history area has eight sub-pages for specific popular writing subway yards and four for layups. Each of these has an introduction, historical significance information, and sample images.

Rounding out the history section is a sub-page for graffiti photographers, which have their own unique place in the history of writing, documenting the largely ephemeral works.

A widely held public sentiment was that graffiti was merely the scribblings of misdirected youth. A small handful of professional artists[,] photographers recognized

the artistic and social significance of the movement. Each of these individuals approached documentation in a unique way. Their collective efforts have preserved an important visual record of graffiti art history. Their documentation of the art has not only assisted in the preservation of the culture; it has also aided in its growth. (http://www.at149st.com/photo.html)

This section is further subdivided into individual pages for photographers Henry Chalfant,

Martha Cooper, Ernie Paniccioli, James Prigoff, and Jack Stewart. Cooper, Paniccioli, and Prigoff
each were interviewed by @149st and transcripts of these interviews also are linked on their
respective pages. A sub-page of the history section is devoted to The Fun Gallery, described as a

Manhattan art gallery supportive of early graffiti artists and having an influential impact on the
credibility of the art form.

Last in the list of history sub-pages is a glossary of 81 alphabetical terms relating to graffiti writing "provided primarily for the use of people outside the writing community" (http://www.at149st.com/glossary.html). @149st is one of only two sites in this research to provide a glossary of terms, the other being Romanian Graffiti (https://www.romaniangraffiti.ro/graffiti-glossary). The @149st glossary includes 80 terms and the Romanian Graffiti glossary includes 108 terms, with slightly more focus on tools such as specific paints and markers. They share 45 of the same terms between them. All terms in the Romanian Graffiti glossary are in English.

Subway Outlaws provides another comprehensive history area for their users. Like @149st, Subway Outlaws acknowledges that people were writing on public surfaces long before the US Graffiti movement began in the 1960s as a cultural phenomenon, but the curators begin their formal outline of writing history in the late 1960s. The site focuses on

subway writing, so they end their historical section in 1990 as the "clean train" era was ushered in (http://www.subwayoutlaws.com/History/History.htm). They provide images along with the chronology of subway writing, discussing specific artists and crews. There are other labeled sections of the site that would appear to provide more historical information, such as Stories, Writing, and Interviews, but the organization of the site is confusing and the layout is cluttered, with flash design and small text of varying sizes embedded within images that a user can sometimes click on to visit another section and sometimes not. There was nothing more than an image of eight men with their writer names under each on the Stories sub-page, but the list of main navigation labels that appears on each page of the site suddenly had two extra categories once on this Stories page: History of Writers, and Old School Kingz. The History of Writers page then takes the user to another sub-page that says "Famous Names in THE HISTORY OF WRITING (The Hall of Fame) A -Z, A list of writers that have have [sic] made their mark on N.Y.C. Subways, or have made a mark in the Graffiti movement" (http://www.subwayoutlaws.com/Interviews/HISTORY%20OF%20NAMES..htm). This is followed by a list of over 1000 names on several pages. Most are simply writer names or crew names, but some have a very short bit of information after them, such as when they wrote, where they wrote, or with whom. They are static, not hotlinked.

Another sub-page that appears only on some sub-pages, such as the history page, is the RIP Page, hosting another list of names and sometimes images "in respect to all the fallen king's [sic] of the subways era" (http://www.subwayoutlaws.com/interview2.htm). Looking at the URL for this page, it seems to be part of the sub-page for interviews, but clicking on the navigational label for interviews takes the user to a different page that does not offer the main navigation

labels at all that are available on almost every other page of the site. Despite these idiosyncrasies, the historical information available, when it can be found, offers more than most other sites in this study.

One last site discussed here with historical information about the graffiti writing movement is Tracy168, itself a featured section of New York City community site Bronx Mall (www.bronxmall.com). It is linked as a site on Art Crimes and fits the requirements for a site according to this research, so it is referred to as a site on its own. Tracy168 features sub-pages for The Story, parts 1 and 2, as well as two individual sub-pages with graffiti writing histories composed by artists King Two and Caine One. The two-part feature on Tracy168 speaks of the artist's impact on the graffiti writing movement in the very early days of the developing cultural phenomenon, his thoughts on writing, and his influence on the development of Wild Style writing and its birth in the Bronx. The sub-pages written by King Two and Caine One are personal accounts of their experiences in the early graffiti writing movement.

Most sites in this study offer little in the way of historical information; the ones mentioned here are exceptions. When a site has a section that is coded History, it is most often providing the history of the featured artist or crew. A few sites focus on specific locations and this is reflected in the historical information they provide. Double-H, which focuses on the history of the German graffiti writing scene, includes information on specific German artists and areas of Germany, German train graffiti history, and German wall graffiti history (http://www.double-h.org/history/index.html). Likewise, 187 Crew includes a short history of the graffiti writing movement in Rijeka, Croatia (https://www.graffiti.org/187/main.html).

4.3.11 The HowTo Code

The HowTo code was applied whenever a site had an area for instruction, whether offered on the site directly or through the curators of the site at a physical location. One site in particular out of the seven using this code is dedicated to online instruction. Trainwriters.com has this text on their home page:

FACT: GRAFFITI IS NOT THE ORIGINAL WORD FOR WHAT WE DO! It is called "WRITING" and we are called "WRITERS". We focus on the art of LETTERING. I only used the word GRAFFITI on this page because that is the word everyone uses to describe what we do. This site is dedicated to all future writers who really want to learn the art of Writing. If you came to this site to learn and copy exactly what I teach. THEN YOU WILL NEVER BE A REAL WRITER! You can learn, and then change the letters and styles to fit your skills. Other wise you will be called a "BITER"!. And you will never get respect from real Writers. (http://trainwriters.com/home.htm)

Of the other six sites that offer material coded with the HowTo code, four of them advertise workshops or classes in physical locations. One site includes basic tips on how to learn to write graffiti, while one other site offers a very basic, customizable stencil kit that can be copied and made at home. Stencil Archive advertises various workshops in physical locations, but also includes videos that demonstrate wheat-pasting and making and using stencils, among others. They also link to other sites that provide downloadable patterns for various stencils.

4.3.12 The Map Code

The Map code was applied whenever a map graphic was presented to show works by location. In this regard, this code could be considered as part of the works code categories, but was included here as a general site feature. The more specific textual locations used with or without a map are treated separately in the following chapter when analyzing codes for

geographic specificity. The use of a map to guide users to geographic areas where works are found is a helpful way to quickly visualize the areas where works are from, whether on a global scale or when used for an individual city. There are nine sites that offer a map to organize where works originate. Of these nine, five used the Google Maps platform. Screenshots are included here from a sample of sites to illustrate how they are making use of maps in unique ways.

Bombing Science features graffiti from around the world and this is reflected in their mapping. Areas with featured works are marked on the map with circles that include numbers to indicate how many images are to be found from that area. For an area with less fewer than ten images, the circle is blue. Areas with more than ten but less fewer than 100 images have an orange circle, and areas with over 100 images use a red circle. These proportions change as a user zooms in further on the map and areas become more granular in this way, dividing areas up more finely to individual cities and suburbs. Images display below the map once a user clicks down to a specific area and the icon on the map changes to a camera icon instead of a circle. This square icon can be seen in Figure 4.2 below, indicating a terminal point where images will be shown, such as near Mongolia in the example. Faith47 uses a very similar Google Map style with a different color scheme.



Figure 4 World map from site Bombing Science (https://www.bombingscience.com/graffiti-map/)

Bristol Street Art has a much narrower focus to the collection, featuring works from

Bristol in England. Above the Bristol map, a user can choose from several filters to narrow down
the types of works shown. Figure 5 shows the options to choose from, as well as a small
amount of text explaining how to use the filters.



Figure 5 Bristol Street Art Map (http://www.bristol-street-art.co.uk/map-of-bristol-street-art)

The menu is not easy to read because of the dark background, but includes four types of filters to choose from: Status, Period, Type, and Artist. Users can choose from works that are labeled active or gone. Once a work no longer exists because it has been painted over or otherwise removed, the marker for that work changes color and the status changes from active to gone. It cannot be proven how up to date this feature is or how well maintained, but it is the only map among the sites that offers this option. The period filter can show users works from the last seven days, the last month, or the last year. It is not obvious whether this means the works were completed, documented, or uploaded in these time frames. The type filter offers users nine different types of works to choose from: stencil, paste-up, façade, sticker, textual, illustration, bins, signs, and other. The artist filter offers 22 different artists from which to choose.

At the time of this writing, the map was not functioning as intended and remained black, but when a filter is chosen, a user can see a pop-up that displays how many images are included. Keeping all categories, one sees text that says "730 found." This text appears for a couple seconds when any filters are chosen. Choosing all for status, period, and type, and choosing only artist Banksy displays text that reads "17 found." Below the black space where the map should appear, a list of categories includes the nine types mentioned in the filters and the addition of Banksy. There is also a list of 11 named areas around Bristol. A user can choose any of these to be taken to a gallery featuring that category.

Daim uses a Google map to show "the 'geo-tagged' posts of the daim.org website"

(http://daim.org/site/en/map/). This is a basic map with the familiar Google Map pins to indicate locations. Spray City and Kiam 77 use a basic Google Map as well with slightly different

fonts and colors. Kiam 77 uses icons of a container instead of the familiar Google Map pin to indicate geo-locations. The container icon is a representation of the work of street art that the artist has placed around the world, meaning the actual piece of artwork is in the shape of a container similar to the icon. Site Huh? uses a very basic map of an outline of Poland to indicate areas where featured works are from. This does not appear to be a Google map, but it gives a sense of where one is within the boundaries of the country. The city names are listed below the map, not on the map near the points themselves. A bigger circle on the map means there are more works there than at the smaller circles.

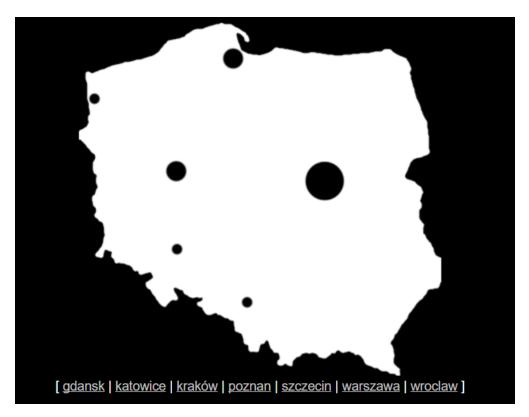


Figure 6 Huh? map of Poland with hotlinked cities as circles and text

The sites Intergraff and FatCap both make more extensive use of interactive mapping than those previously mentioned. Neither appear to be using Google Maps, but there is no

obvious marking to indicate what geo-location software is serving their sites. Intergraff includes the navigational structure of a map on their homepage, as shown in Figure 7 below. Users can click on a continent to begin, which then will open up a new map with that area chosen, broken out into sub-sections (Figure 8). North America, South America, Europe, Africa, Asia, and Australia are the areas available from the world map, given as hotlinked text below the map. Asia and Australia are not hotlinked on the map nor from the text labels, indicating that there are no works featured from these continents. After choosing a continent, a user can click again to a country. Once within a country, the options change to textual navigation through listed city names. In countries such as France, where Intergraff has numerous works, they list the top ten cities and then a link to "view all cities." Similarly, they list the top ten writers beneath this, with a link to "view all writers." They also give options to view all cities in the country with works or to view all writers featured in the country alongside the map itself at the country level (Figure 9).



Figure 7 Intergraff home page map navigation (http://intergraff.com/)



4645 photos	Italia (Italy)	1166 writers	29 cities
4274 photos		1286 writers	56 cities
	España (Spain)	729 writers	13 cities
740 photos		238 writers	5 cities
406 photos	Deutschland (Germany)	270 writers	3 cities
166 photos		92 writers	2 cities
89 photos	United Kingdom (UK)	41 writers	4 cities
79 photos	Ireland	31 writers	3 cities

Figure 8 Intergraff Europe map (http://intergraff.com/pages/eu/eu.html)



Figure 9 Intergraff France map (http://intergraff.com/pages/eu/fr/eufr.html)

FatCap has a similar navigational style, employing a world map divided roughly into continents that can be clicked on, taking the user to ever more granular and focused areas. They have the most extensive map navigation of any site in the study, befitting the very large collection of works available to browse. A user can access the map navigation by clicking on a small image of a map in the upper right corner of the home page labeled "Worldwide Graffiti." This image and therefore link is available from most of the various pages of the site. Beginning on the main

map page, a user can see the world with continents to choose from. Once a user chooses a continent by clicking on it, a floating text box appears temporarily over the continent, listing the number of photos and number of artists available for that area. Then the map reloads to show the continent, where the user can again choose a country. The temporary text box will appear at each selection along the way with number of photos and number of artists, until reaching a terminal division, such as a European country or a U.S. state. Choosing North America, then the United States, then New York State, brings a user to a menu of featured cities, as shown below in Figure 10.

MAIN CITIES

NEW YORK

1036 pictures in 11 cities

Albany (40) Beacon (1) Bronx (2) Brooklyn (4) Cortland (1) Denver (1) Florida (1) Madawaska (1) New York City (965) Queens (2) Rochester (18)

Figure 10 Map of site FatCap at the New York state level (https://www.fatcap.com/usa/new-york.html)

The floating text boxes that temporarily appear over a continent provide the number of pictures and artists for that continent, but once further inside the navigation structure of the map, the text box numbers no longer add up to the numbers at the higher level. For example, when a user clicks on North America, the temporary text box shows "1034 pictures 362 artists." Then when a user clicks on the United States, the temporary text box reads "986 pictures 346 artists." A list of states and inclusive cities appears below this map, giving the total number of

pictures in a total number of cities for each state. The state of California alone, for example, lists "2762 pictures in 68 states," followed by a hotlinked list of 68 cities (not states). This is already more than twice the number of pictures indicated at the previous level of the map for the entire United States. The more a user goes back and forth on the levels of the map, the more quickly the floating text boxes disappear, so they are not very useful in the end to determine how many images and artists are actually represented in the collection. Despite this, the granularity of the map navigation is impressive and appears very useful in accessing works from specific locations.

MAIN CITIES

ALABAMA	Sacramento (5)
39 pictures in 7 states	LOUISIANA
Bay Minette (3) Birmingham (2)	9 pictures in 2 states
Brooklyn (9) Gulf Shores (1)	Baton Rouge (4) New Orleans (5)
Mobile (22) Phenix City (1) Prichard (1)	MAINE 2 pictures in 2 states
ARIZONA 25 pictures in 4 states	Mexico (1) Portland (1)
Phoenix (15) Scottsdale (1) Tempe (2)	MARYLAND 28 pictures in 3 states
Tucson (7) CALIFORNIA	Baltimore (26) Silver Spring (1) Takoma Park (1)
2762 pictures in 68 states	MASSACHUSETTS
Adela (1) Adelanto (1)	38 pictures in 3 states
Alamo (1) Alhambra (8) Anaheim (1) Arcadia (4)	Beverly (2) Boston (28) Springfield (8)
Arcata (4) Atwater (1) Azusa (2)	MICHIGAN 16 pictures in 3 states
Baldwin Park (4) Bellflower (3) Berkeley (35) Beverly Hills (5)	Commerce (1) Dearborn (1) Detroit (14)
Brawley (17) Burbank (21) Carlsbad (6) Carnelian Bay (1)	MINNESOTA 8 pictures in 2 states
Carson (3) Cathedral City (1) Cerritos (1)	Minneapolis (7) Rochester (1)
Chula Vista (14) Compton (5) Costa Mesa (31)	MISSISSIPPI 1 pictures in 1 states
Culver City (8) Duarte (1)	Ouito (1)

Figure 11 FatCap details for United States map (https://www.fatcap.com/usa-graffiti.html)

4.3.13 The MyAccount, Subscribe, and Poll Codes

The MyAccount code is used when a site offers users the option to create their own unique account on the site. This is used most often to participate in forums or to add comments to posts or images. The sites that offer discussion forums require users to set up a personal account in order to participate. Some sites also allow users to create accounts to track their own image submissions and to group their image submissions for other users as well under their created user names. In very few sites, this becomes yet another way to organize images, by the user who is contributing the photographs.

The Subscribe code is used to represent the ability of a user to subscribe to new material posted to the site. This is usually done via an RSS feed or email notification. The Poll code was applied to sites offering a basic poll or survey question to users. Only three sites utilized any kind of poll. For example, site Australian Graffiti asked users "Which city has the best graffiti? Adelaide, Brisbane, Canberra, Hobart, Melbourne, Perth." The votes indicated Melbourne in the lead with 66/80 votes or 82% at the time of data collection (http://australiangraffiti.blogspot.com/). 50mm Los Angeles asks users "What is more important to the longevity of graffiti?" Users can choose one of three answers: "Unity amongst all writers, low pro spots – keeping it under the radar, going all out and bankrupting the system" (http://www.50mmlosangeles.com/). Location Twelve asks users about their own writing experience and preferred paints, a screenshot of which can be seen below in Figure 12. At the time of this writing, the links to view poll results were inactive.

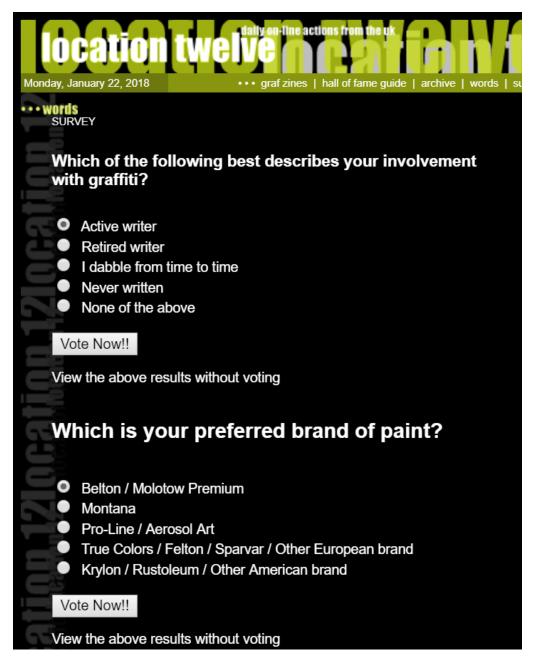


Figure 12 Poll from site Location Twelve (https://www.graffiti.org/dj/index-l12.html)

4.4 Other Media Codes

The set of Other Media codes were applied when a site offered a link to an associated blog or other social media account, a list of links to other graffiti or street art sites or related material, or when the site had been involved in the publishing of a book and linked to such

information in a dedicated area. Many sites have more than one other associated social media account. The statistics associated with each of the Other Media codes can be seen below in Table 8.

OtherMedia	Count	% of Codes	Sites	% of Sites
Links	107	0.5	90	37.3
Blog	50	0.2	40	16.6
Facebook	12	0.1	10	4.1
Instagram	11	0.1	10	4.1
Twitter	9	0.0	7	2.9
Flickr	8	0.0	6	2.5
Book	8	0.0	6	2.5
YouTube	4	0.0	3	1.2
Pinterest	3	0.0	2	0.8
Tumblr	2	0.0	2	0.8

Table 8 Occurrences of the OtherMedia Codes

By far the most common use of other media by the sites is the provision of a set of links to related material. As stated, this is most often links to other graffiti or street art sites, links to other media platforms run by the same person or persons who are running each given site, or links to other types of related media, such as commercial design sites, commercial art supply sites, or anything of potential interest to the site users. The second most common type of other media is a blog associated with the individual sites. Some of the sites in this research are themselves clearly blogs, but they may have other blogs associated with the first blog, or they may be less of a blog and more of a gallery and offering a blog for textual information relating to graffiti art and street art. Textual information commonly found in blog format includes interviews, events, and news of interest to the graffiti and street art community.

What may be of great interest for further research are the links to various associated social media sites. Those coded in this study include, by order of most frequently encountered: Facebook, Instagram, Twitter, Flickr, YouTube, Pinterest, and Tumblr. Occasionally a site would have an associated MySpace account or other less popular or no longer active platform. These were not individually coded. Each social media platform coded in this research treats information differently for categorization, tagging, and general organization. Further research into the methods of description and organization of graffiti art and street art images on image-based platforms in particular (Instagram and Flickr) will be valuable to learn more about how people document and share the art form.

4.5 Summary of Website Code Categories

This chapter has examined the general site codes and other media codes warranted by all sites in the research have been described in detail in this chapter. In contrast to what will follow in chapter five, the general site codes provide a broad look at the organization of the sites from a structural and sometimes commercial perspective. The information coded at this level relates to administrative functions such as purpose statements, how to contact site curators or administrators, personalization functions, and how to actively interact as a user with the site itself. The legal information found as disclaimers can also be seen as administrative in nature.

Other aspects of the codes examined herein relate more to commercial or economic promotion. The Shop code is the most explicit of these, but such motivation can also be implied in the connections a site makes to other media platforms such as those discussed in the other

media codes category. The possible impact of internal or external motivation on a site's organization was introduced with a qualitative analysis of about text information. These analyses will be revisited in the following chapters as the coding for organization of works is presented in chapter five and the input from curators is brought into the discussion and compared with site findings in chapter six.

Chapter 5: Work Code Categories

The work category codes are applied to navigation labels that describe the works themselves, as opposed to the codes discussed in the previous chapter that are applicable to the sites. They are grouped for detailed analysis into general facets, support facets, type facets, and location facets. The codes within each of these groups are presented with their total code counts, percentage of codes, number of sites that were coded with the individual codes, and the percentage of sites that included that type of code. Each of the groups are sorted from the most sites to fewest sites using a code, not for the individual codes as these may be reused by individual sites, sometimes very frequently as can be seen with the individual galleries for named artists. The various facet codes in this chapter are often used as subdivisions of each other, both within and across facet groups.

During coding it became apparent that certain sites are exceptional examples of organization for graffiti art and street art documentation. Nineteen such sites stood out from the 241 as having not only large image collections, but employing more consistent, granular, and useful methods for organizing their works. These nineteen sites are also currently active and adding to their collections, have clearly articulated information about the sites, and have been noted for more in-depth study in the future. These nineteen sites are referred to hereinafter as super sites.

5.1 General Facet Codes

The general facet codes are best explained as relevant descriptors of works that do not readily fit into the more organically evolved groups for supports, types, and locations;

therefore, they are discussed as a group unto themselves. There are 18 general facet codes, as seen below in Table 9, arranged by most sites using a code.

General	Count	% of Codes	Sites	% of Sites
Facets				
Artist	14439	71.2	50	20.7
Event	89	0.4	31	12.9
Gallery	49	0.2	29	12.0
Year	227	1.1	27	11.2
New	35	0.2	26	10.8
Old	35	0.2	26	10.8
Featured	27	0.1	20	8.3
Inside	11	0.1	10	4.1
RIP	75	0.4	10	4.1
RatedHigh	14	0.1	8	3.3
Legal	15	0.1	7	2.9
Outside	7	0.0	7	2.9
Month	35	0.2	5	2.1
Color	12	0.1	4	1.7
Day	5	0.0	4	1.7
Decade	8	0.0	4	1.7
Illegal	5	0.0	2	0.8

Table 9 General Facet Codes

The general facet codes were not all obvious from the start of the research. Grouping works by artist or by year were not unexpected, but finding categories to group works by those new to the site, by user ratings, by legal or illegal status, or by works found inside or outside were interesting because they demonstrated not only the users' participation in shaping the collection groupings, but facets of the works that are particular to graffiti art and street art that might not be applicable to institutional collections of more traditional art. Codes will now be examined individually or in small clusters of related codes.

5.1.1 The Artist Code

The artist code is the most used code most used by far in the research, applied 14,439 times over 50 sites, which is just over 20% of all sites. The artist code was applied whenever an artist or crew's name was used to signify a gallery of works by that artist or crew. Artists often work in groups or are associated with a particular group that may work together at times. These groups are commonly referred to as crews. Ross (2016) defines crews as

Graffiti artists/writers who usually paint together. They serve different roles in the construction of elaborate murals and pieces. Not only do crew members paint together, but also they often socialize together. Crews may live geographically close together or they may live in different cities and countries and periodically assemble to work together (476).

When initially coding, it appeared easy to say when a name was referring to an individual artist or to a crew, so there were different codes for each. As coding continued, it became apparent that it was not always obvious which names were that of an individual and which were crews. Often a site would use the word crew after a name to indicate a crew, such as TC5 Crew, but this was not consistent so the two codes were then merged into the Artist Code to avoid confusion. In traditional library or art collection systems for documentation, this would be equivalent to the author or creator, which can be individuals or collective names as well. The Jackson Five or The Metropolitan Museum of Art are examples of such collective author or creator names familiar to most people. Just like bibliographic authors and creators, the membership of a collective group frequently changes, adding another justification for merging the two codes into one.

There are so many artists and crews operating around the world in the genre of this research, resulting in several thousand artist codes that have been applied. There is no formal authority file for these names as there is for many artists' names in the traditional art world. The Getty Research Institute, for example, maintains the *Union List of Artist Names* (ULAN), which includes lists of artists and those related to the production of art and architecture. The ULAN includes artists' names by given names, pseudonyms, descriptive names when actual names are not available, and proper names of "firms, studios, museums, special collections, patrons, donors, sitters, creating cultures (e.g., *unknown Etruscan*), and other people and groups involved in the creation, distribution, collection, maintenance, and study of art and architecture. *Artists* may be either individuals (persons) or groups of individuals working together (corporate bodies)"

(http://www.getty.edu/research/tools/vocabularies/ulan/about.html). Graffiti art and street art often are documented in uncontrolled or ad hoc ways so that tracing the evolution of an artist's or crew's name is difficult, if not impossible. If a piece is not signed legibly, a best guess may might have to be employed to attribute authorship, or no authorship of a work may might be ascribed at all. Despite these challenges, the name of an artist or crew remains the most commonly used descriptor for works in this research.

5.1.2 The Event and Gallery Codes

The Event and Gallery Codes are used in 31 and 29 sites, respectively. A site will use an event or a gallery show as a way to set aside a group of works. These events or gallery sponsored exhibits may be on the street or within a traditional gallery. They may might also feature works created during a multi-purpose event such as international art fair Art Basel held

annually in Miami, Florida. Wynwood Walls is a popular open-air graffiti writing and street art area in Miami that participates in Art Basel with painting demonstrations and collaborations that are open to the public. Such works could be documented and shared in an Event gallery on a site and would be coded as such. An art gallery, though traditionally an inside, museum-like endeavor, may might occasionally take to the street for exhibits of public art, may provide tours of work in-situ, or may sponsor specific shows of graffiti art style works on portable surfaces such as canvas for an in-house show. While such an indoor, gallery show would technically not be considered graffiti or street art by definitions presented earlier in this research, they are nonetheless frequently used as types of organization on the sites.

5.1.3 The Old Code

The Old Code was applied for areas of a site that feature old works as indicated. These may can be groups of works that are older in an artist's career, such as before current styles developed, or they may might be older works that a curator has not updated and organized as finely as the rest of the site, such as an archive area for works migrated in from a previous iteration of a site. One common textual distinction that appears in the group of items under the Old Code is "old school" as methods, writers, and styles indicative of the early days of graffiti writing. When a site features old school writers or works, these often are used to show the historical evolution of the art form.

5.1.4 The Chronology Codes: Decade, Year, Month, and Day

The most common chronological way to organize works among the sites is to use specific years. Some sites make an effort to differentiate among images created, photographed,

or posted to the site during a specific year, but this information is not consistently provided across all sites. This applies to all chronological codes as well, though the Day code is explained with more detail more often than the others. This is likely because of a named day's association with an event that warrants more text, if only a descriptive title that includes the date. The Decade code was applied to actual ten-year spans used as grouping mechanisms, but also to spans of years that were larger than five years. Some sites choose to use an irregular span of years to organize works, based on what they have in the collection and a decision was made to code either Year or Decade, depending on the span of years and whether it was over or under five years. When the span of years was under five years, it was coded as Year; five years or more and it was coded as Decade. The Month, Day, and Decade codes were applied to a very similar number of sites, five, four, and four, respectively.

5.1.5 The New, Featured, and RatedHigh Codes

The New code was applied 35 times to 26 sites and indicates when a work is either recently produced, or recently added to the site. The definition of the word recent varies greatly, depending on how often a site has been updated. It is uncertain how long works remain in an area coded New, though some blog-type sites simply have a running area for posts of new works that gradually age, older posts falling to the bottom of the pile as newer posts are added on top of them.

Featured works or featured writers and artists may be new works or new additions to the site, but also may be older works or familiar artists highlighted on the site in a specific post.

An area of a site for a feature may include an interview, a news update, outside media links, a

series of gallery images, or a combination of any of these. Text associated with the word feature, features, or featured includes artists, street artists, pieces, writers, sketches, and, on one site, stuff. Specials, special places, special pieces, and special guest stars are also used as labels. Halls of Fame, Hall of Fame, and HOF Guide are examples of navigation labels also coded with the Featured code. Writer Spotlight and Spotlight are used on two other sites.

50mmLosAngeles has a feature area called L.A. Legends, and Fatbombers used to have an area called Gimme5 where they would feature five images at a time (the site has disappeared since data collection).

The RatedHigh code was applied 14 times over eight sites. The text used to indicate application of this code includes best of, best rated, hot, most comments, most featured, most popular, most viewed, most views, most votes, top 20, and top ten. The word hot was used on RatedHigh navigation labels on two different sites. A couple sites differentiated between various types of high rating. Ekosystem.org uses an area for Best Rated Photos of the Year and then offers individual years from 2001 to 2015, in addition to categories Before 2002, Before 2005, Before 2010, After 2010, and After 2014 (http://www.ekosystem.org/mostloved/). Individual images in these annual collections include ratings on a scale of 1-5. For example, a work may say Rating: 4.4/5 (58 votes). Anyone can rate an image simply by choosing how many circles of five they want to give it. Site Full Color, at time of data collection, offered areas for Hot!, Most Votes, Most Comments, and Most Views, each of which warranted the RatedHigh code (http://www.fullcolor.gr/).

Graffhead offers a combination of gallery views, including areas for Latest Additions, Most Viewed, and Latest Comments (http://graffiti.graffhead.com/). I Love Graffiti offers

several ways to group works, including Spotlight and Top Ten, the latter offering their take on the ten best pieces each for a roster of featured artists

(http://ilovegraffiti.de/blog/category/topten/). UK Graffiti allows visitors to sort posts by new, hot, or random (http://ukgraffiti.com/). Subway Outlaws has a navigation label Hot 110, which at first was interpreted as a page that warranted the Featured code, but this explanation for the term is given upon visiting the page itself: "'Hot 110' was a word, and term, used to go over another writers [sic] work in the 1970's. The reasons for writing "Hot 110" over someone else's work varied on the individual writer. The main reason writers went over works of another writer, was to retaliate against the other for going over his/her work, which is a sign of disrespect" (http://subwayoutlaws.com/Hot110/Hot110.htm). Various images of writers going over other writers are then shown on the page with more discussion of this practice and its significance in the early graffiti movement.

5.1.6 The RIP Code

The RIP code was applied in two different ways. If a site had an area set aside for artist memorials for those that have died, this was coded as RIP, but the code was also applied to artist galleries that signified the artist's death with the addition of RIP to the name. In this way the RIP code was applied 75 times across ten sites. Of these 75 applications, 62 were from two sites, 50mm Los Angeles and Art Crimes, both of which are super sites and include large hot-linked lists of galleries by artists' names. Within these lists, artists who have passed away have the letters RIP added either before or after their names. This is the most common way that the RIP code is used in this research, attached to individual artist names to indicate that they are no longer alive.

Four sites out of the ten warranting the RIP code have memorial pages. DuroCIA has two individual memorial pages, one for artist Shy 147 and another for artist Dondi White. Both pages feature works by the artists, photos of the artists themselves, and tribute works for the artists. The Dondi White memorial page is extensive, largely comprised of images (http://durocia.com/dondi white memorial.html) and is a wealth of visual information about the artist and his work. CanControl has a memorial page for artist Dream. Two sites feature areas for memorials in general. German site I Love Graffiti has a page labeled Memorial that includes 22 posts covering the passing of 21 artists. Subway Outlaws includes a R.I.P. section that covers memorials to 75 individual artists over four pages.

5.1.7 The Inside and Outside Codes

The Inside and Outside codes were applied to 4.1% and 2.9% of sites, respectively. Most graffiti art and street art is found outside, though sometimes inside public or private structures, or artworks in graffiti or street style may be commissioned inside buildings. As discussed previously, tThis distinction is not always clear when trying to define the art forms, though the general place for the works tends to be outside, in public, on the streets. This would make the exceptional category of Inside a more expected facet than Outside, and this shows in the application statistics of these two codes. A total of 12 sites warranted one or both of these codes. Five of these twelve had both the Inside and Outside codes and five had only the Inside code, but only two sites used only the Outside code. Besides the words inside and outside, sites employed terms like interior/exterior, indoor/outdoor, rooms (for an Inside code), and art in space (also an Inside code).

5.1.8 The Legal and Illegal Codes

Similar to the Inside-Outside pair described above, the Legal and Illegal codes were not equally expectedanticipated. Graffiti and street art often are carried out illegally, disdain for permission almost intrinsic to the meaning of the works in many cases, especially regarding graffiti (see Merrill 2015). Legal graffiti or street art is the exception, not the rule, and again this is exemplified in the occurrence of these two codes. The Legal code was applied 15 times across seven sites and the Illegal only five times over two sites. The two sites with areas set aside for illegal works also had areas for legal works. Legal works, being the more expected distinction, were set apart without any corresponding area for illegal works in five out of seven sites where the code was used. The term illegal or illegals, when utilized as a navigation label on the two sites in this research, is more like an alternative way to describe graffiti writing than a way to distinguish works as a distinct type. For example, the site for Queen City Tribe uses the heading "Other Bombing and Illegals" as well as a heading for "Legals"

(https://www.graffiti.org/cincinnati/qct/surface.html), which emphasizes the expected nature of most graffiti works to be illegal in nature. Hence the use of the term illegal to set apart works of graffiti art or street art is not very useful.

5.1.9 The Color Code

The color code was applied whenever a site used a specific color to distinguish works, or, in one case, where the site offered the user the ability to browse a gallery of works by colors. Only four sites warranted the application of the Color code. Digital Does, in a section for materials, allows users to view works using bronze leaf, gold leaf, and silver leaf

(https://www.digitaldoes.com/works/). Ekosystem offers users a menu of facets to choose from that include red, green, yellow, blue, pink, and black

(http://www.ekosystem.org/last/500/). Full Color offers tag navigation for the colors red and green as well as for color, but the latter has to do with a color festival and not distinction by particular color so it was not coded as Color. Mr. Stack's Graffiti Website offers a color bar whereby users can click on a color palette to browse by color, as shown in Figure 13 below.



Figure 13 Browse by Color, Mr. Stack's Graffiti (http://keusta.net/blog/index.php/Graffiti)

His site features his own works only and the organization by color feature works well. This type of organization might not be as valuable with works that do not feature a dominant color scheme, but when they do, it serves to sort a collection effectively. The value of such sorting is beyond the scope of this research.

5.2 Support Facet Codes

The Support Facet Codes category describes the surfaces, or supports, upon which works are created or placed. Works often are painted, stenciled, or otherwise applied directly to a surface, but are sometimes created off-site and applied later in a different location. Such remote creations may include sticker art, wheat paste-ups, and even light projection applications. The support facet codes are shown below in Table 10, again by order of most sites to least sites using each.

Support Facets	Count	% of Codes	Sites	% of Sites
Canvas	109	0.6	77	32
Walls	107	0.5	65	27
Trains	253	1.2	51	21.2
Blackbook	28	0.1	20	8.3
Freights	27	0.1	16	6.6
CarsTrucksVans	28	0.1	12	5.0
Subways	81	0.4	11	4.6
Billboards	10	0.0	5	2.1
Body	5	0.0	4	1.7
Clothing	11	0.1	4	1.7
Rooftops	4	0.0	4	1.7
Tunnels	5	0.0	4	1.7
Subway Cars	60	0.3	3	1.2
Buses	3	0.0	2	0.8
Highways	2	0.0	2	0.8
Signs	2	0.0	2	0.8
Skate Deck	2	0.0	2	0.8
Trash Bins	2	0.0	2	0.8
Shutters	2	0.0	2	0.8

Table 10 Support Facet Codes

5.2.1 The Canvas Code

The most popular of the support facet codes is the Canvas code. This is significant in that works on canvas are a deviation from the expected surfaces in the public eye that make up the majority of the other codes in this code category. Working on canvas often is associated with working on commissions, for galleries, or for profit (i.e. sales) that can run antithetical to the graffiti art ethos. This is seen in one of the category names used under the Canvas code: "Street Sellout Art." The name for this code was originally Studio, but the more often that this type of navigation label was encountered, the more obvious it became that the term used most commonly for this kind of work is canvas. The word canvas was used to indicate works not only created on canvas, but implying works created in a studio setting as opposed to live on the

street. The different terms used to denote what was eventually coded as Canvas, and their variations, are shown with frequencies in Table 11 below. Super sites were coded with Canvas only seven times over four total sites. Text used on super sites is in green.

Canyas (canyas (2)) canyas os canyas & skatchas canyas (miyod modia, canyas (yand

51
22
13
10
2
1
1
1
1
1
1
1
1
1
1
1

Table 11 Canvas code terminology

It is not always obvious from the terminology shown that these should be coded as Canvas. Galleries were visited to determine the suitability of codes as applied. While labels such as Commission and Pigments might seem to warrant the codes CommercialDesign and Color, respectively, the contents of such site areas indicated the Canvas code. Other labels, including land escapes, life forms, and Op III Graffiti did not fit into any clear coding facets until visiting the site areas. This speaks to the value of qualitative analysis of the sites and their contents over and above simple textual analysis of navigation labels.

5.2.2 The Walls Code

Walls are the most common surface found in this research for actual works of graffiti art and street art, whose definitions are intrinsically if broadly tied to their presence on the streets. Thus walls, and the Wall code, refer to outdoor walls. Some walls featured on the sites may be inside tunnels or other structures, but they are mainly exterior in nature. The sites commonly employ other labels for indoor walls, or interior room walls, such as the Inside code described above.

The Walls code is sometimes also seen as a general graffiti label. Style Depth has five

main navigation labels across every page of the site: home, walls, design, blog, contact. Of these five, two are used to describe work galleries; walls for outdoor, graffiti style works and design for commercial designs often on paper or digital http://www.styledepth.com/index/home/4047/). Artist Cenz organizes his work gallery into walls, canvases, and mixed media, and as such demonstrates the use of the walls label as a general graffiti art gallery label (http://mrcenz.com/my-artwork/). Sites with more granularity in their gallery organization may be much more specific, using the walls label as only one among many to separate various supports. For example, Brikk Graff has these main navigation labels: main, walls, freights, trains, links, contact. Walls, freights, and trains are all outside supports, but each are given their own area. The Walls area is further subdivided into four geographically focused galleries, three for named Swedish cities and one for Sweden in general.

5.2.3 The Train Type Codes: Trains, Freights, Subways, and Subway Cars

These codes are similar, yet there was enough difference evident in the use of categorization for each that they warranted individual coding. Freights and subways are most easily differentiated as freights carry things other than people while subways (subway trains) only carry people. Subways are found in urban areas and freights are found more broadly, often seen across countries or continents where, when used as a support, they can transport the work of an artist or writer far and wide. Art works on freight trains are still very common.

Graffiti writers used subway cars heavily as supports in the early days of the art movement, most notably in New York City and Philadelphia, regarding them as an efficient way to get a writer's name and work to a great number of viewers across these larger cities. They are not as popular as supports today as they once were. The risks inherent in creating works on subway trains combined with the short life of most of these works has likely contributed to their decrease in popularity as a working surface.

There are two very similar codes that cannot be easily separated within this study, that of Subways and Subway Cars. At first it appeared that these two support codes were simply the same thing, but as data coding continued, it became apparent that sometimes the works were on subway cars and sometimes they were on the subways themselves, or were a combination of the vehicles – the subway trains or cars – and the structures that facilitate the run of the former, including the subway tunnel walls. There is also the Tunnels code to be discussed later, which was mentioned enough to be warranted as a separate code, though it likely overlaps with the Subways and Subway Cars codes. Analysis at the image level would be required to resolve these types of labeling issues, which is beyond the scope of this research.

Over all, trains are the most common surface in the research relating specifically to graffiti art. Walls are common supports for works that can be more easily categorized as street art, but when discussing trains, the works commonly are perceived as graffiti art over street art. This distinction is not always easy to make, as was discussed in previous chapters, but trains have played a large part in the history of graffiti writing. The Trains code was applied 253 times over 51 sites, which is more than the Canvas and Walls codes combined. The Trains code was reused on the sites more frequently than any other support facet code, indicating the importance of the code as a subdivision of other, broader code areas.

5.2.4 The Other Vehicles Codes: CarsTrucksVans and Buses

Other vehicular supports appeared frequently enough in the research to warrant coding, such as buses. Cars, trucks, and vans were grouped as a type of vehicle separate from municipal public transit vehicles, which would include buses and the subway trains. Again, there is likely overlap between privately-owned and municipally-owned vehicles used as supports for graffiti art and street art. There is also a combination of legal and illegally produced works represented by these labels.

5.2.5 The Blackbook Code

A blackbook or black book is the graffiti writer's sketchbook, where they work out designs on paper before being committed to a final support. This is done to practice variations on a style, as well as to draft specifics in preparation for an eventual application that may need to be carried out quickly, depending on the type of support chosen. Blackbooks may contain simple black and white sketches or full color, intricate works. An artist might provide a site with

a blackbook sketch or sketches of a design and then also a photo of a completed work based on the same sketch. Despite being a private rendering on a legal surface other than the streets, the blackbook is a respected part of a graffiti writer's body of works, in contrast to works on canvas, produced for gallery show or sale, which other graffiti writers often view as selling out. This could be seen in the Canvas code terminology shown in Figure 5.4 above, where one site labeled canvas works as Street Sellout Art. The Blackbook code was warranted on 20 of the sites, or 8.3%, and is the fourth most popular type of support occurring in the research. The term "black book (graffiti)" is included in the Getty Research Institute's Art and Architecture Thesaurus with the graffiti qualifier, which is an indication of the term's acceptance in the broader art community, but also as its connection to graffiti art in particular (Getty 2015).

5.2.6 Billboards, Highways, and Signs Codes

These three codes, for Billboards, Highways, and Signs, are grouped because of their relation to roadways. Highways and Signs did not occur as navigational areas in the research often, each applied only two times to two sites. The Highways code was used for navigational labels using the words highway or freeway and both sites that warranted the Highways code also warranted the Billboards code. The Billboards code was more popular, with five sites warranting it, and one site in particular using it multiple times for subdivisions of specific city galleries.

5.2.7 The Body, Clothing, and SkateDeck Codes

These three codes were not used often, seen in four, four, and two sites, respectively.

They represent surfaces with commercial implications, such that works would be for sale or

produced legally on commission. Sites may offer various types of clothing for sale, usually falling under the general website codes referenced in 4.1.3, the Shop Code. Four sites offered areas to group graffiti style works on clothing, subdividing as necessary for different types of clothing, including shirts, shoes, jackets, and hats. Skate decks are skateboards, featuring graffiti style works on the bottoms of the boards, or decks. The body used as a support includes photographs of graffiti style art on the body with paint, or graffiti-style tattoos.

5.2.8 The Rooftops Code

The Rooftops code and Tunnels codes were warranted on four sites each. Rooftops are a fairly common urban support for graffiti art or street art. An example of rooftop graffiti is shown in Figure 14. In this photo one can see that the works are on the sides of walls or other structures on the roof of a building. Rooftop works could also be on the rooftop itself, as in the horizontal surface, but they are usually as seen in this photo on other upright structures or walls, accessed by way of the rooftop.

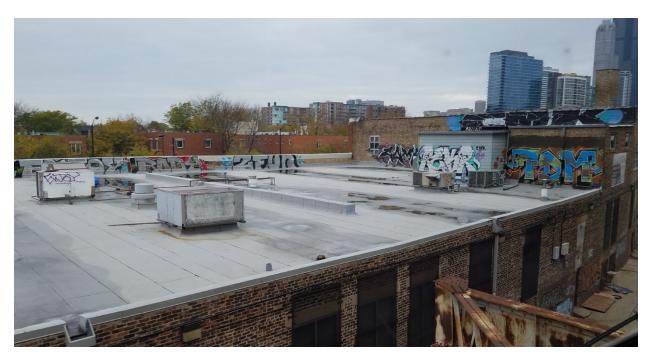


Figure 14 Rooftop graffiti, Chicago, photo by Ann M. Graf

5.2.9 The Tunnels Code

Tunnels likely have overlap with various other codes, as works often appear on tunnels associated with subways, trains, or highways. The Tunnels code was warranted five times over four sites. The code tends to be warranted on sites that use more granularity in categorization, such as on super site FatCap, where there are numerous divisions of supports and types. This is another example where image-level analysis would be necessary to understand the various meanings of a tunnel as a support for works.

5.2.10 TrashBins, and Shutters Codes

TrashBins and Shutters codes were each applied twice over a total of four sites. These were the least frequently warranted support codes. Each time that a TrashBins or Shutters code was applied, it was on a super site. This makes sense as super sites use more granularity in their

organization to meet the needs of larger collections of images. Trash bins are a common sight in the urban environment and, as one interview participant pointed out, writers typically do not considered them a high stakes surface. Basically, few people care if you paint on a municipal trash bin so they are easy targets for tags and graffiti works.

Shutters are typically aluminum or other often corrugated metal walls or doors that slide down to close off a shop or building of some sort. They are more common in some parts of the country and world than in others. While only two sites in this study warranted the Shutters code, there were many images that were collocated in this way. Global Street Art has a gallery area titled "Shutters or Ridged Surfaces" that holds 14,106 images as of this writing (http://globalstreetart.com/search?action=bar&q=shutters&tab=tags). The other site warranting the Shutters code is Ekosystem, which also has a gallery area dedicated to "Shutters" with over 300 images. Analysis at the individual image level over all sites may reveal many more works labeled with the Walls code that could be more finely characterized as shutters. One may walk down a city street lined with shutters that are up during business hours and not see any of the works. Only when the shutters are down, typically after business hours, can one view the works.



Figure 15 Works on Shutters, Rio de Janeiro, photo by Ann M. Graf

5.3 Type Facet Codes

The Type category codes express the various styles or types of artworks. The vocabulary used for type discrimination is often particular to the graffiti art and street art community, in contrast with what one might encounter within a traditional museum setting (see Graf 2016).

Type Facets	Count	% of Codes	Sites	% of Sites
Sketches	74	0.4	56	23.2
Graffiti	75	0.4	50	20.7
Other	184	1.1	43	18.3
CommercialDesign	63	0.3	43	17.8
StreetArt	38	0.2	35	14.5
Murals	39	0.2	32	13.3
Tags	22	0.1	17	7.1
3D	18	0.1	16	6.6
Characters	59	0.3	15	6.2
Pieces	37	0.2	15	6.2
Stencils	20	0.1	13	5.4
Bombs	13	0.1	12	5.0

Throwups	16	0.1	12	5.0
Letters	19	0.1	10	4.1
Productions	12	0.1	10	4.1
Stickers	14	0.1	10	4.1
Digital	8	0.0	8	3.3
TrainWholecars	13	0.1	8	3.3
Action	6	0.0	6	2.5
Posters	9	0.0	5	2.1
SprayPaint	4	0.0	4	1.7
Wheatpaste	4	0.0	4	1.7
Political	3	0.0	3	1.2
Projections	3	0.0	3	1.2
TrainEtoEs	5	0.0	3	1.2
Collaborations	3	0.0	3	1.2
TrainPanels	3	0.0	3	1.2
Silvers	2	0.0	2	0.8
TrainTtoBs	2	0.0	2	0.8
Wildstyle	3	0.0	2	0.8
Handstyle	2	0.0	2	0.8

Table 12 Types Facet Codes

5.3.1 The Sketches Code

Appearing on nearly a quarter of all sites, the Sketches code was the type code warranted by the greatest number of sites. Sketches are often the design mock-up for what will become large pieces in color. The more complex a piece and the more time and materials required for its execution, the more important it is to practice the design first on paper before committing resources to the final surface. An artist preparing a work for an illegal surface may be especially concerned with getting the design right on paper in advance as there will be pressure during the execution to complete the work quickly. These are just some of the reasons that graffiti writers and street artists will prepare sketches. The Sketches code was applied to labels using the words sketches, drawings, outlines, illustrations, and variants of these such as charcoal sketches, ink outlines, and sketch battles. There is likely overlap between this code and

the supports facet code Blackbooks as one of the main purposes of a blackbook is to sketch out future works.

5.3.2 The Graffiti Code

Labeling a photo gallery with the word graffiti may seem either an obvious choice or a useless one, depending on the collection and goals of the site. One fifth of all sites dedicated an area for graffiti works with this code applied. Of the 77 times this code appeared, it was applied to labels with the words graffiti or graff 57 times. The other 20 instances it was applied to labels including vandalism, buff killers, P. Skips, and various country and city named graffiti subgalleries. The content of these galleries, combined with textual information often given within the galleries, was used to apply the codes when the labels were unclear, such as with P. Skips and buff killers.

5.3.3 The Other Code

The Other code represents types that do not fit into any of the other categories and do not appear often enough to warrant their own codes. Many sites use the word other or others, sometimes in combination with other words (other graffiti pictures, other works) to indicate a gallery of assorted types or styles. Some sites also use labels that do not have meaning other than to denote sets of images according to unknown criteria. Examples of this include Armed Rob, which uses the labels set 001, set 002, set 003, etc. up to set 018, and then a series of ten labels that simply read "EMPTY" (http://www.armedrob.dk/, no longer available as of this writing). Examples of label text that were coded Other are shown in Table 13 below, grouped

by the individual sites. Super sites are in a green font color to demonstrate the granularity of terms needed by those with larger collections of images and more detailed organization.

Site	Text	Codes
3	Scratchiti, Street art/Murals/Alternative, Yards and Lay-ups Backpacks, Boom Boxes, Bum Graffiti, Graff Sluts, Graffiti Flyers, Graffiti Pogs, Graphic Art, Landmark Inc., Landmarks, Overhangs, Roll Calls, Room	3 13
6	Graff, Toy Trains	
9	Right Vibe (Images that tell stories)	1
11	others	1
42	EMPTY, set 001, set 002, set 003, set 004, set 005, set 006, set 007, set 008, set 019, set 010, set 011, set 012, set 013, set 014, set 015, set 016, set 017,	28
12	set 018	1
13	Motorcycles	2
31	ILLUSTRATION, OTHER	1
32	Other Mixed Media	1
36 37	Screenprints	1
38	Scenes	1
52	Wallpapers	1
32	Acrylic Paint, Aluminium, Engrave, Fiberglass, Furniture, Ink, Marker, Paper,	15
57	Paper, Pencil, Roller Paint, Rope, Steel, Wood, Wood	13
59	Cardboards	1
69	Big, night	2
72	Other Works, Urban Works	2
	Bratislava tram, Calgary tram, Istanbul tram, mixed, trams, trams, trams,	11
73	trams, trams, trams	
	Abstract, block, brush, bubble, cartoon, fat cap, hardcore, ignorant,	13
79	landscape, realistic, sharp, shops, street equipment	4
80	Trams	1
81	copycat Animals, art/artists/paint tools (non spraycan), body parts, body parts (not	1 47
	skulls), bombs, brains, buildings/structures, close ups, corners or curved, cultural theme, earths/planets, eyes/nose/ears/mouth, famous men, famous women, film/tv/computer references, food & drink, freehand spraycan, gas masks and masks, geographic/historic, hands, hearts, hello my name is – to do, high reality, hip-hop culture, legs/feet, liquid paint, martial	7/
88	arts/eastern culture, object/appliance/flag (excl. spraycans), objects, other body parts, other technique (pen, sculptures, tiles, etc.), panorama, plants and fungi, police/crime/consumption/pollution, pyramids, religious/spiritual/festive, scenes/waves, sexy/nude/exaggerated, slavery/black culture, sleeping – to do, smoking/drugs, soldiers/other fighting/guns/knives, sports/cards/games, spray cans, Surfaces 196, Techniques 282, vehicle (incl. planes & boats)	

94	unusual spots		1
112	hand		1
120	Moving Objects, other moving objects		2
132	Bunker, concrete, industrial, trackside, urban		5
149	Others		1
150	art objects, art on building		2
151	private		1
172	blown out		1
174	Other graffiti pictures		1
177	Detailizm, styleizm		2
189	Public Art Projects		1
205	Burners		1
207	Other Works		1
209	planes		1
217	2D Science, 3D Science, Automotive/Bike Works, Style Experimental		4
218	Fun, Plastic SubwayCars		2
221	Color Circus, Lost Letters		2
223	QUICKIES, Quickies & Misc., SEX!, SMILEYS		4
224	Locked Beauties: doors & gates		1
225	random		1
229	specials		1
240	Bass Reliefs		1
		TOTAL	184

Table 13 Other Code Text by Sites, Showing Super Sites in Green

It can be seen from Table 13 that the sites that have the greatest number of Other coded text tend to be super sites. Site 12 has many terms, but they do not have conceptual content to differentiate them. Site 73 has eleven terms, but ten of them have to do with trams in general, or specific city trams. Site 57 remains the only site using more than five Other codes that is not a super site. Out of 184 total Other codes, 81 are used on super sites. To further isolate conceptual individuals within labels coded Other, EMPTY text, numbered sets, and exact duplicate text within one site was removed to leave 148 Other codes. Super sites still account for 81, revealing 55% of the Other codes belonging to super sites.

5.3.4 The Commercial Design Code

There are a number of codes used in this research that are applied to sites with commercial interests more than to sites that are aggregations of photos of works by various artists. These sites often are run by individual artists or crews that actively seek commission work and exhibitions. The CommercialDesign code is one that is almost exclusively used by sites run by artists, crews, or other artist collectives. Vocabulary used to label site areas that warranted this code are shown below in Table 14 with text used by super sites in green.

Album Cover Portfolio	1
Artwork	1
Assignments	1
Carhartt	1
Clothing Design Portfolio	1
Comercial [sic], commercial, commercial works	6
Commission, commissioned, commissions (1)	6
Custom, custom graffiti (2), custom graffiti lettering, customized,	
customs, cutomizations [sic]	7
design, designs, flier design portfolio, graphic design	10
editions	1
for cash	1
illustration, illustration & design, illustrations	6
installation, installation art, installations	3
Interiors	1
Jobs	2
Logo Design Portfolio, logos	2
Main Portfolio Menu	1
on-demand	1
Pre-Digital Portfolio	1
professional/art	1
Projects	3
Web Design Portfolio	1
work	1

Table 14 Vocabulary Coded CommercialDesign with Variations and Number of Occurrences

One super site used the label commissions. All other CommercialDesign codes that were used on super sites were on one individual site that is run by a specific crew, which would agree with the idea that sites run by individual artists or crews unsurprisingly have their economic interests at heart more than sites that gather and share the work of all artists and crews.

5.3.5 The StreetArt Code

The StreetArt code is very general, but used as a distinction from works that are conceptualized as graffiti art. As discussed earlier, this is a difficult distinction to make, often fraught with differences of opinion and issues surrounding public perception, artist intent, legality, and style. Entire sites are devoted specifically to street art, such as Bristol Street Art (http://www.bristol-street-art.co.uk/), Global Street Art (http://globalstreetart.com/), and Irish Street Art (http://irishstreetart.com/), which became unavailable by the time of this writing). While this code was relatively popular, appearing on 14% of all sites, it is ultimately too broad to be useful, unless the site includes areas for both graffiti art and street art, distinguishing between these two broad styles. There are 15 sites that have galleries for both graffiti and street art.

5.3.6 The Murals Code

The term mural is associated with legal or commissioned works and is not normally used within the graffiti art community to describe graffiti art works. There were 32 sites warranting the Murals code, seven of which also had galleries coded for Graffiti and seven of which also had galleries coded for Street Art. Three sites warranted all three codes for Murals, Graffiti, and

Street Art. Further analysis at the image level would be warranted to determine the possible differences in usage of these three type facets, which is beyond the scope of this research.

5.3.7 The Tags Code

Tags are a common type of graffiti work, ubiquitous in any urban environment. They were defined and discussed in detail in chapter one. Seventeen sites set aside areas to feature works labeled as Tags. Of these 17 sites, one site warranted the Tag code six times, while all other sites with this code only once. This site, 50mm Los Angeles, is a super site and had works tagged with various types of Tag tags, including cement tags, dust tags, and slap tags. Cement tags are when someone writes in wet cement and their signature is left to harden. Dust tags are writing in dusty or dirty surfaces. Slap tags are stickers with a tag written, printed, or stenciled on them and applied to various surfaces. This super site also had overlap between codes for Tags and Stickers, and between Tags and Handstyle, which demonstrates the greater granularity often used on super sites with large collections.

5.3.8 The 3D Code

The 3D code was applied to areas of a site that feature works that are in three dimensions, such as sculpture or other physical objects treated as graffiti art or street art. There was one super site that used the term 3D to mean 2D works painted in a three-dimensional style, such as by using shading to create what appears to be an image that jumps off the flat surface. This was not included in the scope of the 3D code. Terminology used for this code includes 3D and 3-D, as well as sculpture, sculptures, graff sculpture, sculpture graffiti, and objects.

5.3.9 The Characters Code

The Characters code was applied 59 times over 15 sites. Thirty-seven of these 59 codes were warranted on one single super site, Global Street Art. They use very granular categorization, as previously demonstrated in this research. Individual types of characters were coded with the Characters code. The text coded as Characters from Global Street Art includes:

- Characters 115
- CHARACTERS
- animals
- character types
- children/babies
- cute characters
- females
- males
- many characters (3+)
- bears/pandas
- birds/sky
- cats/lions
- dinosaurs
- dogs/wolves
- dragons
- elephants/rhinos
- fish/octopus/sea
- insects/bugs
- monkeys
- other animal (frog, croc, gir'f)
- pigs
- rabbits
- rodents
- sheep/cows/bulls/horses/goats
- snakes/lizards
- abstract/other character
- all other monsters
- angels/fairies/wizards
- clowns
- famous comics/cartoons
- Lego/Lego-like

- letter characters
- machines/robots
- mermaids/pirates/seamen
- skulls/skeletons
- space/aliens
- sun/moon

50mm Los Angeles, also a super site, is the only other site to utilize a specific character gallery along with a general character gallery. They have a very granular tagging system that includes the named character of child television actor Gary Coleman.

5.3.10 The Pieces Code

Pieces refer to large graffiti works that require more time, materials, and effort than other types of graffiti. The Pieces code was applied 37 times over 15 sites. Terminology used for this type of work label almost always (34 out of 37) includes some variant of the word "piece" such as pieces, streetpieces, piecing, masterpiece, and feature pieces, but also "Big Prodz lot of work" on one site, "big wall" on another, and "wall of fame" on a third.

5.3.11 The Stencils, Wheatpaste, and Posters Codes

The content of the Stencils code has overlap with that of the Wheatpaste, Stickers, and Posters codes and possibly other codes as well. Wheatpaste works often may be stencil works and vice versa. This is true as well for Posters, which may be stenciled works applied with wheatpaste. As such, the Wheatpaste, Stickers, and Posters codes could all be considered supports instead of types, but they were not coded in this way for this research. One of the super sites in this research, Stencil Archive, focuses exclusively on stencils. Stencils are the most

popular of these types of repeatable works, with galleries for their organization featured 20 times over 13 sites. The Posters code was warranted on five sites and Wheatpaste on four.

5.3.12 The Bombs Code

One curator stated in an interview that there are no works called bombs, only the act of bombing, so a better code name would have been Bombing. The code was applied thirteen times over a dozen sites. One site used "bomb" and one other "bombs," but the other eleven sites used the word bombing, sometimes with modification for surface (tunnel bombing, bombing busway) or geographic location (Finnish bombing). The use of the gerund form may signify agreement with the one curator who stated this was an action, not a type of work, though as a result of an action possibly producing a particular type of work.

5.3.13 The Throwups Code

Throwups (called by various similar names, including toss-ups, quickies, and throwies) are works that are done quickly, hence the name, and result in works with less complex designs and fewer colors than pieces. This code was applied 16 times over 12 sites, or on 5% of sites overall.

5.3.14 The Letters Code

The Letters code was applied 19 times over ten sites. This code was frequently repeated under different facets on two sites in particular. One site reused this type of navigation label three times for letters, block letters, and straight letters. The super site Full Time Artists has a page for graffiti fonts that is further subdivided into seven different pages:

Graffiti Fonts Home

Buy Graffiti Fonts

Font Collections

Graffiti Fonts 1.7

Graffiti Fonts 2.2

Graffiti Fonts 3.1

Graffiti Fonts 4.0

The last four subdivisions are for collections that can be downloaded digitally (http://www.fulltimeartists.com/graffiti fonts/). This code likely has overlap with the Handstyles code below, though it would be hard to state this definitively without further research. The Handstyles code is used rarely and the few images with which it is associated in

5.3.15 The Productions Code

this research are all tagging examples.

The Productions code was warranted 11 times over ten sites. One site repeated this type label, using it once for productions and once for crew productions. Crew productions are those that are produced by multiple writers all of whom are members of the same graffiti crew. The word production, productions, or prod (abbreviation of the same) was used in all labels for this code save one. Super site Fat Cap used the label "big walls," which aptly describes what a production is. Works known as pieces, when combined with a background, are referred to by Snyder (2009) as productions. In this way, they can be seen to be one step up on the complex hierarchy of graffiti art styles.

5.3.16 The Stickers Code

Stickers are printed digitally, stenciled, or designed by hand and affixed to street signs, municipal utility boxes, traffic light poles, trash bins, railings, and any other surface where they

may be seen. Many commercial enterprises utilize stickers for advertising and these will be seen mixed with graffiti art and street art stickers, most often in an urban environment (see Figure 16 below). A popular sticker form of graffiti art employs US Postal Service mailing label stickers, which can be obtained for free from most local post offices, in person or delivered to your door through the online USPS ordering system (O'Neill 2010). Graffiti writers or street artists draw their tag, character, or other design on the stickers and then commit the works to public surfaces quickly, without having to take time and risk executing the works themselves in public. For this reason, they are sometimes referred to as slap tags or slaps. The word stickers was used eleven times; sticker, slap tags, and slap tag were each used one time for this code.



Figure 16 Examples of Sticker Art: Obey Giant by Shepard Fairey, Pittsburg (left) and Have Goals, Milwaukee (right). Photos by Ann M. Graf.

5.3.17 The Digital Code

The Digital code was applied to site areas set aside for digital works, which are not typical graffiti art or street art works. These are graffiti-style works executed using digital software, often involving artistically stylized text. These areas of a site may be either tutorials that demonstrate graffiti style fonts or, more commonly, they are areas useful to demonstrate an artist's design skills for commercial purposes.

5.3.18 The Train Codes: TrainWholecars, TrainEtoEs, TrainTtoBs, and TrainPanels

The Train codes are used to differentiate among different sizes of train graffiti.

Wholecars require more planning, time to execute, materials, tools, and risk than the other types of train graffiti listed here. For this reason, they often earn more respect and admiration from other writers. EtoEs, or End-to-Ends, and TtoBs, or Top-to-Bottoms, are types of train works that also earn more respect than smaller works because of the effort involved.

Train panels represent further defined works on passenger trains that are not as large as Wholecars, TtoBs, or EtoEs. Sites with emphasis on train graffiti featured train panel works, using the term as one of several ways of dividing up the large number of works on trains. More granularity in description is needed when the collection is large or focused on one type or surface that could be seen as unwieldy with just one area labeled as trains.

5.3.19 The Action Code

The Action code is applied to site areas that feature photographs of artists creating works. Often the identity of the artist or artists is protected, either by not showing the faces in the photo or by blurring or otherwise blocking out any visible faces. This code refers to a type of

image, rather than a type of graffiti art or street art. There are six sites that warranted the Action code; of these six, half were super sites.

5.3.20 The SprayPaint Code

The SprayPaint code was warranted only four times on four individual sites. Terminology used as navigation labels for this code include spray paint, sprayings, spraycan art, and aerosol & paint. Graffiti art is known for the use of spray paint, so this type of label does little to distinguish works by style, unless the site has a collection where this separation makes sense. Three of these four sites are artist sites, where an artist collects and promotes their own works. The fourth site is undetermined. It may be the works of one artist or many. The fourth site employs "aerosol & paint" as one of four subdivisions of a gallery of work from Barcelona in 2004 (http://www.txmx.de/graffindex.html). The three other sites have commercial motivations as evidenced by the promotion of individual artists, which has been discussed in more detail in chapter four. It may make sense for artists promoting their own work to use this type of material distinction to show their breadth of skills and experience.

5.3.21 The Political Code

The Political code was warranted three times on three sites. Describing a work as political refers to the content of the work less than to an actual artistic style. Interestingly, this code was only used by super sites. 50mm Los Angeles, Global Street Art, and Stencil Archive are the three sites that warranted this code, and they all employ a very granular categorization for their works. 50mm Los Angeles used the word political for these works, while Global Street Art used politics. Of particular interest among these three sites is Stencil Archive, which, as the

name implies, features specifically stencil works. Stencils, posters, and wheatpaste works are often used for political messages. These types of works can be created in the safety of a studio and applied quickly to the streets, or stenciled quickly on the streets. While many stencils of a political nature are featured on the site, one sub-gallery exists on Stencil Archive for the Occupy Movement in the US, entitled "Occupy Together (Occupy Wall Street, Occupy San Francisco, Occupy Oakland, and other Occupy locations)"

(https://www.stencilarchive.org/archives/index.php/USA/Occupy-Together).

5.3.22 The Projections Code

Projections refer to the use of light projected onto surfaces to display textual or artistic images without indelibly defacing the structures that support them. This code was only warranted on three sites, one of which is a super site. The terminology used for this code includes projections, light painting, and lightgraffiti.

5.3.23 The Collaborations Code

Collaborations likely have overlap with works considered pieces or productions, but the emphasis is on the concept of working together as a group to accomplish something. This code was warranted on sites that feature the work of a single artist or crew when that artist or crew worked with others outside the crew. This code was warranted three times on three individual sites and the terminology used included collaboration, collaborations, and collaboration murals.

5.3.24 The Silvers Code and Wildstyle Code

Silvers are a very specific kind of graffiti work that involve simple letter outlines and filling with silver paint. While a known graffiti style, this type label rarely occurred in the data,

only on two sites. Wildstyle is also a well-known graffiti style, dating to the early days of New York graffiti writing, but like Silvers did not appear on more than two sites. Both Silvers and Wildstyle appear in Gottlieb's faceted classification for graffiti art styles (2008). The only other two style codes here that overlap in any way with Gottlieb's classification are Trains, Freights, and Pieces, corresponding partially with her "Swedish Train," "Neo Classic American Freight," and "East Coast Piecing Style."

5.3.25 The Handstyle Code

Handstyles refer to lettering and thus to graffiti style works in general. There may be overlap between this code and the Letters code, as mentioned above. The Handstyles code was only warranted twice, making it was easy to see both site examples, which were galleries of simple black line graffiti writer tags. The two navigation labels coded with Handstyles were "Graffiti Handstyles" and "Handstyle." The Lettering code contains much more granularity beyond simple tag lettering.

5.4 Location Facet Codes

The coding process began with a list of basic geographic divisions that were assumed would be found in the data, including GPS coordinates, addresses, intersections, cities, states and territories, and countries. As analysis took place, it became apparent that GPS coordinates are not something used by either contributors or curators. GPS coordinates were never seen on any of the sites. A postal street address was only used twice on one site. This same one site was the only one to use street intersections as a geographic location, but they used this type of location 27 times. This site was also the only one to employ a specific location designation of

"undisclosed," which they did two times. This site is also a super site. Normally a code was not applied to a facet that was only used on one site, but because there were so few location codes, all facets of location were kept for inclusion here.

Location Facets	Count	% of Codes	Sites	% of Sites
Cities	1637	8.6	43	17.8
Countries	543	2.8	37	15.8
SpecificLandmarks	73	0.4	13	5.8
CityParts	94	0.5	13	5.4
World	22	0.1	12	5.0
Continents	42	0.2	11	4.6
States	117	0.6	6	2.5
CountryParts	10	0.0	5	2.1
Address	2	0.0	1	0.4
Intersection	27	0.1	1	0.4
Undisclosed	2	0.0	1	0.4

Table 15 Locations

A total of 2569 location facet codes were applied to the data. Of these, 1988 were applied to super sites, or 77% of all location codes. Fourteen out of 19 super sites employed location codes, or 74%. Only 46 out of the 222 sites that are not super sites warranted location codes, or 21%. Across all sites, the most common geographic facet used by far was city. The World code was added because many sites focus on a geographic area and would use a category to indicate works from areas outside of this focus. Often this would involve using one category for all other locations. The word World was used to code this outside-of-focus area because, depending on where the site was focused, this catch-all category included works from all over the world.

Intermediate geographic codes were necessary to indicate areas on the sites for parts of countries, parts of cities, and for specific landmarks. Cities, states, and countries were

sometimes referred to in parts on the sites. Cities parts include examples such as Tenderloin, the Castro, and the Mission in San Francisco, or Plaistow, Tottenham, Crouch End, and Turnell Park in London. Country parts include the Midwest, the South, the East Coast, and the West Coast of the US, Puerto Rico, and Andalucia. Specific landmarks include named buildings, parks, tunnels, train yards, and other names that often required additional research to determine how they should be coded.

While it was expected that there would be information on the sites to indicate locations as granular as street intersections, postal addresses, and even GPS codes, this information was rare. There is an obvious problem with protecting the artists who are involved in illegal activity so some sites may be intentionally vague when providing location information, resorting to less specific location information such as city, even when more precise location information is known. This was noted in the interview portion of this research. Providing precise location information may not be favored for such legal reasons, but also because the works featured online are often gone quickly, negating the value of such data for those who might want to try to visit a work in person.

5.5 Tagging as Post-Coordinated Grouping

When a site uses image or post tagging, a type of post-coordinated indexing occurs that may find an image in a grouping for several facets of the work at once. This can be extremely helpful, but also has inherent problems if there is no system in place to control the tags for consistency. Some sites use systems of organization that utilize what could be called parent categories and various levels of child categories. For example, a site may use locations as parent

categories, and subdivide by surfaces or types beneath this. This can be useful, but also confusing if a user is trying to find wholecar works and they have to look in various geographic location areas on a site to find them all. This is seen, for example on Double-H, a site devoted to graffiti in Hamburg, Germany, which uses the four basic (or parent) categories of History, Trains, Legal, Illegal (http://www.double-h.org/english/index e.html). When a user visits the trains page, they are offered the subdivisions (or child categories) as shown in Figure 17.



Figure 17 Trains subpage of Double-H site (http://www.double-h.org/english/trains/index.html)

From here a user can choose from six specific named trains. Choosing DB (German Railway) takes the user to another subpage with options for about U-trains, trainbombing, WHOLECARS, E-TO-E, and PANELS (http://www.double-h.org/english/trains/utrains.html). These same options are similar for each of the subpages under the main trains page. A site could just as easily use the text label Wholecars as the parent category with subdivisions beneath it for different train types. In either case, this creates more work for the user to find works by particular facets.

Another option is to offer numerous subpages for different supports, types, or locations and allow users to find works with their own facet preferences. This involves redundancy as an

image may then have to be in, or be linked to, several places. An option that makes sense is to employ tagging to individual images or posts with the ability to click on any given tag and be taken to a post-coordinated gallery of works attached to that tag. An example of this can be seen in Figure 18 below in a tagged work on Global Street Art, a super site with an extensive collection of works by artists around the world. Global Street Art makes use of tagging in various ways and auto generates collections based on the names of artists, regardless of whether they already have a separate area within the site organization. This happens when a user clicks on the tag for artist Caratoes. The user is taken to a page for that tag that includes the message: "This is an auto generated page. If you are this artist or we've got the name wrong, please email us" (http://globalstreetart.com/artists/14a01to-caratoes).



Figure 18 Image of work by artists A squid called Sebastian and Caratoes with tagged categories (http://globalstreetart.com/images/31mknlz)

The tags on the right side of this image are hotlinked so users can click on each one to be taken to an ad hoc collection of works featuring that tag. "A squid called Sebastian" and "Caratoes" are artist names. "Murals" and "Character / Object" are type facets. "Walls or Flat Surfaces" is a support facet, and "Belgium" is a location facet. "My Work" is seen on many works on the site, but does not lead to any collections. The titled applied to this work, "Collab wall at KERK Ghent" can also be seen below the image. The title gives further location information, situating this work in Ghent, Belgium. Kerk is Dutch for church, so this may indicate an area of Ghent, adjacency to a church, or work on a church.

5.6 Size of Collection and Need for More Categories

After analyzing all the codes applied to the data, it was apparent that larger collections had a broader range of categories for organization in general. This is not surprising. The number of individual codes applied to each site ranged from one to 4,725. Only 15 sites warranted over 100 codes. Nearly half of these, seven sites, are super sites. The greatest number of codes applied to a non-super site is 712 while the greatest number applied to a super site is 4,725. Super sites do account for the majority of codes in this research, with the average super site warranting 797 codes. The average number of codes warranted on non-super sites is 23. Once duplicate codes were removed, leaving only one instance of a code on any one site, the total number of codes ranged from one to 50. This indicates an average variety of 18 codes each on the 19 super sites and seven codes each on the 222 non-super sites.

The actual size of the 241 image collections are not individually known, though a few sites report statistics providing the number of images available. It is not known how accurate

these numbers are when they are offered by a site so no attempt was made to compare number of codes applied to a site with the size of the collection.

5.7 Summary of Work Code Categories

The categories discussed in this chapter are a representation of the various ways that photographic images of works are grouped and categorized on the sites. The size of the collection may dictate how the granularity of the organization of the site. This is seen in various libraries and archives, which require morethe common knowledge organization problem of depth of indexing or cataloging when the number of breadth of resources represented becomes too large to effectively categorize with a shallow knowledge organization system. More differentiation is needed when more works are added and this is reflected in the use of more facets for organization on sites with larger collections.

The scope of a site also corresponds to varying needs for categorization. A site focusing on fewer styles or supports, or on works from a smaller geographic area will require different levels and types of organization. While size of the collection was already noted as likely affecting the granularity of categorization, even a small collection that is narrowly focused may might require a greater number of conceptual divisions to avoid having only one relatively large gallery of images. A common example of this would be a site that features train graffiti. Instead of having one gallery for all train graffiti, there may can be several different galleries for train works in various geographic locations, in various styles, or covering various portions of trains (equating roughly to size of works).

Another factor that appears to influence the number and kind of categorization used on the sites is the motivation of the site curators. Differences are seen in the categories used by those with internal motivations and external motivations. Internal motivations involve the desire to garner commercial work or commissions and to add to an artist or crew's working portfolio. This is associated with certain categories that are not as prevalent on externally motivated sites, which are those that tend to share more educational, historical, or altruistic interests. Each type of motivation will result in categorization to meet the needs of different audiences.

Analysis has been carried out herein at the level of the category label on the sites. It is acknowledged that image level analysis is necessary to more precisely define the conceptual contents of various codes in this research. Much further depth can be given to analysis at the individual image level, but that is beyond the scope of this research.

Chapter 6: The Interviews

6.0 Introduction

There is evidence on the websites to demonstrate aspects of graffiti art and street art that may be regarded as important for documentation. This evidence has been examined and introduced in detail in the last chapter. What is lacking from this examination is the input from those who set up those facets for documentation in the first place. Short interviews were designed to present the findings to the website curators and to then ask for their opinions on the different facets. The knowledge gained from the interviews will be presented here and then related to the findings from examination of the sites. The interview instrument can be seen in Appendix C.

6.1 Contacting Participants

When first collecting data for this research from the websites, any contact information for the website curators was collected. Most often this contact information was in the form of an email address. There were 35 sites that offered a contact form instead of an email address. The contact form was used in place of an email for these sites, though a few of these contact forms were no longer operational due to the age of the site or the fact that the site was no longer being maintained. Of 241 sites, an invitation to participate in an interview was sent to 212. Three were invited via Facebook Messenger and one by posting the invitation directly onto the comment area for a Facebook post, as no message option was made available. There were 29 sites for which no contact information was found. The email invitation text can be found in Appendix B.

6.2 Responses to the Interview Invitations

Participants were given the options to respond by email, by phone, or by Skype. The overwhelming majority chose to participate by email. This was not unexpected due to the broad geographic distribution of curators. A one-month window was reserved for participation from the date of sending out all invitations. During this time, 39 responded that they would be willing to participate. Six of these willing participants were associated with super sites, as previously defined. Thirty-seven requested the questions be sent through email. One participant requested a Skype interview and one requested a phone interview. All participants were given the interview questions via email, including the Skype and phone participants. One participant decided to decline the interview after receiving the questions. Eleven completed interview responses were received through email; one Skype interview and one phone interview were also conducted successfully.

6.3 The Participants

There were thirteen interview responses thus received. Of these thirteen, five participants are curators of super sites. One other participant is co-founder of another super site in this study, though no longer managing that site, having moved on to a new site also in the study. This equates to input from six super site curators, representing 32% of these 19 exceptionally well-organized sites within the sample. Super site curators also therefore represent 46% of interview participants overall. Participants are situated around the world, from the United States (7 sites), the UK, France, Denmark, Spain, Romania, and Croatia. Super site participants are from the US (4 sites), Romania, and the UK.

Participants were not asked their roles in the graffiti and street art community, other than if whether they were responsible for the organization of the websites used in this study, which they all are. Most submitted that they are or had been graffiti writers at some point in their lives. None of them referred to themselves as street artists. Eight out of the thirteen sites curated by the participants are collections of images of works not created by the curators.

These curators are collecting photos of graffiti art and street art when they photograph it or they receive photographs from others. One site is a tribute site for late U.S. graffiti artist Dondi, who was prolific during the mid-1970s and 1980s in New York City. This site features only photographs of Dondi and his works. The remaining four sites feature largely the works of the artists who curate the sites, as opposed to collecting broadly from other artists. Two of these three sites focus on individuals, yet include works with other artists, and two sites features works by a particular graffiti crew and its members. Ten of the thirteen curator sites are currently active, still updating posts and adding images. Three of them are in an archive state, where they are no longer being built or actively maintained.

6.4 Interview Results

Questions are grouped in the interview similar to the way codes have been grouped for analysis from the sites and for reporting in chapters four and five. Therefore, the results will be reported here in the same way, by discussion of code groups and the participants' information relevant to those code groups. The website code categories were not discussed with the participants. They were asked about the work code categories for description of works, which represent the general, support, type, and location facet codes.

After introducing the research again briefly and explaining the four categories of organization seen on all 241 sites, curators were asked if whether they had any comments on a group of labels used in each category, beginning with the General Facets. In this research, the General Facets are referred to as codes, but they were discussed with participant curators simply as ways to organize general site content. Some participants provided information on specific labels, while others gave broader, less specific feedback. Specificity of comments varied across categories, codes, and curators.

6.4.1 General Facets Discussion

Most curators began by explaining their own basic organization labels. Speaking generally at the beginning of the interview, the most commonly referenced way to organize was by geographic location. More than one curator mentioned the impact that the early movement had on the inclusion of geographic location information. Before the Internet, graffiti aficionados would trade photos of graffiti, often their own works, via mail. It was common to write the general location of the work on the back of the photo when trading or when submitting the image to a graffiti magazine. The editors of the early magazines would often only have a city to attribute to a photo submission, whether written on the photo itself or from the return address or postmark on the submission envelope. This became a standard way to describe submitted photos, also including the name of the artist if supplied or ascertained from the image itself.

A few curators also mentioned the scope and motivation of a site. If the site features the works of only a specific artist or crew, there will be a different kind of organization warranted in

comparison with sites that seek to document any and all works, or sites that accept submissions from users. Once a site provides images submitted by users, there is only so much information that can be gathered about the image. The curator must take what they get from users and offer what categorization they can if they agree to post an image. Curator A also mentioned that the organization of a site will depend on the perspective the curator wants to present to users.

Organizing works by artist or crew is very important. Image submissions received by artists or crews also lend themselves to organizing in this way. Several curators mentioned that organizing by artist or crew name is either the most important, or one of the most important ways to organize images of works. Some acknowledged that the name of the artist or crew is not always known. Curator I said that if he knew at least one artist or crew member who contributed to a work, he would include that one name along with the work, possibly adding "+?" to indicate that others were involved, but not known. Some sites will solicit for further information from users who view the works.

When asked about the importance of knowing an artist or writer's real name, as opposed to an alias or graffiti name, all curators agreed that the name that the artist goes by was the most valuable. Some curators mentioned the possible benefit of knowing the real name of an artist, but always stated this in association with commercial work (Curators A, D, G, I, and J). Curators stated the value in knowing an artist's real name if that artist wished to be acknowledged for a style or skill to gain commissions or gallery representation, not for adding to images of works of graffiti art online. In fact, six curators specifically mentioned that it was important to only refer to artists by the name they choose to use, which is often an alias, in

order to respect their wishes, to adhere to the unspoken rules of the graffiti community surrounding anonymity, and to avoid divulging information law enforcement could use for prosecution (Curators A, B, G, K, L, and M). Two curators mentioned that not only could revealing the real names of artists who work illegally jeopardize those artists and their work, and it could have impact on the websites that feature those works as well (Curators C and M). This was the only prompt among the General Facets category questions that all thirteen curators addressed.

In response to a related question, about half of the curators mentioned that they would add RIP to the name of an artist who had died out of respect, decency, or tradition. This was said to be done for more prolific and respected artists especially, and for pieces that were done specifically to honor another artist who had died. Curator C asked, "... what's the point? You never see Picasso(RIP) in his galleries, right?" Curator D noted it was a sign of respect, yet felt it more relevant in a textual description of a person than next to a photo of work by that person. Curator K echoed a similar sentiment, adding that it was sometimes hard to find out about the death of an artist due to the anonymity afforded them in the graffiti community. This same curator admitted to sharing a blog post about a death instead of adding RIP after names in an image archive. Curator L of a crew site stated that one of their own members had died, but still was considered a member of the crew and referred to with the addition of RIP after the name. This curator specified that they do not use he or she in order to further protect anonymity, adding "In older crews it's mostly a man's world. Maybe [we] represent both — he and the she side."

Only one curator (M) noted that it could be useful to have an area for very well known or famous artists. This curator stated that it might be important, "though maybe not overtly, but more in a structural way behind the scenes, to push less experienced viewers/users towards the better stuff." Curator H said he never had seen that used for organization on a site. No others commented on this facet from an organizational perspective, though some made comments about the importance of fame in the graffiti writing world in general.

After organizing by artist name and location, the next most commonly accepted facet in this category is date. The year is the most mentioned component of date required, though a few curators included a preference for as specific a date as possible of when the work was completed to situate it within the historical context of graffiti art styles. The year was acknowledged as often the best that could be ascertained, especially with user-supplied images. Curator H mentioned that the month is good to have as well to place the work within summer or winter, each season presenting its own challenges depending on location. Curator E stressed the importance of knowing when a work was destroyed or painted over, while Curator M stated that this did not seem important, but could be provided if known "for curiosities [sic] sake." In general there was no agreement on the preferred form of date, other than to provide at least the year. Curators did not always specify what the date should represent, such as the date of the completion of the piece, the date of the photograph, or the date of the disappearance of the piece.

Four curators (B, H, I, and M) commented on the use of the name of an event as an organizational label. There was general agreement that an organized event that produced works relevant to the site could serve as a gathering method for images, though curators

disagreed on how relevant this would be for their own site and how these images might be set apart. One issue that arose regarding the use of an event as an organizing label for an online gallery includes the fact that unless a user is familiar with the event, the label might not make sense. Curators B and I mentioned that tagging or adding descriptive information to an image to indicate an event might work better than a separate area for event photos. Curator H simply agreed that using a label for named events was a good idea.

There was no consensus on the use of labels for new and old works. Some curators used a type of feature post on their sites to highlight works new to the site, while others felt that all new things become old at some point so the label was ineffective. Categorizing works as new to the site by featuring them in a blog post that would move down over time is one way that curators handle this category, but two curators, F and J, specified that the date of the works should suffice to identify works as old or new. Only Curator K stated that documenting older work was important to maintain a historical record of the art, including that there should be a special area set aside for old works. Overall, curators did not view using labels for works such as new or old as a priority, but prefer having a date of some type.

While Curator H simply wrote "yes" next to the indoor/outdoor label, five others (E, F, I, L, and M) asserted that these labels did not make sense, were never used, or, as Curator M put it, "should be implied by the location data, and the picture itself." These labels likely make more sense for curators working in commercial art who desire a broader portfolio to attract clients.

All but one curator had something to say about the importance of knowing the size of a work, though opinions again varied. Several noted that extreme size, either very large or very

small, can be worth noting. Very small yet intricate pieces can require greater skill, or can control, and very large pieces may require more planning, time for execution (and sometimes therefore risk), and materials. Curators B and D mentioned the same well-known and extremely large work by artist Saber in Los Angeles to illustrate their points. Curator E mentioned the importance of very large pieces beyond roughly "the area of 8-12ft in length and 4-6ft in height as a function of the size of a human & the width of the average spray pattern." Several curators stated they were in favor of showing the size of a work that fell outside of average range by including context instead of stating measurements.

It is worth noting that Curator D co-developed the Art Crimes website used not only as a site among the 241 analyzed for this study, but as the source of all the other sites. Curator D shared details of the discussion that the Art Crimes co-developers had regarding size when they began their groundbreaking graffiti art archive. He felt that size was important to note. His co-curator agreed, but wanted to focus on the works and not the context of the works. There are two famous photographers of the early graffiti art movement, Martha Cooper and Henry Chalfant, each with a different approach to documentation. Chalfant focused on the works themselves, while Cooper focused more on the context, the environment, and the process along with the works. The Art Crimes developers decided to follow the former's style, focusing on the artworks themselves and consciously removing context. "That was a decision to try to make people just look at the pure visual artistic merits of the art that was created because at that time the discussion was much more negative in general." This quote reveals more about the social acceptance, or rejection, of graffiti art and graffiti writers during the mid-1990s when the Art Crimes site went live.

To summarize the comments relating to the importance of noting size, most curators agreed that it was important, especially regarding works that are larger or smaller than average, but they did not agree on how to provide size information. Four curators, B, D, G, and I, specifically said that noting size was not very important, Curators G and I stating that the photo should indicate the size and Curators B, D, and I that size was only important with works that are either very large or very small. Five curators, G, I, J, K, and M, indicated that they preferred to include something in the photo to give a sense of scale for exceptionally sized works. These might include the feet of the person taking the photograph (Curator K), a human, a car, or the entire building on which a work is completed. Curator J noted that size definitely should be included if the photo is of a production where "several different artists [come] together to make a big wall." Curators H and M specifically related greater size of a work to greater time required to complete a work, which can be important information.

When asked about labeling works as legal or illegal, the answers again varied with agreement that it could be important information, but many sharing that this was most likely going to be evident by the work itself, the surface the work was on, or other labeling used to group works according to type. Certain language used to describe works carries an association with illegal or legal works. For example, works described as pieces, throwups, burners, or freights will be understood by the graffiti art community to be illegal, whereas murals are regarded as legal works. Only Curators J and M specifically said it was important to know whether a work was legal or illegal, though Curator M admitted that he does not label works in this way, stating,

I think this is important information that sets the context of the work majorly (whether it was done quickly on a highway, or something had all day to complete it), but due to the nature of my site being publicly available on the internet, we felt that we did not want the site to be used as a law enforcement tool, or something that hindered the artists productivity, so preferred to keep this information not directly listed. That being said, most experienced graffiti heads would be able to tell the legality of a work fairly quickly by seeing a flick of something, or knowing about the artists who did it.

Like the comments regarding size, curators in general see the legal status of a work as helpful information, but they did not often explicitly state that works should be labeled as such.

6.4.2 Support Facets Discussion

Most curators agreed that it us useful to categorize photos by the names of supports or surfaces on which a work is created, but this depends on the site and the collection. Curator M, for example, said that his site focused on graffiti art and therefore more of the supports they featured were walls and freights, which are among the most typical or traditional of graffiti art surfaces. The interview questions did not specifically mention every single support encountered on the 241 sites, but listed several of the more popular ones and asked for ideas for other supports not listed. The interview did ask curators how important they felt it is to distinguish the different types of rail supports, such as trains, subways, and freights.

While the Canvas code was the support most frequently applied to the sites, the label is not popular with the curators interviewed. Five curators, C, E, F, J, and M, commented on it, but the consensus was that it was not relevant to graffiti art unless an artist was interested in selling work or showing in a gallery. Curator J went as far as to say that works on canvas were not featured because of the graffiti focus of the site. Curator M affirmed the "marked" distinction between works on the street and works on canvas, the latter a form of work

directed at "traditional galleries and museums." Those who did comment on the use of canvas as an organizational label felt it was irrelevant or beyond the scope of recognized graffiti art.

Few curators commented on clothing as a surface. Curator F mentioned a love for designing on clothing, but nothing about the use of clothing as a surface for organization purposes. Curator E spoke of historical distaste for graffiti on clothing in the 1990s, and Curator M has a specific geographic focus for his collection and is only interested in photos of graffiti art on clothing from the very early days of the art form in his city, during the 1980s. Subways were also mentioned by only two curators, one to suggest that an artist might as well paint on the subway walls if they are already in there (Curator E), and the other to note that there are no subways in his city (Curator M). This points to the influence of the particular geographic location or scope of the collection curated as a factor for use of this, and other, labels.

Alongside rail transport vehicles such as trains and subways discussed below, walls are among the most commonly acknowledged supports for graffiti and street art. Only four curators commented on the walls label, Curators E, I, L, and M, and one of these to simply express the enjoyment of painting on this surface, yet this is obviously a popular label judging by the positive remarks and frequent use of the category. Curator C stated that the biggest galleries on his site are for pieces and walls. Curator E said that "the walls are the traditional 'canvas' for graffiti. They have the size & visibility that the graffiti artist wants. They're flat, easy, sometimes they have a nice texture. This is where most of the truly great work is done." Curator I added, "I don't care much about the surface used (it's almost all just walls anyway). Curator K manages a site specifically focused on stencils and said that "this list appears to be more graffiti-oriented and stencils are mostly on walls or sidewalks."

Nearly half of those interviewed commented on trains, freights, and subway cars as a group. Curator E affirmed their significance as surfaces: "These in my opinion are the 'realest' of all surfaces. Technically challenging & physically dangerous, never legal, mobile, traditional & often very long running." Curator M agreed, stating, "Obviously one of the original and most interesting formats of Graffiti. It also focuses almost entirely on illegal work, which is also often the more interesting. So a major category for organizing flicks." Curator J shared that these types of moving surfaces will used as descriptors above the styles applied to them, meaning that he would not separate out throw-ups and pieces on freights, for example, because the surface itself would be the category here that trumps the style. This relates again to the scope of the site in question. A site devoted to train graffiti might warrant more granularity to distinguish a larger collection of works on rail transport vehicles.

There were five curators (D, E, J, L, and M) who addressed subway cars as a surface, as opposed to the subways themselves. Curator A was the only one to suggest using subway stations as a support category. Three (F, J, and M) mentioned that they did not have subways in their city, and of these Curator M added that this made the label not as relevant on his site.

Curator E reiterated the historical significance of subway cars as a surface by stating that they are "[t]he original, the legendary, almost holy venue for graffiti art. A difficult, irregular surface with no absorbency placed in a very dangerous environment where life & limb are at risk."

Curator L noted that their site did not feature subway cars "[b]ecause of some ended cases by law enforcements and possible troubles ... "These comments highlight the value of images of work on subway cars, mostly from a historical perspective, but not a concerted effort by any of the curators interviewed to set aside space on their sites specifically for work on this surface.

The use of subway cars as a surface category is likely more important depending on the scope of the individual site, including any geographic focus that a site may have on an urban area with a subway system.

Comments about tunnels were similar to those regarding subways and subway cars. This type of organization is tied to the scope of the site and the geographic location featured, and whether they have tunnels for trains or subways. Only three curators spoke about the tunnels label, two (F and M) to say that they had few or no subways so the label was not relevant.

Curator E said that "Tunnels & overpasses are great spots, fairly safe (from the law), infrequently buffed and generally nice surfaces. A wealth of hidden artwork covers the hidden places of most cities."

Curators were asked whether they felt it was important to distinguish among trains, freights, and subway trains because the terminology regarding rail transport vehicles varied across the sites. All who responded to this question agreed that there are important differences. Works on passenger trains or subway cars, sometimes referred to as clean trains, are highest on the hierarchy of respect due to the high amount of risk and very limited time available to execute them. Freights are considered lower risk and easier to do, while scrap trains that sit in a yard out of service are lowest on the scale of respect. The confusion over terminology regarding rail vehicles mainly concerns the word train. A train can be a passenger train, a subway train, or a freight train. Using the finer distinctions of freights (sometimes called boxcars), passenger trains, and subways helps to set each type apart. An active train that carries people, as opposed to freight or things, remains the most dangerous and most respected of the modern rail transport supports for a graffiti writer.

Very few curators offered comments regarding the organization of works on other vehicles. Curator I mentioned the use of categories or tagging works for trains and vans, but did not think he used any other categories for vehicles. Curators E, F, and M shared opinions about creating works on vehicles, but did not address the use of a category specific to these kinds of supports. At least three curators, E, J, and M, regard works on billboards, signs, and rooftops as prestigious accomplishments in the "hard core" graffiti art community. Curator F from outside the U.S. noted that "there is a difference from writers in USA and here, here, we don't really care about billboards, they get changed quickly and nobody paints them." Graffiti art done on a highway sign would be the most challenging and therefore likely to garner the greatest respect from other writers, followed by billboards, lesser signs, and rooftops. The risk involved and the time required to complete a work were once again emphasized as a type of measure of the value of the image. Curator J from the western U.S. introduced the term Heavens, defining it as the "highest ranked illegal graffiti there is when people get on highway signs ... they either climbed over the bridge to get on that sign or they had to climb the pole, climb all the way up it and that's what we call Heavens. ... They did it probably in the middle of the night with semis flying under them ... so Heavens are definitely up there when it comes to graffiti credibility." This term may be regional as it was not encountered on any of the sites. Curator E, from California, said that "If you do billboards or heavens (freeway signs) you're fucking hard core. ... This is a deadly sport." This was the only other use of the term heavens encountered during the research.

Trash bins are regarded as the bottom of the graffiti hierarchy within the categories specifically discussed as surfaces for this research. Four curators commented on them, only one

showing any degree of interest in documenting them. Curator E commented that just because a trash bin is there, "someone will tag on it. Who cares? It's ugly & full of stinking refuse anyway." Curator F stated that they were not worth documenting because the surfaces were generally small, while Curator M stated the normally hasty and low-quality work commonly found on trash bins "was not a priority to document." Only one curator, J, admitted that some people might be fascinated by the variety of tags that can be found on them.

Blackbooks are recognized as important tools and records associated with the graffiti art movement, both by graffiti writers and more traditional art institutions. Curator E summed this up: "Blackbooks are probably 2nd only to subway cars in terms of the depth of tradition & importance. This is where styles are developed & plans are laid. This is where traditions are passed & where new writers are trained." Two curators, L and M, indicated that they did have an area for Blackbooks on their sites, but they were very selective in what works they would feature. Curator M "decided not to include this type of stuff on the website unless it was a well produced work by a notable writer or deceased writer." Curator L uses this label for organization to feature "selected pieces made in full scale, only. To show a piece from sketch to paint, and to keep the web site simple."

Curators suggested a few additions for support labels, including bus, train, and subway stations (Curator A only), airplanes, submarines, ships, private cars, motorcycles, legal industrial design objects (Curator F only), and specific materials such as glass, wood, brick, and iron (Curator H only). Curator D also suggested sculpture and stickers, but these are already part of the list included in the Types Facet section of the interview.

6.4.3 Types Facets Discussion

Curators were presented with a list of commonly found type labels from the 241 sites to solicit feedback on the usefulness of each. Interestingly, the first curator interviewed, Curator B, said "this is kind of a list that would be generated by an outsider." Said list, in contrast to this comment, was developed directly by looking at what was done by those arguably considered insiders: writers, crews, and aficionados that are organizing these works online, including Curator B. It is not certain whether Curator B understood that the list was generated by other graffiti website curators, or whether he was suggesting that other websites are not curated by graffiti art insiders. There was general agreement on the most popular types, such as graffiti, stencils, and murals, but some addressed the needs of their own sites and the scope of their collections as important considerations for their own organizational decisions. The influence of collection size and scope is a common theme throughout the interviews.

Curators B, I, K, and M expressed that they now use hashtags on works to make finer differentiations between types and to order works in non-mutually exclusive categories. This practice of hashtagging has developed organically as technologies have evolved to allow this type of ad-hoc organization over time. Curator M explained that his site was designed from the start to be simple because he was not sure that it would be successful and he did not want to invest the time to develop categories that were too granular for fear of overwhelming his early audience. The site also grew out of user submissions, which limits the amount of information that can be gathered while relying on inconsistent data provided by others. Now that this site is very successful and heavily visited, more categories have been developed as a critical mass of

images in various more granular categories has been gathered and the use of hashtagging has also increased.

Feedback on top-level categories focused on the difference between graffiti and street art. Curator E referred to this distinction as "a pretty hard division" that "seems to be blurring somewhat over time," while Curator G noted "a fundamental distinction between NY inspired graffiti and the rest of street art, and this should be two categories. This line is difficult to put but you should be able to organize in those two categories." Curator E added that "there is a bit of animosity here as many [graffiti] writers feel like they practice a far more difficult craft & get far less credit." Curator J associated lettering with graffiti and some political works with street art.

Curator J also felt a category for sketches was unnecessary, arguing that these would be in the Blackbooks category (discussed among the supports above) because "that's where they're going to be." Curator E suggested further granularity for the sketches category by adding pencil, ink, and full color distinctions. It is not known whether this curator would like to see these further divisions of the Sketch category, or if he is simply suggesting ways it could be subdivided if desired.

Only one curator commented on Characters, Curator J, but he made the distinction between works featuring realistic portraits of actual people and "cartoonish-looking graffiti" by introducing the term realistics. Realistics are described as painting the image of a real person, such as Martin Luther King, Jr. or an RIP piece of Tupac Shakur, in which the rendition is realistic

and not a cartoon illustration. No other curators commented regarding Characters as a category for organization.

Curators often spoke of stencils, stickers, wheatpaste, and posters in overlapping terms so they will be addressed together here. These types are often combined, such as a stencil appearing on a wheatpaste, sticker, or poster. Curator J shared that he grouped repetitive media such as stencils, wheatpaste, and stickers together. A stencil, once cut, can be used to repeat the same design over and over. Stickers and posters often are either stenciled or printed so they provide the same design sometimes hundreds or thousands of times over. Unless an artist makes an effort to include their name or other identifying information on a stencil design, sticker, wheatpaste, or poster, it can be very difficult to assign attribution information to these works. Curator K, whose site emphasizes stencil works, asserted the importance of including images of the stencil cutouts used to create the finished stencil works, stating "Many photographers do not include this and it is important to share knowledge and document the actual cut media." This is very likely not possible for most sites unless a curator is documenting his or her own stencil works. Curators did not give posters more than a passing mention, but they did suggest that stencils, stickers, and wheatpaste are all useful categories depending on the scope of a collection.

Curators did not comment often on letters or handstyles, only to mention that this type of label overlaps with others or it is not included in an effort to avoid very simple works such as bombing or throwups, "unless the writer was a particularly notable local writer (Curator M)." Curators only mentioned the categories of throwups, bombing, productions, and digital works to indicate that they were not used. Curator J specifically stated that he would not feature

digital or computer-generated works. Curator E, on the other hand, suggested near the end of the interview adding a category for digital typefaces and fonts, stating that "if blackbooks & light shows are graffiti then so are fonts." Curator H hinted at the acceptance of digital works by suggesting further categories for hacking, crypted, laboratory, futuristic, and contemporary. He did not further define what these labels mean.

Curator H referred to the category of Wildstyle as Freestyle and Curator J used the term Burners, but neither offered further information beyond the alternative names used for this label. Curator E suggested adding a category for New Wave, equating this with "wildstyles that really had no discernible letters even to the most trained eye." The action category was largely unacknowledged as well with only one comment by Curator E: "Graffiti lends itself to this much better than most visual art for sure. There is some resentment around the largely social media driven idea that everyone has to be a performance artist now. Personally I resist the urge to do this but I don't hate it or anything." Curator H was the only one to refer to Projections, suggesting to "make a group with light graffiti we could name 'Post Graffiti.'"

None of the curators discussed specific sub-types of train graffiti. These terms include Wholecars, End-to-ends, and Top-to-bottoms. It is not known whether this means they are not needed, or they generally are accepted ways to further distinguish train works. Only two curators discussed the political category, with seemingly different opinions. Curator H shared that "this is not a categorie [sic] for me but agree it can be. Maybe add 'brainless works' with it." This comment could be taken as supporting the use of the category or as sarcasm to suggest it is not useful. Curator K is in favor of such as category, specifically citing the use of hashtagging to note political works.

There are some groups on flikr, for example, that are solely for political work. I will tag my photos with "antigentrification" and "antifascist" and "anarchist" if the message is clearly stated. Clarion Alley here in San Francisco has very political messaging in their murals, as does Precita Eyes muralists (and their cohorts). There has been an "Evict [insert name]" tag in the City for about three years now, tagging "Evict [mayor] Ed Lee", "Evict Google" etc. Stencilist Eclair Bandersnatch has political themes in her work. So does Solis. I only have a major album for San Francisco protests, but I have many tags for political stencils.

This statement indicates the value of some type of organization, in this case hashtagging, to group political works, but it is evident that location and scope of the collection likely affect this value for any particular site.

The last question regarding the different labels used for types of art works solicited suggestions for additional categories. Four curators had nothing to add, but those that did are discussed here, starting with the most commonly mentioned. None of the category additions were suggested by more than two curators so there was no overwhelming response for the additional of any specific categories.

Curators D and E suggested a category for what can be called etching, scribing, or scratching. Both of these curators manage sites based in the western United States. They both felt this was distinct enough to warrant its own category. This type of work was originally coded for during the site analysis once the term was first encountered, but it did not repeat so the code (Scratchiti) was removed. Curators J and M mentioned body art as a possible category. This was included in the list of support codes during site analysis, but was not given as a category in the interviews as some rarely used categories were left out to simplify the interview

and not overwhelm participants with too many of the lesser details. Interestingly, body art was brought up independently of any prompt.

Only Curator J volunteered comments on the 3D (sculptural) type, but using a different meaning, as explained below. Curators D and E mentioned it at the end as possible additions, despite the fact that the category was listed in the interview. The term 3D was used to code three-dimensional works in the site analysis, but this term was qualified in the interviews with the word sculptural after it to distinguish this type of work from a three-dimensional writing style that is sometimes seen wherein a writer uses careful shadowing to make letters or images appear to jump off a flat surface. This style of writing was not used as a conceptual code as it was not encountered on the sites, though a careful image-level analysis might reveal its actual use. Curator J was obviously referring to this latter style of 3D writing and not to actual works in three dimensions. Curator E suggested adding a category for "sculptural," but it is unclear what exact conception is meant by this term. His only comment after suggesting this category was "there is such a thing."

Other suggestions for additions include "monikers or hobo monikers on a freight train" often done in grease pencil or chalk, regional styles, derivative styles passed down from writer to writer, non-art graffiti ("Bobby loves Susie, Skate or Die, Kilroy Was Here, KISS, ACDC"), gang graffiti, hacking/crypted/laboratory/futuristic/contemporary, and Post Graffiti (to include light graffiti or projections). Non-art graffiti appears to indicate graffiti tagging, which is already a code applied to the sites. The conceptual boundaries are undefined for many of these suggestions and there is likely overlap in meaning with each other and with previously introduced categories.

6.4.4 Location Facets Discussion

Curators addressed location information much more generally in the interview questions. Curators were asked for their opinions on providing location information, how granular or specific that information should be, and if whether they had any other suggestions for providing location information or organizing by location. In this way the questions were very open-ended, except when asked whether specific GPS coordinate data were valuable to add to the description of a work.

No one questioned the importance of providing location information for works, but rather the discussion centered on how specific this should be and how this specificity should be expressed. The scope of an individual site is a consideration, as Curator A suggested that a site with a local focus would probably benefit from greater precision in location than one that covers an entire country or the globe. The issue of legality also arose, wherein a few curators reiterated the courtesy involved in not divulging the exact location of illegal works if there was any concern for police prosecution of a writer (Curators B, D, E, I, and L). Curator B is against very specific location information, stating "Specific location is frowned upon. Comes close to snitching as cops will assemble a folder on a suspect to qualify a warrant for arrest (and later prosecution) and this just makes it easy." These considerations are understandably complex and depend largely on the judgment of the one posting the images. Curator B frowns on the idea of having a tourist-style map to guide people to specific works, while Curator I considers this a good idea for those who want to see works in person and who can travel to them.

disappearance of works that could make such a map extremely unreliable and ultimately disappointing beyond as a historical reference.

After considering the scope of a site, such as how local the collection of works, the specificity can be decided upon. Obviously, sites with a broader geographic scope will have need for a greater number of top level categories, usually countries. The most commonly mentioned geographic category suggested by the curators is the name of the city. Again, if the site focuses on a very local collection, such as from one city, the name of the city will be useless, requiring more granularity. Curator I mentioned categorizing by known Halls of Fame, or HoFs. These are areas usually with a lot of wall space that are popular, often tolerated, semilegal or legal, places to paint. Writers recognize them within their respective communities as a space to create and often the work of some of the best, most talented, and most respected writers can be seen there. Curator I stated that once a critical mass of images was gathered from a particular HoF, he would create a category for that location.

Curators spoke of the link between graffiti and travel, not only of interest for those who wish to see works in person, but for artists and writers who want to see what the graffiti scene looks like in another place and possibly to plan where they would like to create work themselves. Styles are historically tied to locations, such as specific parts of the United States like New York and Los Angeles. Curator M talked about the homogenizing effect the Internet has had on current styles, rendering them less tied to place than in the past, adding

... I am of an older generation that was around when graffiti was still very 'scene' dependent, and the city where something was from, was very relevant to the work. Nowadays I could understand that people just want to see pictures of good artwork, and don't care where its [sic] from, and I can understand the objective appeal of this. But I

still find the original graffiti forms and traditions to be what gives the artwork a lot of meaning, and the city it was done in to be important for context.

Ultimately there was no general agreement on how specific geographic location should be expressed beyond including at the very least the name of the city for a work, and more specific for a locally-focused collection, such as a neighborhood or even a spot on a GPS-enabled map. GPS coordinates are easy to use, often built into smartphone camera applications and digital SLR cameras alike, so it can be easy to precisely locate a work and provide access to a range of works using a simple GoogleMaps interface, as on several sites within this research. There are advantages and disadvantages to this technology regarding graffiti art and street art, most specifically when providing the location of an illegally produced work would aid in an artist's prosecution. For these reasons, curators were asked to speak to the use of GPS coordinates in connection with works online.

Seven out of 13 curators stated that specific GPS coordinates were very important or useful. Curator J qualified this by adding that it was more important in a collection focused on a smaller place, such as one city. Curator D said that it is very good to have this information, but it should not be shared when it was obvious that the work was done illegally. Personal judgment is required to decide whether a work could get an artist or writer in serious trouble and in this case the added information should not be shared. Curator I shared that when traveling it was very useful to have geotagged works to visit in a destination city so they could be viewed in person. Geo-locating works can be very useful when considering future research on historical and political movements reflected in works over time and space. Curator M, in favor of GPS tagging, stated, "I think this is fine and useful. Though I know many writers would think this is

too technical of information to include with an artwork, but effectively it is the same as saying 'the Burger King on 8th st.'" Again, this would make sense to a local collection and demonstrates a similar specificity.

Three curators, B, C, E, are against using GPS coordinates to specifically locate works. Curators B, C, D, and E brought up the issue of law enforcement using this information to prosecute writers. Curator G simply stated a lack of interest because of the site's focus on historical works that no longer in exist. Those interviewed generally acknowledged the benefits of GPS technology, but again were not in agreement on its use. Careful judgement on the ramifications of geo-tagging works is in order, depending on the scope of the collection and the attitudes of individual curators. The more obviously illegal the works, the less acceptable the technology seems to be to curators, while street art works by their very nature and association with more socially acceptable and legal artistic production can be geotagged without the same careful consideration.

6.5 Summary of Interviews

There were several factors that influence the differences of opinion among curators.

The most obvious of this is the scope of the individual site. Focusing on train graffiti, for example, will obviate the need for more granularity in categories to describe types of works on trains that might be unnecessary in another collection. This is applicable to location specificity, supports, and type facets as well. Unlike the site analysis, commercial motivation did not arise as a common factor in deciding upon organization labels, though curators occasionally discussed commercial design work.

The interviews were qualitatively designed for explanatory power, so it is important to recognize that the views expressed are not representative of the population of curators. The preferred use of email for the interview itself is limiting. It is likely that offering the interview by email allowed for more individual responses because this affords participants control over the process, the time involved, and the effort expended. It may also be easier for some participants for whom English is not their native language. Using email limits the exchange of information by cutting off the ability of the researcher to follow-up in real time to questions, to elicit further information, or to receive clarification. A few curators were asked for additional information, but this was much more easily obtained during the two interviews conducted in real time via phone and Skype than it was for the email participants.

The curators focused on graffiti as opposed to street art, which is not in and of itself a bad thing, but it is acknowledged. As previously stated, there is a very hard to define difference between the two art forms, but after analyzing the sites and conducting the interviews, there is a relationship arising in the data that points toward an internal motivation associated with graffiti art and an external motivation associated with street art. This association would benefit from further research and may lead to more nuanced study of organization on internally and externally motivated sites.

The interview participants were ultimately a source of rich information. They represent those who are carrying out the work of description and organization of graffiti art and street art images online. Their collective knowledge of the art form, its history and development, styles, methods, and the attitudes toward it, coupled with an awareness of their audiences that goes

beyond what an outside observer could ascertain by viewing the sites combine to make their opinions on terminology and organization of collections extremely valuable for this research.

Chapter 7: Summary and Conclusions

The purpose of this research was to contribute to the forms of knowledge organization required by the process of documentation and sharing of street art. Specifically, this research is an examination of how website curators are carrying out this process, with particular attention paid to the textual information associated with photographs of the artwork in online, non-institutional collections, the methods being used to document the street artworks, and the organizational practices of collectors that serve to make the collections available to users.

Operating on the belief that street art is valuable historically, artistically, and culturally, and realizing that numerous websites exist that are devoted to documenting and sharing street art, this study represents a first step toward determining the structure of the domain of online street art collections.

A set of 241 street art and graffiti art websites were examined. A total of 107 codes were applied to the site data from within six categories. Two of these categories relate to aspects of the sites in general and four of these categories relate to the works collected on the sites, which are the photographic images of graffiti art and street art. Text on the sites that was coded as "about" information was harvested, analyzed, and qualitatively coded for purpose or motivation, audience, organization, and art style language. After all coding of the sites was completed, an attempt was made to contact the owners or administrators of the sites to request an interview. Interview requests were sent to 212 of these owners or administrators, referred to as curators. Of these 212 interview invitations, 35 were unsuccessful as noted by server errors, returned email errors, or other electronic failure to reach their intended

destination. Thirty-nine curators initially responded favorably to the invitations and were emailed the interview questions. Thirteen interviews were conducted successfully, eleven by email, one by phone, and one by Skype. These three sets of data serve as the material examined within this research.

7.1 Results

Results of site analyses indicate the occurrence of several facets of organization for collections of street art and graffiti art online. The most commonly encountered information about the sites themselves is contact and about information. The most popular uses of other media offered on the sites are lists of links to other sites and blogs associated with the original sites. When a site has other associated social media accounts, these are most often Facebook, Instagram, Twitter, and Flickr in descending order of popularity.

Information that relates to the organization of images is grouped into four facets for general, supports, types, and location information. By far the most commonly used descriptive facet for works encountered in the research is the name of the artist or crew, though each name was coded individually, which inflates this representation. Accounting for which descriptive work facets occurred most frequently without repetition are the Canvas, Walls, and Trains supports codes and the Sketches and Graffiti types codes. Location information is most common at the City level, followed by the Country.

7.2 Size of the Collection, Scope, Motivation

Three influences likely have impact on the organizational practices encountered on the sites. These are the size of the collection, the scope of the collection, and the motivation of the

curators. The size of individual collections was not determined quantitatively as this was not possible within the scope of this research. Some sites list how many photos are in their collections, but it is not known how accurate or up to date this information is. Therefore, a determination of size of collection is based upon qualitative examination of the sites. Some are obviously much smaller than others and some are obviously quite large. The relative size of a collection and the scope of a collection are intrinsically tied to the granularity of descriptive facets employed by curators. This makes sense and was expected as it is encountered commonly in bibliographic collections such as those found in libraries and archives. The more materials, the greater need for discrimination in classification and subject headings for those materials. Some smaller collections with narrow focus, such as a site that features train graffiti only, will also have a need for more granularity to distinguish among works on one like support, and to avoid having only one relatively large group of works for a user to browse. Some sites, usually older ones that are no longer active, do present all works together without more granularity than galleries numbered by pages or by years.

More than one curator during the interviews mentioned that they had started their collection and their organizational scheme to be very simple in the beginning, adding categories as the collection grew. Growth of a collection could occur rapidly, especially in successful sites that solicit user submissions of works. This presented inherent problems when the growth outpaced the ability of curators to keep up with site design, especially with long-lived sites such as Art Crimes, developed before today's relational databases that can be categorized much more easily than older, more simple ones. The use of hashtagging has also greatly expanded the ability of curators to add and group images as needed, though only two curators mentioned

consistency in the use of hashtagging terms as a stated goal. Several sites displayed such inconsistency in hashtagging, but this was not a focus of this study.

After analyzing about information when supplied across the sites, it became apparent that there are two basic types of motivation for posting collections of graffiti art and street art online. These two motivations were coded as internal and external. An internally motivated site is compiled by, and largely for, the interests of an individual artist or crew and promotes their work and skills. It is often used as a portfolio to attract attention for the artist or crew and to garner future commissioned work or gallery representation. An externally motivated site is usually compiled to share works by a variety of artists and crews for pleasure, education, and historical record. There may be items for sale to benefit the site curators, but these are not the primary motivation of the site and can be seen to support the maintenance of the site itself. Externally motivated sites tend to use fewer descriptive terms to represent the style of work featured on them in comparison with internally motivated sites, which likely benefit from a broader range of style terms to attract interest in a broader skill set. The term graffiti is more often used as an overall style descriptor on externally motivated sites. This may be associated with a desire by working commercial artists to distance themselves from activities perceived by possible future clients as illegal.

There are several similarities between what curators do on their sites and what they say is important, and what art museums do when documenting artworks for their visitors. There are also some notable differences. One will often see a standard descriptive label for an artwork in an art museum that includes the name of the creator and the year that the work was created. A title for the work is also usually included as well as the medium of the work. Often

the city where the work was created is included, if known, as well as the size of the work. In this study, curators most often included the name of the creator of the work, the year, and the city where the work was created. Medium is sometimes indicated by the grouping of works in this study, but this varies greatly.

Most notable is the absence of size information in this study, though this is not a strict comparison as art museums do not organize works in general by size either. Works are usually grouped in art museums by artist, by style, by medium, or by recognized art movements. In this way, the organization of art museums is very similar to what was seen in this research. Further analysis at the image level will be valuable to consider such comparisons between works on the sites and traditional works in art museums.

There are many similarities noted across all the sites in this study. This is interesting because the sites are located all around the world and the curators are not using any formal controlled vocabulary or recommended guidelines to organize the works they feature. This study has demonstrated the importance of knowing the artist's or crew's name responsible for the work, when and where the work was completed, as specifically as possible while being sensitive to the legal ramifications of this information, and ultimately providing the best possible image of the work itself.

7.3 Limitations

Textual grouping mechanisms for the organization of works were the focus of this study and as such limit the information gathered for analysis. Further conceptual clarification of supports and styles information, for example, could be gained by taking analysis to the

individual image-level. There may be more overlap or distinction revealed at this level for terminologies used to describe works. Further distinctions could also be made between site architecture and hashtagging, when used, as grouping techniques and how each affects the granularity seen on the sites.

The use of email for eleven out of the thirteen interviews can also be seen as a limitation. As previously stated, the use of email inhibited the ability of the researcher to ask follow-up questions and receive clarification from curators regarding the use of categories to organize works. Some curators simply responded that they used or did not use a category, but did not offer reasons why. The interviews asked for additions to terminology in each of the four work categories, but without synchronous interviews, it was difficult to determine whether these suggested additions were simply thoughts on how a category could be further divided or useful terms that should be used. Most of the suggested additions were never seen in actual use on the sites and therefore do not seem warranted. Additional interviews by phone, Skype, or in person would help to clarify these important issues and will be a focus of future exploration.

The findings are largely qualitative in nature and not generalizable to all photographic collections of street art and graffiti art. The lack of agreement on exactly what separates graffiti art from street art continues to be an issue in regard to how these works are organized and will likely play a needed part in any future examination of this topic. The nature of collections often based on user submissions and what data is provided along with these submissions also affects the ability of curators to organize works as efficiently and consistently as possible.

7.4 Future Research

There are several areas that will be fruitful for future research. One of the largest of these and most complex is the analysis that could take place at the individual image level. There is often metadata or other descriptive information provided at this level that could be analyzed to gain a more precise understanding of how images are described, how much context is given within an image, and what terminology is used. This is more granular than the collection-level analysis applied herein and can be a rich source of further information, especially focusing on the super sites from this study. Related to image-level analysis is the use of hashtagging for post-hoc grouping. What types of hashtags are applied, how consistently are they applied, and who is providing them – the curators or the users or both? In this way the possibility of following or archiving the works of individual artists or crews, locations, or styles could be explored as well.

These areas of further research can also be applied to specific social media platforms. Of the most commonly associated platforms, Instagram and Flickr are particularly rich sources of information because they are image-based and both rely on hashtagging for description as well as text. This is once again a complex area for research as hashtagging on these platforms goes beyond description to the use of specific tags to garner attention from groups and galleries. Further understanding of motivations and platform-specific architectures would be warranted, along with the technical expertise to harvest data automatically with APIs or other available software in face of the enormous amounts of data that could be gathered and analyzed.

7.5 Contribution of this Study to KO Research

This study has contributed important knowledge regarding how the street art and graffiti art community approaches the organization and presentation of artworks online.

Members of this community share terminology that is specific to graffiti art and street art and they organize collections using methods that are allied with the way they talk about the works. The legal complications associated with the creation of some of these artworks, as well as the desire to protect working artists from prosecution, are shared concerns among curators that impact how the works are shared. This is an important finding related to this community and this artistic movement that sets it apart from the traditional art world. Such issues have impact on the data collected and shared in relation to works and can also impact effect the future study of the works and the history of the movement.

This research has revealed the existence of a domain of street art and graffiti art documentation, evidenced by the ontology revealed in the four work-related facets used for organization. These include the mutual semantic content of the general, supports, types, and location facets. This ontology can be used to inform the design of KOSs to support documentation of street art and graffiti art in the future. It can also be compared or combined with current systems for art documentation, such as Gottlieb's classification system for graffiti art styles (2008), the Getty vocabularies and tools, and elements of commonly used metadata standards such as the Dublin Core, and VRA Core.

7.6 Conclusion

The goals of this study were to examine how works of street art and graffiti art are being documented online to expose the organizational practices and terminology used by gallery curators. This study was introduced as an important step toward determining the structure of the domain of online street art collections from a non-institutional point of view. The research has succeeded in presenting an overview of how such collections are organized. The specific terminologies used to describe these types of works have been revealed in detail, as well as some of the reasons given for their use by a set of site curators.

Motivations, size of the collections, and stated collection scope have been shown to play a part in how sites are organized and the vocabulary chosen to represent art styles. The research revealed the existence of a set of sites, herein referred to as super sites, that are very well developed and current examples of granular organization that warrant further study. This research serves as a successful summary of the current state of graffiti art and street art collections online and as such is a valuable addition to the literature discussing such art styles, motivations for documentation, and terminology favored by those within the communities carrying out the creation of work as well as the process of organizing the collections.

REFERENCES

- 50mm Los Angeles (webpage). N.d. Accessed May 19, 2017: http://www.50mmlosangeles.com
- "Gallery." 2006. 50mm Los Angeles. Accessed May 19, 2017: http://www.50mmlosangeles.com/gallery.php
- Albrechtsen, Hanne, Annelise Mark Pejtersen, and Bryan Cleal. 2002. Empirical work analysis of collaborative film indexing. In *Emerging frameworks and methods: Proceedings of the Fourth International Conference on Conceptions of Library and Information Science*, edited by Harry Bruce, Raya Fidel, Peter Ingwersen, and Pertti Vakkari, 85-108. Greenwood Village, CO: Libraries Unlimited.
- Alpaslan, Zeynep. 2012. "Is street art a crime? An attempt at examining street art using criminology." *Advances in Applied Sociology* 2 (1): 53-58.
- Anderson, Benedict. 2006. *Imagined communities: Reflections on the origin and spread of nationalism*. Rev. ed. London: Verso.
- Armstrong, Justin. 2005. The contested gallery: Street art, ethnography and the search for urban understandings. *AmeriQuests* 2 (1). DOI: 10.15695/amqst.v2i1.46. Available: http://ejournals.library.vanderbilt.edu/ojs/index.php/ameriquests/article/view/46
- "About Art Crimes." 2015. Accessed May 18, 2017: https://www.graffiti.org/index/story.html
 Art Crimes (website). 2017. www.graffiti.org.
- Austin, Joe. 2001. *Taking the train: How graffiti art became an urban crisis in New York City.*New York: Columbia University Press.
- Austin, Joe. 2010. "More to see than a canvas in a white cube: For an art in the streets." *City* 14 (1/2): 32-47.
- Austin, Joe. 2013. "Academics don't write: A few brief scribblings and some questions."

 Rhizomes: Cultural Studies in Emerging Knowledge 25. Accessed February 2, 2017:
 http://www.rhizomes.net/issue25/austin.html
- Baca, Judith. 1995. "Whose monument where? Public art in a many-cultured society." In Mapping the terrain, new genre public art, edited by Suzanne Lacy, 131-38. Seattle: Bay Press. Available: http://www.csus.edu/indiv/o/obriene/art7/readings/JudyBaca.htm
- Baudrillard, Jean. 1999. "Photographies: For illusion isn't the opposite of reality ..." In *Jean Baudrillard: Fotografien, photographies, photographs, 1985-1998,* edited by Peter Weibel. Ostfildern-Ruit, Germany: Hatje Cantz. Available:

 http://www.egs.edu/faculty/jean-baudrillard/articles/photographies/

- Beaudoin, Joan and Elaine Ménard. 2015. "Objects of human desire: The organization of pornographic videos on free websites." *Knowledge Organization* 42 (2): 90-101.
- Becker, Howard S. 2008. Art worlds. Berkeley, CA: University of California Press.
- Benedetti, Joan M. 2000. "Words, words: Folk art terminology-why it (still) matters." *Art Documentation* 19 (1): 14-21.
- Bengsten, Peter. 2014. *The Street Art World*. Lund, Sweden: Peter Bengtsen and Almendros de Granada Press.
- Benjamin, Walter. 1939, 1992. "The work of art in the age of mechanical reproduction." In *Art in modern culture: An anthology of critical texts*, edited by Francis Frascina and Jonathan Harris, 297-307. New York: Icon Editions, Harper Collins. Available:

 http://faculty.winthrop.edu/stockk/contemporary%20art/benjamin%20mechanical%20reproduction.pdf
- Bowen, Tracey E. 1999. "Graffiti art: A contemporary study of Toronto artists." *Studies in Art Education* 41 (1): 22-39.
- Bruce, Caitlin. 2014. "Transitional art, transnational murmurs: Post-revolutionary urban street art." PhD diss., Northwestern University.
- Burns, Edgar. 2010. "Developing email interview practices in qualitative research." *Sociological Research Online* 15 (4). Available: http://www.socresonline.org.uk/15/4/8.html
- Cairns, Susan. 2013. "Mutualizing museum knowledge: Folksonomies and the changing shape of expertise." *Curator: The Museum Journal* 56 (1): 107-19.
- Cameron, Fiona. 2007. "Beyond the cult of the replicant: Museums and historical digital objects Traditional concerns, new discourses." In *Theorizing digital cultural heritage: A critical discourse*, edited by Fiona Cameron and Sarah Kenderdine, 49-75. Cambridge, MA: MIT Press.
- Castleman, Craig. 1982. Getting up: Subway graffiti in New York. Cambridge: MIT Press.
- Chang, Hsia-Ching, and Hemalata Iyer. 2012. "Trends in Twitter hashtag applications: Design features for value-added dimensions to future library catalogues." *Library Trends* 61 (1): 248-58.
- Chang, Jeff. 2007. Can't Stop, Won't Stop: A History of the Hip-Hop Generation. New York: St. Martin's Press.
- Cohen, Anthony P. 1985. *The symbolic construction of community*. Chichester, UK: Ellis Horwood.

- Cowick, Carmen. 2015. "Preserving street art: Uncovering the challenges and obstacles." *Art Documentation: Journal of the Art Libraries Society of North America* 34 (spring 2015): 29-44.
- Cox, Andrew M., Paul Clough, and J. Marlow. 2008. Flickr: A first look at user behaviour in the context of photography as serious leisure. *IR: Information Research* 13 (1). Available: http://www.informationr.net/ir/13-1/paper336.html
- Creswell, John W. 2014. *Research design: Qualitative, quantitative, and mixed methods approaches.* Los Angeles: Sage.
- Cresswell, Tim. 1992. "The crucial 'where' of graffiti: A geographical analysis of reactions to graffiti in New York." *Environment and Planning D: Society and Space* 10 (3): 329-44.
- Daichendt, G. James. 2013. "Artist-driven initiatives for art education: What we can learn from street art." *Art Education* (September): 6-12.
- Dallas, Costis. 2016. "Digital curation beyond the "wild frontier": A pragmatic approach." *Archival Science* 16: 421-57.
- Danto, Arthur C. 1981. *The transfiguration of the commonplace: A philosophy of art*. Cambridge: Harvard University Press.
- DeNotto, Michael. 2014. "Street art and graffiti: Resources for online study." *C&RL News* April: 208-11.
- Dickens, Luke. 2008. "Finders keepers': Performing the street, the gallery and the spaces inbetween." *Liminalities: A Journal of Performance Studies* 4 (1): 1-30. Available: http://liminalities.net/4-1/finderskeepers.htm.
- Durkheim, Emile. 1984. The division of labour in society. London: Macmillan.
- Felisbret, Eric, and Luke Felisbret. 2009. Graffiti New York. New York: Abrams.
- Ferrell, Jeff. 1993. *Crimes of style: Urban graffiti and the politics of criminality*. New York: Garland.
- Flinn, Andrew. 2007. "Community histories, community archives: Some opportunities and challenges." *Journal of the Society of Archivists* 28 (2): 151-76.
- Flinn, Andrew, Mary Stevens, and Elizabeth Shepherd. 2009. "Whose memories, whose archives? Independent community archives, autonomy and the mainstream." *Archival Science* 9: 71-86.
- Forster, Alan M., Samantha Vettese-Forster, and John Borland. 2012. "Evaluating the cultural significance of historic graffiti." *Structural Survey* 30 (1): 43-64.

- Getty Research Institute. 2015. "Union List of Artist Names Online." Available: http://www.getty.edu/research/tools/vocabularies/ulan/
- Gottlieb, Lisa. 2008. *Graffiti art styles: A classification system and theoretical analysis.* Jefferson, NC: McFarland & Company, Inc.
- Graf, Ann M. 2016. "Describing an Outsider Art Movement from Within: The AAT and Graffiti Art." In Chaves, Guimarães, José Augusto, Suellen Oliveira Milani, and Vera Dodebei, eds. Knowledge Organization for a Sustainable World: Challenges and Perspectives for Cultural, Scientific, and Technological Sharing in a Connected Society. Proceedings of the Fourteenth International ISKO Conference 27-29 September 2016 Rio de Janeiro, Brazil. Würzburg: Ergon, 125-32.
- Graves-Brown, Paul, and John Schofield. 2011. "The filth and the fury: 6 Denmark Street (London) and the Sex Pistols." *Antiquity* 85: 1385-1401.
- Hagen, Carol A., Morten G. Ender, Kathleen A. Tiemann, and Clifford O. Hagen, Jr. 1999. Graffiti on the Great Plains: A social reaction to the Red River Valley flood of 1997. *Applied Behavioral Science Review* 7 (2): 145-58.
- Hansson, Joacim. 2013. "The materiality of knowledge organization: Epistemology, metaphors and society." *Knowledge Organization* 40 (6): 384-91.
- Harpring, Patricia. 1999. "Resistance is futile: (1) Inescapable networked information made accessible using the Getty vocabularies." In *Proceedings of the American Society for Information Science (ASIS) annual meeting* 62: 833-47.
- Hartel, Jenna. 2007. "Information resources, activities, and spaces in the hobby of gourmet cooking." PhD diss., University of California, Los Angeles.
- Hartel, Jenna K. 2010. "Leisure and hobby information and its user." *Encyclopedia of Library and Information Sciences*. Available: http://works.bepress.com/jenna_hartel/6/
- Hjørland, Birger. 1998. "Theory and metatheory of information science: A new interpretation." Journal of Documentation 54 (5): 606-21.
- Hjorland, Birger. 2002. "Domain analysis in information science: Eleven approaches traditional as well as innovative." *Journal of Documentation* 58 (4): 422-62.
- Hjørland, Birger. 2003. "Fundamentals of Knowledge Organization." *Knowledge Organization* 30 (2): 87-111.
- Hjørland, Birger. 2013. "User-based and cognitive approaches to knowledge organization: A theoretical analysis of the research literature." *Knowledge Organization* 40 (1): 11-27.

- Hjørland, Birger and Hanne Albrechtsen. 1995. "Toward a new horizon in information science: Domain-analysis." *Journal of the American Society for Information Science* 46 (6): 400-25.
- Hundertmark, Christian (C100). 2003. The art of rebellion. Corte Madera, CA: Gingko Press.
- Iveson, Kurt. 2010. "The wars on graffiti and the new military urbanism." City 14 (1/2): 115-34.
- The J. Paul Getty Trust. 2015. *The Art & Architecture Thesaurus Online*. [http://www.getty.edu/research/tools/vocabularies/aat/index.html]. Accessed May 18, 2016.
- Jacob, Elin K. 2003. "Ontologies and the Semantic Web." *Bulletin of the American Society for Information Science and Technology* (April/May): 19-22.
- Kavoura, Androniki. 2014. "Social media, online imagined communities and communication research." *Library Review* 63, no. 6/7: 490-504.
- Kipp, Margaret E.I., and D. Grant Campbell. 2006. "Patterns and inconsistencies in collaborative tagging practices: An examination of tagging practices." Annual General Meeting of the American Society for Information Science and Technology, Austin, TX, USA, November 3-8, 2006.
- Kipp, Margaret E. I., Jihee Beak, and Inkyung Choi. 2017. "Motivations and intentions of Flickr users in enriching Flick records for Library of Congress Photos." *Journal of the Association for Information Science and Technology* 68 (10): 2364-79.
- Konkova, Elena, Ayşe Göker, Richard Butterworth, and Andrew MacFarlane. 2014. "Social tagging: Exploring the image, the tags, and the game." *Knowledge Organization* 41 (1): 57-65.
- La Barre, Kathryn. 2006. "The Use of faceted analytico-synthetic theory as revealed in the practice of website construction and design." PhD diss. Indiana University.
- Lachmann, Richard. 1988. "Graffiti as career and ideology." *American Journal of Sociology* 94 (2): 229-50.
- Lasley, James R. 1995. "New writing on the wall: Exploring the middle-class graffiti writing subculture." *Deviant Behavior: An Interdisciplinary Journal* 16: 151-67.
- Lee, Charlotte P., and Ciaran B. Trace. 2009. "The role of information in a community of hobbyist collectors." *Journal of the American Society for Information Science and Technology* 60 (3): 621-37.
- Levy, David M. 2000. "Where's Waldo? Reflections on copies and authenticity in a digital environment." In *Authenticity in a digital environment*, 24-31. Washington, D.C.: Council on Library and Information Resources.

- Loeffler, Silvia. 2012. "Urban warriors." Irish Arts Review 29 (1): 70-75.
- Lydiate, Henry. 2010. "Street legal." Art Monthly 336: 41.
- Lynch, Clifford. 2000. "Authenticity and integrity in the digital environment: An exploratory analysis of the central role of trust." In *Authenticity in a digital environment*, 32-50. Washington, D.C.: Council on Library and Information Resources.
- Ma, Lai. 2015. "A sign on a tree: A case for 'public knowledge." Library Trends 63 (3): 528-39.
- Macdonald, Nancy. 2001. *The graffiti subculture: Youth, masculinity and identity in London and New York*. New York: Palgrave.
- MacDowell, Lachlan. 2015. "Graffiti, street art and theories of stigmergy." In *The uses of art in public space*, edited by Julia Lossau and Quentin Stevens. New York: Routledge, 33-48.
- Mai, Jens-Erik. 1999. "A postmodern theory of knowledge organization." In *Knowledge: Creation, organization and use.* Proceedings of the ASIS Annual Meeting, 36: 547-56.
- Mai, Jens-Erik. 2008. "Actors, domains, and constraints in the design and construction of controlled vocabularies." *Knowledge Organization* 35 (1): 16-29.
- Mai, Jens-Erik. 2011. "The modernity of classification." *Journal of Documentation* 67 (4): 710-30.
- Margree, Paul, Andrew MacFarlane, Ludovica Price, and Lyn Robinson. 2014. "Information behaviour of music record collectors." *IR: Information Research* 19 (4). Available: http://www.informationr.net/ir/19-4/paper652.html#.WOfnKtlrLic
- Masilamani, Rachel. 2008. "Documenting illegal art: Collaborative software, online environments and New York City's 1970s and 1980s graffiti art movement." *Art Documentation* 27 (2): 4-14.
- McAuliffe, Cameron. 2012. "Graffiti or street art? Negotiating the moral geographies of the creative city." *Journal of Urban Affairs* 34 (2): 189-206.
- McMillan, David W., and David M. Chavis. 1986. "Sense of community: A definition and theory." Journal of Community Psychology 14: 6-23.
- McTavish, Jill. 2015. "Everyday life classification practices and technologies: Applying domain-analysis to lay understandings of food, health, and eating." *Journal of Documentation* 71 (5): 957-75.
- Merrill, Samuel. 2015. Keeping it real? Subcultural graffiti, street art, heritage and Authenticity. *International Journal of Heritage Studies* 21 (4): 369-89.
- Mieszkowski, Jan. 2010. "The writing is on the wall." Postmodern Culture 21 (1).

- Obst, Patricia, Lucy Zinkiewicz, and Sandy G. Smith. 2002. "Sense of community in science fiction fandom, part 1: Understanding sense of community in an international community of interest. *Journal of Community Psychology* 30 (1): 87-103.
- Olberg, Steven T. 2011. "Political graffiti on the West Bank wall in Israel/Palestine." PhD diss., University of St. Thomas (Minnesota).
- O'Neill, Claire. 2010. Going Postal: Mail Stickers as Street Art. *The Picture Show: Photo Stories from NPR*. National Public Radio.

 https://www.npr.org/sections/pictureshow/2010/11/23/131550749/goingpostal.

 Accessed February 17, 2018.
- Panofsky, Erwin. 1939. *Studies in iconology: Humanistic themes in the art of the Renaissance.*New York: Oxford University Press.
- Phillips, Julie Dawn. 2002. "Gran Fury and the politics of AIDS: The rhetoric of visual argument in the gay and lesbian rights movement." PhD diss., Purdue University.
- Randazzo, Gabe, and Lisa Lajevic. 2013. "Cleaning our world through reverse graffiti." *Art Education* 66 (5): 39-45.
- Ratislavová, Kateřina, and Jakub Ratislav. 2014. "Asynchronous email interview as a qualitative research method in the humanities." *Human Affairs* 24: 452-60.
- Rheingold, Howard. 2000. *The virtual community: Homesteading on the electronic frontier*. Cambridge, MA: MIT Press.
- Riggle, Nicholas Alden. 2010. "Street art: The transfiguration of the commonplaces." *Journal of Aesthetics & Art Criticism* 68 (3): 243-57.
- Ross, Jeffrey Ian. 2016. Routledge handbook of graffiti and street art. New York: Routledge.
- Saussure, Ferdinand de. 1986. Course in general linguistics. Chicago: Open Court.
- Shatford, Sara. 1986. "Analyzing the subject of a picture: A theoretical approach." *Cataloging & Classification Quarterly* 6 (3): 39-62.
- Shatford-Layne, Sara. 2002. "Subject access to art images." In *Introduction to art image access:*Issues, tools, standards, strategies, edited by Murtha Baca, 1-19. Los Angeles: Getty
 Research Institute.
- Skov, Mette. 2013. "Hobby-related information-seeking behaviour of highly dedicated online museum visitors." *IR: Information Research* 18 (4).
- Smiraglia, Richard P. 2011. "Domain coherence within knowledge organization: People, interacting theoretically, across geopolitical and cultural boundaries." In *Exploring Interactions of People, Places and Information: Proceedings of the Annual Conference of*

- *CAIS 2011*, edited by Pam McKenzie, Catherine Johnson, and Sarah Stevenson. Available: www.cais-acsi.ca/ojs/index.php/cais/article/view/310/63
- Smiraglia, Richard P. 2012. "Epistemology of domain analysis." In *Cultural frames of knowledge*, edited by Richard P. Smiraglia and Hur-Li Lee, 111-24. Würzburg: Ergon Verlag.
- Smiraglia, Richard P. 2014. The elements of knowledge organization. Cham: Springer.
- Smiraglia, Richard P. 2015. *Domain analysis for knowledge organization: Tools for ontology extraction*. Waltham, MA: Chandos.
- Smiraglia, Richard P., and Lee, Hur-Li, eds. 2012. *Cultural frames of knowledge*. Würzburg: Ergon Verlag.
- Snyder, Gregory J. 2009. *Graffiti lives: Beyond the tag in New York's urban underground.* New York: New York University.
- Snyder, Gregory J. 2016. "Graffiti and the subculture career." In Ross, Jeffrey Ian, ed. *Routledge handbook of graffiti and street art.* New York: Routledge, 204-13.
- Srinivasan, Ramesh, and Jeffrey Huang. 2005. "Fluid ontologies for digital museums." International Journal of Digital Librarianship 5: 193-204.
- Stebbins, Robert A. 1994. "The liberal arts hobbies: A neglected subset of serious leisure." *Society and Leisure* 17 (1): 173-86.
- Stemler, Steve. 2001. "An overview of content analysis." *Practical Assessment, Research & Evaluation* 7 (17). Available: http://PAREonline.net/getvn.asp?v=7&n=17
- Terras, Melissa. 2010. "Digital curiosities: Research creation via amateur digitization." *Literary* and *Linguistic Computing* 25 (4): 425-38.
- Terras, Melissa. 2011. "The Digital Wunderkammer: Flickr as a Platform for Amateur Cultural and Heritage Content." *Library Trends* 59 (4): 686-706.
- Trant, Jennifer. 2008. "Studying social tagging and folksonomy: A review and framework."

 Journal of Digital Information Special issue on digital libraries and user-created content.
- Trant, Jennifer. 2009. "Tagging, folksonomy and art museums: Early experiments and ongoing research." *Journal of Digital Information* 10 (1).
- Valesi, Marco. 2014. "Clean wall, voiceless people: Exploring socio-identitarian processes through street-urban art as literature." PhD diss., University of California, Merced.
- Visconti, Luca M., John F. Sherry Jr., Stefania Borghini, and Laurel Anderson. 2010. "Street art, sweet art? Reclaiming the 'public' in public place." *Journal of Consumer Research* 37 (3): 511-29.

- Wacławek, Anna. 2011. Graffiti and street art. London: Thames & Hudson.
- Wallace, Jacqueline. 2012. "Yarn Bombing, Knit Graffiti and Underground Brigades: A Study of Craftivism and Mobility." WI: Journal of Mobile Media: The Mobile Cultures Issue 6 (3). Available: http://wi.mobilities.ca/yarn-bombing-knit-graffiti-and-underground-brigades-a-study-of-craftivism-and-mobility/
- Walsh, Peter. 2007. "Rise and fall of the post-photographic museum: Technology and the transformation of art." In *Theorizing digital cultural heritage: A critical discourse*, edited by Fiona Cameron and Sarah Kenderdine, 19-34. Cambridge, MA: MIT Press.
- Weller, Katrin. 2010. *Knowledge representation in the Social Semantic Web*. (Knowledge & Information: Studies in Information Science series) Berlin: De Gruyter.
- Wellman, Barry, and Milena Gulia. 1999. "Net surfers don't ride alone: Virtual communities as communities." In *Communities and cyberspace*, edited by Peter Kollock and Marc Smith. New York: Routledge.
- Whitehead, Jessie L. 2004. "Graffiti: The use of the familiar." Art Education 57 (6): 25-32.
- Wikipedia. 2015. "Blog." https://en.wikipedia.org/wiki/Blog, accessed October 30, 2016.
- Young, Alison. 2012. Criminal images: The affective judgment of graffiti and street art. *Crime Media Culture* 8 (3): 297-314.

APPENDICES

Appendix A: Inter-coder Agreement by Presence or Absence in Case

	AGREE	AGREE			FREE
CODE	ABSENT	PRESENT	DISAGREE	PERCENT	MARGINAL
3D	22	1	0	100.00%	1
About	13	6	4	82.60%	0.652
Action	22	1	0	100.00%	1
Artist	15	6	2	91.30%	0.826
Blog	18	5	0	100.00%	1
Bombs	22	0	1	95.70%	0.913
Book	22	1	0	100.00%	1
Buses	22	1	0	100.00%	1
Canvas	20	3	0	100.00%	1
CarsTrucksVans	21	2	0	100.00%	1
Characters	22	1	0	100.00%	1
Cities	15	5	3	87.00%	0.739
CityParts	20	1	2	91.30%	0.826
CommercialDesign	21	1	1	95.70%	0.913
Contact	13	10	0	100.00%	1
ContributeFlix	22	1	0	100.00%	1
Countries	16	4	3	87.00%	0.739
Decade	22	0	1	95.70%	0.913
Disclaimer	20	3	0	100.00%	1
Event	22	1	0	100.00%	1
Facebook	22	1	0	100.00%	1
Featured	20	3	0	100.00%	1
FemaleArtist	22	1	0	100.00%	1
FLKR	22	1	0	100.00%	1
Freights	21	1	1	95.70%	0.913
Gallery	22	1	0	100.00%	1
Glossary	22	1	0	100.00%	1
Graffiti	21	2	0	100.00%	1
Guestbook	20	3	0	100.00%	1
History	22	1	0	100.00%	1
Interviews	21	2	0	100.00%	1
Links	13	8	2	91.30%	0.826
Murals	19	3	1	95.70%	0.913
MyAccount	22	0	1	95.70%	0.913
New	20	0	3	87.00%	0.739
Old	21	2	0	100.00%	1

Other	14	5	4	82.60%	0.652
Pinterest	22	1	0	100.00%	1
Productions	22	1	0	100.00%	1
RIP	21	2	0	100.00%	1
Shop	19	4	0	100.00%	1
Sketches	19	4	0	100.00%	1
SpecificLandmarks	21	1	1	95.70%	0.913
Stencils	22	1	0	100.00%	1
StreetArt	21	1	1	95.70%	0.913
SubwayCars	22	0	1	95.70%	0.913
Subways	19	2	2	91.30%	0.826
Tags	22	1	0	100.00%	1
Throwup	20	3	0	100.00%	1
Trains	15	7	1	95.70%	0.913
TrainWholecars	21	1	1	95.70%	0.913
Tunnels	22	1	0	100.00%	1
TW	22	1	0	100.00%	1
Videos	19	4	0	100.00%	1
Walls	16	4	3	87.00%	0.739
Wildstyle	22	1	0	100.00%	1
World	21	0	2	91.30%	0.826
Year	21	1	1	95.70%	0.913
YouTube	22	1	0	100.00%	1
TOTAL	1185	130	42	96.90%	0.938



Department of University Safety & Assurances

New Study - Notice of IRB Exempt Status

Melody Harries IRB Administrator Institutional Review Board

Engelmann 270 P. O. Box 413

Milwaukee, WI 53201-0413

(414) 229-3182 phone (414) 229-6729 fax

http://www.irb.uwm.edu harries@uwm.edu

New Study - Notice of IKB Exempt Su

Date: January 29, 2018

To: Richard Smiraglia, PhD

Dept: School of Information Studies

CC: Ann Graf

IRB#: 18.169

Title: FACETS OF GRAFFITI ART AND STREET ART DOCUMENTATION ONLINE: A

DOMAIN AND CONTENT ANALYSIS

After review of your research protocol by the University of Wisconsin – Milwaukee Institutional Review Board, your protocol has been granted Exempt Status under Category 2 as governed by 45 CFR 46.101(b). Your protocol has also been granted approval to waive documentation of informed consent as governed by 45 CFR 46.117 (c).

This protocol has been approved as exempt for three years and IRB approval will expire on January 28, 2021. If you plan to continue any research related activities (e.g., enrollment of subjects, study interventions, data analysis, etc.) past the date of IRB expiration, please respond to the IRB's status request that will be sent by email approximately two weeks before the expiration date. If the study is closed or completed before the IRB expiration date, you may notify the IRB by sending an email to rbinfo@uwm.edu with the study number and the status, so we can keep our study records accurate.

Any proposed changes to the protocol must be reviewed by the IRB before implementation, unless the change is specifically necessary to eliminate apparent immediate hazards to the subjects. The principal investigator is responsible for adhering to the policies and guidelines set forth by the UWM IRB, maintaining proper documentation of study records and promptly reporting to the IRB any adverse events which require reporting. The principal investigator is also responsible for ensuring that all study staff receive appropriate training in the ethical guidelines of conducting human subjects research.

As Principal Investigator, it is also your responsibility to adhere to UWM and UW System Policies, and any applicable state and federal laws governing activities which are independent of IRB review/approval (e.g., FERPA, Radiation Safety, UWM Data Security, UW System policy on Prizes, Awards and Gifts, state gambling laws, etc.). When conducting research at institutions outside of UWM, be sure to obtain permission and/or approval as required by their policies.

Contact the IRB office if you have any further questions. Thank you for your cooperation, and best wishes for a successful project.

Respectfully,

Melody Harries IRB Administrator

Appendix C: Email Interview Invitation

Greetings,

My name is Ann Graf and I am a PhD student in information studies at the University of Wisconsin-Milwaukee. I am researching how graffiti art and street art are being documented online. I chose to look at every website linked on the Art Crimes website (https://www.graffiti.org/), which led me to your site. I have studied what types of information sites like yours are using to organize collections of photographs of graffiti art and street art, such as arranging collections by styles, by surfaces, by types, or by locations.

Now that I have a list of all the different ways that these sites are organized, I would like to talk to the people who run the sites to see what they have to say about how the photographs of graffiti art and street are organized. I have a limited number of questions that I want to ask, and I would be willing to email them to you, or talk to you on the phone or by Skype.

The information that I gather from those who run the websites will be added to the information I have already gathered directly from the websites. You will not be mentioned by name in my dissertation and all responses will be kept strictly confidential. All respondents will be anonymized in the data and reporting.

Would you be willing to talk to me about this? If you are over the age of eighteen (18), and you are comfortable speaking English, how do you prefer to be contacted - by email, by phone, or by Skype? I would like to talk to you in the next week or two, if possible.

Thank you for your time and consideration. Your participation will enrich my research and will shed light on the ways that graffiti art and street art are being documented and why. I hope that ultimately this will positively impact appreciation for and scholarship on these valuable, highly ephemeral, and often contested art forms.

Ann

Appendix D: Interview Instrument

Interview Questions

My name is Ann Graf and I am a PhD student in information studies at the University of Wisconsin-Milwaukee. I am researching how graffiti art and street art are being documented online. I chose to look at every website linked on Art Crimes, which led me to your site. I have studied what types of information sites like yours are using to organize collections of photographs of graffiti art and street art, such as arranging collections by styles, by surfaces, by types, or by locations. Now that I have a list of all the different ways that these sites are organized, I have a few questions for those curating these websites about what you think are important aspects of these works to be recorded.

The information that I gather from those who run the websites will be added to the information I have already gathered directly from the websites. You will not be mentioned by name in my dissertation and all responses will be kept strictly confidential. All respondents will be anonymized in the data and reporting.

What I have discovered by looking at 241 websites is that there is great variety in the ways that collections of photographs of street art and graffiti art are organized, but there are some similarities as well.

Most of the websites I examined will organize photographs by several types of general categories, such as by artist, by date, by whether something is new or old, inside or outside, by an event or a gallery name, or even by color. Other common ways of organizing the photographs are by location, by the support or surface the works are on, and by the type or style of artwork. I would like to discuss each of these categories with you in more detail.

Some general ways to organize collections of graffiti art or street art photographs online include by:

- Artist (individuals or crews, writer names, not real names)
- Date (of the photograph or of the completion of the artwork, or when it was removed, painted over, or otherwise destroyed) how specific of a date? Day? Month? Year?
- Event (such as a graf jam)
- New works (new to the site, or newly created) or old works (old school, or classic works)
- Legal works or illegal works
- Very well known or famous writers or artists
- By whether the work is inside/indoors or outside/outdoors

Do you have any comments about any of these?

If an artist has died, is it important to note this, typically with RIP after his or her name?

Is it important to know the real name of a writer or artist? Why or why not?

Is it important to know the size of a work? Why or why not?

I would like to discuss supports or surfaces commonly used as categories for organizing graffiti art and street art photographs.

- Trains, Freights, Subway cars
- Canvas
- Walls
- SubwayCars
- Subways
- Blackbooks
- Cars, Trucks, Vans, Buses or other vehicles
- Clothing
- Billboards or Signs
- Rooftops
- Tunnels
- Trash Bins

Do you have any comments about any of these? Are there any that are more useful than others?

Are there any other surfaces or supports that you think should be included as well that I haven't mentioned?

Do you think it is important to distinguish among trains, freights, and subways? Why or why not?

I would like to do the same with a list of types and styles.

- Graffiti
- Street Art
- Sketches
- Characters
- Commercial Designs
- Murals
- Pieces
- Tags
- Stencils
- Letters, lettering, or handstyles
- Bombs or bombing
- 3D
- Throw-ups

- Stickers
- Productions
- Wholecars
- End-to-ends
- Top-to-bottoms
- Political works
- Posters
- Digital works
- Action (showing works being created)
- Wheatpaste
- Projections (or light graffiti)
- Wildstyle

Do you have any comments on any of these?

Are there any other types of styles or artwork that you think it would be useful to include for organizing these photographs?

Last, I would like to ask you about location information. How important do you think it is to include location information for works of graffiti art or street art? How specific do you think this location information should be, if possible?

Do you feel having a specific set of GPS coordinates for individual works is important or valuable? Why or why not?

Are there any other categories for organizing photographs of graffiti art and street art that might be useful that we have not discussed?

Do you have anything else to add?

Appendix E: The Websites (Super Sites are highlighted in green)

Site name Home URL

12 Oz Prophet http://www.12ozprophet.com/
123 Klan http://www.123klan.com/
@ 149 St http://www.AT149ST.com/
156 Crew http://156allstarz.net/

187 Crew https://www.graffiti.org/187/main.html

50mm Los Angeles http://www.50mmlosangeles.com/

abc @rtindustry - Vince http://www.vince.de/

Area 33 http://www.freewebs.com/area33/

Airone http://www.air-one.net/

Amoeba http://www.mauerpark.de/index2.html AOS http://www.aoscrew.com/index.htm

Armed Rob http://www.armedrob.dk/
Art Crimes http://www.graffiti.org/
Art of Graffiti http://keusta.net/blog/
The Art of Rocket http://www.rocket01.co.uk/

Art of Wall - Tokyo http://www.big.or.jp/~kizuku/k.html/art.html

Artistic Bombing Crew http://www.artisticbombingcrew.com/

Askew http://askew1.com/

As One http://www.styledepth.com/

Australian Graffiti http://australiangraffiti.blogspot.com/

Azek http://azekone.blogspot.com/
Bandit77 http://www.bandit77.com/
Banksy http://www.banksy.co.uk/
Bates http://www.greatbates.com/
Blade http://www.bladekingofgraf.com/

Blek le Rat http://bleklerat.free.fr/stencil%20graffiti.html

BOL23 http://www.bol23.com/

Bombing Science http://www.bombingscience.com/
Brave Arts http://www.braveone.co.uk/

Brikk Graf https://www.graffiti.org/tranzit/brikkgraff/

Bristol Street Art http://www.bristol-street-art.co.uk/

Burglar http://burglar.massatto.net/

BurnerzOnly http://burnerz.pl/
Can Two http://www.cantwo.de/
Can Control http://cancontrolone.com/
Cenz http://www.mrcenz.com/
Ces53 http://www.ces53.com/
CMPSPIN http://www.cmpspin.com/

CNS Skillz (Checkin' new

skillz) http://www.cnskillz.com

Connections http://members.tripod.com/~fr8connections/

Crash http://www.crashone.com/
Crazy Apes http://www.ca-crew.com/
Cres http://www.cres.dk/

Crushing Miami http://www.crushingmiami.com/
The Cypher https://www.graffiti.org/cypher/
Dabs / *Dbsk1 http://dbsk1.com/main.php
Dabs & Myla http://www.dabsmyla.com

Daim http://daim.org/

The Dark Site http://home.kabelfoon.nl/~gio/

Day-Z http://www.day-z.com/
Deace http://www.deace.com/

Deace - Old Version to

2009 http://www.deace.com/oldversion/

Dest http://www.dest.ch/
DFM http://www.rapschrift.de/
Mr Dheo http://www.mrdheo.com/

Digital Jungle https://www.graffiti.org/dj/index_dj.html

Does http://www.digitaldoes.com/
Dofi http://www.dofitwo.com/
Dome http://www.domeone.de/

Dondi CIA Kings https://dondicia.wordpress.com/

Double-H http://www.double-h.org/

Dr. Revolt's Graffiti Page http://www.nytrash.com/Revolt.html

Drone http://drone.withtank.com/

Duncan Cumming http://www.duncancumming.co.uk/

DuroCIA http://durocia.com/

Dytch66 http://www.dytch66.com/
EGR http://www.EGRart.com/
Eiresol Style http://www.eiresol.com/
Ekosystem http://www.ekosystem.org/
Elan Wonder http://www.elanwonder.com/

Endstation https://www.graffiti.org/endstation/

Eron http://www.eron.it/

Eyegasm https://www.graffiti.org/eyegasm/

Eyeone http://www.eyelost.com/
Ezra http://www.ezraone.com/
FAB http://fabcrew.com/
Faith47 http://www.faith47.com/
Fatbombers http://www.fatbombers.com/

Fatcap.com http://www.fatcap.com/ Flashbereich.de http://www.flashbereich.de/ Fly ID http://www.flyidcrew.com/ Freon http://freon1.free.fr/ **Full Color** http://www.fullcolor.gr/

Full Time Artists http://www.fulltimeartists.com/ https://www.graffiti.org/ger/ Ger Getting Up http://www.getting-up.en/ Giant https://www.graffiti.org/giant/ Global Street Art http://globalstreetart.com/ Graffart http://www.graffart.eu/ Graffhead http://graffiti.graffhead.com/ Graffiti Collector http://graffiti.white-tree.net/ Graffiti Hamburg http://www.graffitihamburg.de/ Graffiti Planet http://www.graffitiplanet.com/ GraffitiFilms.TV http://www.graffitifilms.tv/

GraffNet https://www.graffiti.org/graffnet/ Haero http://www.haero.com/muridxeng.htm The Helsinki Connection https://www.graffiti.org/hc/indexold.html

HUH? https://www.graffiti.org/huh/

The Hull Warehouses http://www.angelfire.com/in/warehouse/

Hurt You Bad http://www.hurtyoubad.com/

LLove Graffiti http://ilovegraffiti.de/

Intergraff international

graffiti archive

www.intergraff.com

Invisible Made Visible http://www.invisiblemadevisible.co.uk/

Irish Street Art

http://www.ironcrew.narod.ru/home.htm Iron Crew

www.irishstreetart.com

Iz The Wiz http://www.izthewiz.com/ Jersey Joe http://www.JerseyJoeArt.com/ Jial1 http://www.jialone.com/ **JoeyOne** http://www.joeyone.com/

Jolt http://guerillagarden.blogspot.com/

Jor http://www.jorgallery.com/ Kazzrock http://www.kazzrock.com/ http://www.keepdrafting.com/ **Keep Drafting**

Kelzo www.kelzo.com

KGM http://www.kgmcrew.ru/ Kiam77 http://www.kiam77.de/

Kings of New York http://www.kingsofnewyork.net/

Koma http://www.mrkoma.com/ Komik http://www.komart.ch/

Kromi http://www.krmi.net/

Lame Face crew https://www.graffiti.org/lf/
Legends Of Rare DeSign https://www.graffiti.org/lords/

Ler http://www.lerart.com/english/home.html
Location 12 https://www.graffiti.org/dj/index-l12.html
Loomit http://www.loomit.de/version1/home.htm

Lounge37 http://www.lounge37.com/
Love Graffiti http://www.lovegraffiti.com/
Lunar http://www.lunar75.com/studio/
Macia Crew http://www.macia-crew.com/

Mad C http://www.madc.tv/
Marka 27 http://www.marka27.com/
Mason http://www.mason.de/

Mass Appeal Magazine https://massappeal.com/news/art/graffiti/

Mesh http://meshrock.com/

Miami Graffiti http://www.miamigraffiti.com/

Midnite Run https://www.graffiti.org/midniterun/
Most Valuable Players http://www.xs4all.nl/~fromage/

Mr W http://www.misterw.com/
MSG Cartel http://www.msgcartel.com/
Nasher http://www.nasher.fr/

Nashwriters http://angelfire.com/art/nashwriters/

Neck CNS http://www.neckcns.com

Needy Greedy Graf Page http://members.tripod.com/~pilot66/NG-GRAF.html

Neon http://www.writingneon.de/

New York City Trains,

Mid '80s https://www.graffiti.org/nyctrains/index.html

N-lgma https://www.graffiti.org/dj/n-igma1/introduction.html

NWO http://www.nwocrew.ru/
OBS http://www.obsekte.de/

One Name http://www.eldar.cz/onename/

One Truth http://www.one-truth.ch/

Os Gemeos http://www.osgemeos.com.br/en

Overspin http://www.overspin.it/HOMEPAGE.htm

http://www.paid3.com/Home%20Final/Home%20Revamped%20c

Paid3 opy.html

Paint.dk http://www.paint.dk/

Pastor http://www.angelfire.com/pe/past/link.html

Peacez http://www.peacez.com/
Peeta http://www.peeta.net/
Peru143 http://peru143.com/

Pest http://www.pest-p19.com/

PTA2 http://www.petados.com/

Phat Flemish Styles http://members.tripod.com/~ooz_one/main.html http://www.angelfire.com/biz2/MYZONE/new.html

Pigz http://www.tarestyles.com/pigz/pinkjuice http://www.pinkjuice.com/
Pose2 http://www.posetwo.com/

Protest Graffiti http://protestgraffiti.blogspot.com/
Psyckoze http://www.psyckoze.com/desk.htm

Queen City Tribe https://www.graffiti.org/cincinnati/qct/index.html

Railwhores http://railwhores.tripod.com/
Replete http://www.repletes.net/
Rezine69 http://www.rezine69.com/
Rime MSK http://rimemsk.com/

Robots Will Kill http://www.robotswillkill.com/
Romanian Graffiti http://www.romaniangraffiti.ro/

Rosa http://cathlove.com/
Rosy http://www.rosyone.com/
Rusl http://www.rusl1.de/

Sacramento Graffiti https://www.graffiti.org/sac/

Sal http://sal-one.com/
Sane2 http://www.sane2.com/
Savager http://www.thesavager.com/
Scab http://www.scabbage.com/
Scribe http://www.scribeswalk.com/

Shame http://www.shame.dk/
Shame http://www.shameabc.com/
Sherm http://www.shermgrafik.com/
Shizentomotel http://www.shizentomotel.com/

Shok http://www.shok1.com/
Siner http://sinergraf.com/
Sir Two http://www.sirtwo.net/
Skize http://www.skize.se/

Smart http://www.smart-one.com.au/

Smog-One http://smog-one.com/

Son 103 https://www.graffiti.org/son103/

Souline http://www.souline.it/

Specimen http://spe6men.graffiti.free.fr/pge/specimen.htm

Spray City http://www.spraycity.net/

St. Louis Freights https://www.graffiti.org/stlouis/freights/index.html

Steel City http://members.tripod.com/~Steel_City/

Stencil Archive http://www.stencilarchive.org

Stomp and Crush: The

Great Gallery of Graffiti http://graffiti.stompandcrush.com/

Streets are Saying Things http://www.saster.net/

Style Only Workgroup https://www.graffiti.org/styleonly/

Style Wars http://www.stylewars.com/
Subway Outlaws http://SubwayOutlaws.com/
Scott Sueme http://www.suemenow.com/
Suiko http://www.suiko1.com/
Tare http://www.tarestyles.com/

Tatty Seaside Town https://www.graffiti.org/brighton/

TC5 http://www.tcfive.com/

TDR http://www.thedarkroses.com/
Team Alosta http://www.waf-alosta.be/
Tes http://graffiti.no/tes/

Third Decade http://www.third-decade.co.uk/

Thoms http://www.thoms.it/

Toronto's Unauthorized

Permanent Artifacts http://www.angelfire.com/mo/tupa/

Totem2 http://www.mr-totem.com/
Toys of Denmark http://www.toyscrew.dk/

Tracy 168 Wild Style http://www.bronxmall.com/tracy168/
Train Writers http://trainwriters.com/home.htm
Trash http://cargocollective.com/trash
Trixter http://www.mrtrixter.com/

TXMX GRAFFITI & STREET

ART: INDEX http://www.txmx.de/graffindex.html

Uk Graffiti http://www.ueberdose.de/
Uk Graffiti http://www.ukgraffiti.com/
Undastream http://www.undastream.com/

Upptown Graffiti http://www.upptown.eu.org/index2.htm

Ups Online https://www.graffiti.org/ups/

Vandals Movement http://vandmove.unas.cz/index2.php

Visual Cancer https://www.graffiti.org/fr8/

Visual Orgasm: The

Canadian Climax http://www.visualorgasm.com/
Vyal http://www.vyalone.com/

Wall Nuts http://www.graffiti.org:8080/cincinnati/wallnuts/

Wany http://www.wanyone.com/
Weeno http://www.weeno.fr/
Wet Paint http://www.Aerosolart.it/
WonABC.de http://www.wonabc.de/
Woozy http://www.woozy.gr/
Xenz http://www.xenz.org/

Zedz http://www.zedz.org/

Zephyr http://www.zephyrgraffiti.com/

CURRICULUM VITAE

Ann M. Graf

Place of birth: Milwaukee, WI

EDUCATION

B.A., University of Wisconsin-Milwaukee, May 1987

Major: Mass Communication

M.L.I.S., University of Wisconsin-Milwaukee, May 2011

Concentration: Information Organization

Dissertation Title: Facets of Graffiti Art and Street Art Documentation Online: A Domain and Content Analysis

EMPLOYMENT HISTORY

Teaching Academic Staff, UW-Milwaukee SOIS

- Organization of Information, INFOST 511: Spring 2018 (online), Fall 2017 (onsite), Spring 2017 (online)
- Information Resources for Research, INFOST 210: Spring 2018, Summer 2017, Spring 2017, Fall, 2016 (all online)
- Organization of Knowledge, INFOST 230: Fall 2017 (online)
- Basic Cataloging for School Libraries, INFOST 691: Summer 2017 (online)
- Introduction to Information Science and Technology, INFOST 110: Fall 2016 (onsite)

Research Assistant, UW-Milwaukee SOIS, 2012-2016

• Various duties including editing, bibliography, literature review, data collection, domain analysis, oral history interviewing, transcription of interviews, data visualization

Research Assistant, UW-Milwaukee History Department, Hmong Diaspora Studies Program, 2015-2016

 Literature review, oral history interviewing, oral history transcription and summary, writing and editing

Indexer, Independent contractor, summer 2016 to present

Teaching Assistant, UW-Milwaukee SOIS

Organization of Knowledge, INFOST 230: Spring 2015 (onsite)

• Information Organization, INFOST 511: 2 sections, Fall 2014 (online)

Bibliographer, UW-Milwaukee History Department, 2012-2014

Research and classroom support for UW-Milwaukee SOIS, June 2011 to August 2012

Adjunct Instructor, Bryant & Stratton College, 3 semesters, Fall 2011 - summer 2012

- History & Practice of Information Systems 2 sections fall 2011, 2 sections spring 2012
- Introduction to Information Literacy and Research 2 sections, summer 2012

Project Assistant for UW-Milwaukee History Department for EMKE, 9/2010 – 8/2011

Intern – UW-Milwaukee Golda Meir Library Technical Services Department, 8/2009 to 11/2010

Fieldwork – Information Architecture for the Center for International Blood and Marrow Transplant Research, Medical College of WI, summer 2010.

PUBLICATIONS

- Smiraglia, Richard P., and Ann M. Graf. 2017. "From Music Cataloging to the Organization of Knowledge: An Interview with Richard P. Smiraglia." *Cataloging & Classification Quarterly* 55 (5).
- Graf, Ann M. 2016. "Describing an Outsider Art Movement from Within: The AAT and Graffiti Art." In Chaves, Guimarães, José Augusto, Suellen Oliveira Milani, and Vera Dodebei, eds. Knowledge Organization for a Sustainable World: Challenges and Perspectives for Cultural, Scientific, and Technological Sharing in a Connected Society. Proceedings of the Fourteenth International ISKO Conference 27-29 September 2016 Rio de Janeiro, Brazil. Würzburg: Ergon, 125-32.
- Kipp, Margaret E. I., Jihee Beak, and Ann M. Graf. 2015. Tagging of Banned and Challenged Books. *Knowledge Organization* 42 (5): 276-283.
- Graf, Ann M., Seligman, Amanda I., and Anderson, Margo. 2014. *Bibliography of Metropolitan Milwaukee*. Milwaukee: Marquette University Press.
- Graf, Ann, and Smiraglia, Richard P. 2014. "Race & ethnicity in *The Encyclopedia of Milwaukee*: A case study in the use of domain analysis." In Babik, Wiesław Ed., *Knowledge Organization in the 21st Century: Between Historical Patterns and Future Prospects.*Proceedings of the Thirteenth International ISKO Conference 19-22 May 2014 Kraków, Poland. Würzburg: Ergon, 114-120.
- Graf, Ann, and Smiraglia, Richard P. 2013. Transition in education: Domain analysis from the Encyclopedia of Milwaukee. In *Proceedings of the 4th North American Symposium on Knowledge Organization (NASKO 2013), June 13-14, Milwaukee, Wisconsin*. Available

http://www.iskocus.org/NASKO2013proceedings/Graf Smiraglia TransitionInEducation.pdf.

Graf, Ann, and Smiraglia, Richard P. 2012. Cultural curation as classification: the evolution of the bibliography and taxonomy for The Encyclopedia of Milwaukee. In Quan-Haase, Anabel, Rubin, Victoria L., and Chaves, Debbie eds., Information in a local and global context: proceedings of the 40th annual conference of the Canadian Association for Information Science, Waterloo, Ontario, May 31-June 2, 2012. Available http://www.cais-acsi.ca/.

Fox, Melodie J., and Graf, Ann M. 2011. Research and opinion: Mining the collective, reconsidering warrant [review of Lynne Howarth presentation]. *Cataloging & Classification Quarterly* 49(6): 543-44.

PRESENTATIONS

Use of Explicit Categories for the Organization of Online Graffiti Art Image Collections: Examining Current Community Practices. Accepted proposal for presentation at the 15th International ISKO Conference, 9-11 July 2018 at Porto, Portugal.

Odonate Monitoring Project at the Urban Ecology Center: Experiences from the Urban Ecology Center-Milwaukee. Accepted proposal for presentation at the Wisconsin Summit for Natural Resources Volunteers, March 22-24, 2018, Eau Claire, Wisconsin. (This presentation is a result of my ongoing volunteer experience in community science at the Urban Ecology Center, Milwaukee.)

Dragons & Damsels: Odonata as Evidence of a Healthy Ecosystem. Presented at the 11th Annual Urban Ecology Center Citizen Science Research Symposium, December 13, 2016, Urban Ecology Center – Washington Park, Milwaukee, Wisconsin. (This presentation is a result of my ongoing volunteer experience in community science at the Urban Ecology Center, Milwaukee.)

Describing an Outsider Art Movement from Within: The AAT and Graffiti Art. Public Presentation as part of the University of Wisconsin – Milwaukee School of Information Studies Brown Bag Series 2016-17 on November 16, 2016.

Ephemeral Art, Ephemeral Community: Domain Analysis of an Unintentional, Collaborative Archive of Street Art, Works in Progress poster presented at ALISE, January 2016, Boston.

Photograph, Organize, Display: How Individuals Are Preserving a Record of Street Art. Poster presented at the Archives Education Research Institute (AERI), June 2014, Pittsburgh.

SERVICE

American Society for Information Science & Technology (ASIST) SIG-AH (Arts & Humanities) Social Media Officer, November 2017 to present

ASIST Membership Committee, 2018

Academic Planning Committee, UW-Milwaukee SOIS, Fall 2017-present

Program Committee, NASKO 2017: Visualizing Knowledge Organization: Bringing Focus to Abstract Realities. The sixth North American Symposium on Knowledge Organization (NASKO 2017), June 15-16, 2017, in Champaign, Illinois.

PhD student representative, SOIS Research Committee, 2015 to 2017

Secretary of SOIS ASIS&T Student Chapter, 2013 to 2016

Executive Committee Member, SOIS Doctoral Student Organization, 2014 - 2015

Judge, UW System Symposium for Undergraduate Research, 2014, 2015, 2017, 2018

Doctoral Student Representative, SOIS Diversity and Equity Committee, 2013 - 2014

SOIS Ad Hoc committee on MLIS Completion Requirements, Spring 2013

SOIS Journal Task Force, Spring 2013

PROFESSIONAL MEMBERSHIPS

International Society for Knowledge Organization (ISKO) – 2012 to present

North American Society for Knowledge Organization (NASKO) – 2012 to present

American Society for Information Science & Technology (ASIST) – 2011 to present

SIG-CR (Classification Research), SIG-AH (Arts & Humanities)

Association for Library and Information Science Education (ALISE) – 2015 to present

Visual Resources Association (VRA) and Midwest Chapter – 2017 to present

Art Libraries Society of North America (ARLIS) and Mid-States Chapter – 2016 to present

Social Studies of Information Research Group (SSIRG) at SOIS – 2013-present

Knowledge Organization Research Group (KOrg) at UW-Milwaukee SOIS – 2012-present

AWARDS AND SCHOLARSHIPS

ISKO Best Paper Award 2016 for "Describing an Outsider Art Movement from Within: The AAT and Graffiti Art" at the International ISKO Conference, September 27-29, 2016, Rio de Janeiro, Brazil

Chancellor's Graduate Student Award, Fall 2012, 2013, 2014, and 2016

Magna Cum Laude and Phi Beta Kappa, May 1987