Archaeological Site Looting in "Glocal" Perspective: Nature, Scope, and Frequency

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Abstract

The looting of archaeological sites undermines the preservation of cultural heritage. The purpose of this study is to broaden and refine our understanding of the nature, geographic scope, and frequency of looting and archaeological site destruction and to place looting in global perspective. Situated within a "glocal" (global and local) context, this study focuses on a large sample of field archaeologists working throughout the world and their opinions about and personal encounters with looting. Some key findings are presented: first, that the overwhelming majority of surveyed field archaeologists have experienced looting firsthand on more than one occasion; second, that archaeological site looting is in fact a globally pervasive problem and is not limited to certain parts of the world to the exclusion of others. The paper ends with a consideration of the implications of such findings for the broader cultural heritage debate.*

INTRODUCTION

The looting of archaeological sites, which largely fuels the international trade in illicit antiquities,[1] occurs when undocumented, illicitly obtained artifacts are ripped from the ground and sold, often on the legal market.[2] Archaeology is a critical component in the study and understanding of human history, and the destruction of archaeological finds has both material and intellectual consequences. That is to mean, not only are archaeological resources finite but so is the cultural information they may yield.[3] Looted ar-

chaeological sites and the orphaned objects removed from them (which are then bought and sold as commercial commodities) provide limited contributions to our knowledge about the human past and tell us little about the culture that produced them. In short, looted antiquities and archaeological resources retain little scientific value.[4] As finite resources, once they are gone, they are gone forever.

While the intellectual and material consequences of looting[5] are well known, estimating the occurrence, frequency, and nature of archaeological site destruction is more problematic. First and foremost, looting is normally a clandestine undertaking,[6] and looters are not eager to be interviewed about the extent of their illicit endeavors.[7] Second, looting threatens two types of sites: those known to archaeologists and those that have not yet been discovered.[8] Italy, for example, is not alone in being likened to an "open-air museum" because of the richness of its archaeological landscape, which includes both discovered and yet-undetected sites.[9] There is, in other words, no "master catalogue" of all archaeologically significant sites around the world both known and unknown, so the task of assessing the extent of the damage caused by looting around the world is difficult.[10]

Nonetheless, there is a growing body of research that attempts to document on-the-ground looting and archaeological site destruction.[11] Much of this docu-

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[1] Brodie et al. 2001.

[2] Bowman 2008.

[3] Gill and Chippindale 1993; Proulx 2010, 2011a, 2011b.

[4] Bator 1982; Atwood 2004; Proulx 2010, 2011b.

[5] "Looting" is defined as the removal of culturally significant material from archaeological sites for commercial gain, the act of which destroys archaeological context or evidence

needed to learn from the site.

[6] Elia 2001.

[7] Proulx 2010.

[8] Conklin 1994.

[9] Pastore 2001, 155.

[10] Pendergast and Graham 1989; Bowman 2008. Moreover, when reported to authorities, archaeological site looting is often mistakenly subsumed under the rubric of "art crime" or "cultural property theft" in official estimates, or it is recorded by circumstance of theft (e.g., burglary) rather than type of object stolen. However ill-categorized those reports may be, site looting remains decidedly underreported (INTERPOL 2007; Proulx 2010).

[11] Proulx 2011a, 2011b.

mentation takes the form of archaeological field surveys and photographic testimony.[12] For example, in an attempt to assess the extent of Etruscan tomb looting in central Italy, Lerici estimated that, of the 550 tombs he discovered, nearly 400 of them had been stripped of their burial treasures and irretrievably damaged by *tombaroli*.[13] In a similar effort, Roosevelt and Luke surveyed the landscape of ancient Lydia and found that, of the nearly 400 burial tombs they inspected, 90% showed signs of looting.[14] In Belize, Gutchen concluded that nearly 60% of the 106 archaeological sites for which he was able to obtain data had been looted, and nearly half of those sites had been damaged beyond repair.[15] A similar survey of more than 800 Malian archaeological sites revealed that more than 50% of them had been looted.[16] In Cambodia, Heritage Watch documented looting and archaeological site destruction at 23 burial mounds within an area of 100 km^2 near Thmar Puok.[17] And Gado, estimating that more than 90% of the archaeological sites in the southwestern region of the Republic of Niger had been looted, recently noted that much of the region's history "has been lost for ever."[18] In fact, some archaeological sites have been destroyed so thoroughly that they are now known only through those looted antiquities that have appeared on the market or in collections.[19]

Other scholars have studied the antiquities market itself to gauge the extent of archaeological site looting. For example, Gill and Chippindale showed in their groundbreaking study that as aesthetic interest in and demand for Cycladic figurines increased in the late 20th century, so did the number of unauthorized excavations at Cycladic archaeological sites.[20] In a later study, the authors found that a similar relationship between market demand and looting was evident not only for Cycladic objects but also for objects from throughout classical antiquity.[21] In their studies of classical vases on the antiquities market, both Elia and Nørskov found similar relationships between market demand and archaeological site destruction.[22] The same situation pertains to pre-Colombian antiquities, as Coggins, Gilgan, and Luke and Henderson have all demonstrated.[23]

These studies represent important efforts to quantify the damage to the archaeological landscape. But each deals with only one archaeological site,[24] one geographic region,[25] one country,[26] or one historical focus.[27] Thus, we are left with a rather inchoate picture of the global nature, scope, and frequency of looting. Moreover, the very nature of this scholarly attention to looting lends itself to the impression that looting is an isolated problem, plaguing some countries but not others. This impression has proved useful in downplaying the seriousness of the looting problem, which is part of dealers' and collectors' general strategy to minimize connections between looting and the trade.[28] Moreover, scholarly attention to some regions of the world to the exclusion of others has meant that many countries have not received as much attention as they deserve in the international debate on looting and the illicit antiquities trade. Finally, if looting does, as has been suggested, coincide with other forms of transnational criminal activity (e.g., organized crime, drug trafficking)[29] that move in tandem with globalization, then it is critical to examine the geographic scope and frequency of looting and archaeological site destruction on a global scale.

This study attempts to fill the lacuna. It employs a "glocal" (global and local) approach to the study of

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[12] E.g., Gill and Chippindale 1993; Watson 1997, 2006; Schick 1998; Paredes 1999; Brodie et al. 2000, 2001, 2006; Chippindale and Gill 2000; Chippindale et al. 2001; Elia 2001; Gilgan 2001; Nørskov 2002; Toner 2002; Atwood 2004; Kersel 2006; Luke and Henderson 2006; Roosevelt and Luke 2006.

[13] Italian slang for "tomb-robber" (Hamblin 1970). For Lerici's estimate, see Meyer 1973.

[14] Roosevelt and Luke 2006, 179. Signs of looting activity include, but are not limited to, holes, pits, missing objects, or other damage to the site not part of systematic archaeological excavations.

[15] Gutchen 1983, 223, 225.

[16] Dembelé and van der Waals 1991; Dembelé et al. 1993.

[17] O'Reilly 2007.

[18] Gado 2001, 59.

[19] Brodie et al. 2000.

[20] Gill and Chippindale 1993.

[21] Chippindale et al. 2001.

[22] Elia 2001; Nørskov 2002.

[23] Coggins 1995, 1998; Gilgan 2001; Luke and Henderson 2006.

[24] E.g., Meyer 1973.

[25] E.g., Roosevelt and Luke 2006.

[26] E.g., Dembelé and van der Waals 1991; Dembelé et al. 1993; O'Reilly 2007.

[27] E.g., Elia 2001; Nørskov 2002.

[28] Brodie 2002; Renfrew 2002. For a discussion of looting within the context of the broader cultural heritage debate, see Elia (2009), who has written on the "mythologies" of the antiquities trade that facilitate the explanation, justification, and validation of antiquities collecting. These are the myths of the old collection, the chance find, the reputable dealer, the collector as guardian of the past, and the guilty source country. In light of the intensity and ubiquity of archaeological site looting evidenced by this study, I suggest that perhaps there is in fact a sixth myth: the myth of exaggerated looting. As Elia (2009, 241) notes: "Dealers, collectors, and curators who participate in the antiquities market almost never acknowledge [the causal relationship between collecting and looting]. Instead they offer denial, obfuscation, blame, and self-justification."

[29] Proulx 2010.

archaeological site looting by focusing on local opinions about and personal encounters with looting among a large international group of archaeologists excavating throughout the world. By means of a glocal approach, I aim to broaden our understanding of looting and archaeological site destruction as global phenomena by better grounding such issues in the local, "on-the-ground" contexts in which they happen. Archaeological site looting is a global concern, but it does not exist apart from its constituent localities. In other words, as I have argued elsewhere,[30] global phenomena are really locally contextualized phenomena; the global is in fact "local at all points,"[31] and looting as a local phenomenon provides the groundwork for our "global way of seeing"[32] archaeological site destruction around the world in the broader context of international cultural heritage. There is thus a clear need to achieve a broader and more refined understanding of the glocal contexts of archaeological site looting, since, as Mackenzie notes, "[b]efore we can talk of how best to regulate the market, we must be sure of the existence and form of the looting problem we wish to address."[33] An improved assessment of looting around the world, one that better links the global with the local, is thus necessary for laying the empirical groundwork for both the formulation of international market regulatory practices and further scholarly analysis.[34]

This study thus examines global archaeological site looting in context, situating it in the local experiences and narratives of field archaeologists worldwide by means of an online mixed-methods survey. Given that many archaeologists have worked on the ground at the very sites of interest to looters, how have they personally experienced looting? Where have they experienced it, and what is the nature of their experiences? In addition, the survey was designed to determine whether their assessments and experiences vary significantly depending on where in the world they work.

I begin with an overview of the study sample, research design, methodology, operationalization, and analytic procedure employed in this study. Next, I present findings in three separate sections: archaeologists' assessments of the geographic scope of archaeological site looting, their personal experiences with on-site looting, and their experiences with off-site looting. I conclude with a discussion of the salience of these findings.

ARCHAEOLOGICAL PERSPECTIVES ON LOOTING

Based on the centrality of fieldwork to the discipline of archaeology,[35] this study is grounded in the premise that archaeologists are an invaluable source of information about site looting and, by extension, the illicit antiquities trade at the "source" end of the problem. Field archaeologists are in a position to observe looting firsthand, whether the focus of their work is archaeological survey, excavation, post-excavation analysis, or site conservation and management. This alone makes them a significant source of information on looting and site destruction. Moreover, archaeological interpretation is necessarily preoccupied with systematic and meticulous methodology. Archaeologists, concerned with learning as much as possible from a site, are painstakingly precise in their efforts to preserve archaeological context by recording and photographing features, locating and digging trenches, taking samples, and drawing detailed plans and maps. Most archaeologists spend multiple field seasons at one site meticulously surveying, excavating, or conducting post-excavation analyses. As a result, archaeologists know their archaeological sites and landscapes intimately. Despite the difficulties in establishing the presence and extent of looting, archaeologists are generally sensitive to changes at their sites, which puts them in a good position to assess the presence and magnitude of looting activity. In sum, archaeologists' assessments of site looting represent invaluable local perspectives on a global problem.

RESEARCH DESIGN AND SAMPLE

To collect field archaeologists' accounts of their personal experiences with looting, I crafted an online

[30] Proulx 2010.

[31] Latour 1993, 117.

[32] Hobbs 1998, 419.

[33] Mackenzie 2005, 1.

[34] Personal vignettes and isolated documentation of site damage alone cannot provide a solid enough foundation on which to base policy and practice because in the end, as Brodie et al. (2001, 1) have noted, "when the hard political decisions are made, it is figures that count."

[35] At the heart of archaeology's authenticity and identity as a discipline lies archaeological fieldwork (DeBoer 1999; Holtorf 2005; Proulx 2010). For the professional archaeologist, "the ability to do fieldwork has always been central" (Moser 2007, 245). One can safely assume that most, if not all, practicing archaeologists have firsthand archaeological fieldwork experience of some sort and, by extension, represent an authoritative source on the experience of fieldwork (Proulx 2010). It stands to reason, then, that if looting is a facet of that fieldwork experience, and fieldwork is an essential element of archaeology, then archaeologists find themselves in a prime position to encounter looting activity firsthand; archaeologists are an invaluable resource for the scholarly study of archaeological site looting and the trade in illicitly obtained antiquities (Proulx 2010).

survey based on a structured questionnaire format. This research design incorporated both qualitative and quantitative methodologies. The computer-assisted, self-administered online survey was e-mailed to nearly 15,000 archaeologists working around the world, each of whom received a linked invitation to participate in the study. Embedded within each respondent's survey link was a unique numerical identifier ("token"), which was used as that respondent's study participant number. Online survey responses were automatically collected in an electronic database.

Sample Population

The target population for this study was archaeologists working throughout the world. Since there is no "master database" of archaeologists worldwide and their current contact information, sampling was conducted from a variety of online sources.[36] First, five of the largest international archaeological organizations were selected:

1. Archaeological Institute of America (AIA) based in Boston, Massachusetts.[37]
2. World Archaeological Congress (WAC), whose current president is based in Adelaide, Australia.[38]
3. European Association of Archaeologists (EAA) based in Prague, Czech Republic.[39]

4. Register of Professional Archaeologists (RPA) based in Baltimore, Maryland.[40]
5. Society for American Archaeology (SAA) based in Washington, D.C.[41]

From these five archaeological organizations, a total of 9,945 contacts were gathered to be included in the sample. Archaeologists who were members of more than one of these organizations were included in the database only once. To locate contact information for more archaeologists from around the world, I conducted online searches, scouring the Internet for other archaeological research centers, institutes, societies, organizations, and associations. From these Internet searches, 43 more sources were identified, from which 2,031 more contacts were included in the master target population database. Next, I examined the websites of each and every school listed online with programs, departments, schools, centers, or institutes for archaeology and related disciplines; this yielded contact information for an additional 1,950 faculty and staff members whose profiles, teaching and research agendas, or subunits included the word "archaeology."

Finally, to ensure that the master database of potential survey respondents was as representative as possible, I conducted more online searches to locate archaeologists working in regions or countries under-

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[36] I completed data collection for this project in late 2007 and began analyzing the data in 2008.

[37] With more than 7,600 members, the Archaeological Institute of America (AIA) is the largest North American archaeological organization. Its members work throughout the world, most notably in the Old World. First and foremost, I scoured all the AIA's online fieldwork bulletins for participants and their contact information. Next, since the AIA provides neither a publicly available member directory nor member contact information on its website, I searched the AIA annual meeting programs and abstracts from 2006 and 2007 for participants' names; I then conducted an Internet search for their e-mail addresses. This yielded 1,100 potential survey participants from among those contacts whose information was available in one of the AIA sources noted above.

[38] The World Archaeological Congress (WAC) is the only international organization for practicing archaeologists. Instead of annual meetings, the WAC hosts congresses every four years in various locations. Like the AIA, the WAC provides no publicly available member directory; thus, I scoured meeting programs and abstracts from the most recent congress (2003), which was the only one to date to provide online meeting information. I also searched information from the Inter-Congress of the WAC. I added all members participating in the WAC newsletter and WAC listserv to the master database of potential survey respondents. The WAC contingent of the sample population is thus limited to members who participated in one of the above WAC activities; it yielded 632 more potential survey respondents.

[39] The European Association of Archaeologists (EAA) is an archaeological organization geared toward European ar-

chaeologists working in Europe and throughout the world. Like the WAC and AIA, the EAA does not provide any online member directory. I searched the 2006 EAA annual meeting programs and abstracts for contact information and performed supplementary Internet searches to locate meeting participants' email addresses. Another 908 individuals were included this way. The EAA contingent of the master database was limited to members who participated in the 2006 annual meeting and whose email addresses could be located through a Google search.

[40] Since the preceding four organizations are largely academic, I also sampled the Register of Professional Archaeologists (RPA). The RPA includes field archaeologists who work in a variety of professional outlets outside academia. The organization maintains an online member directory, which includes more than 6,500 archaeologists working throughout the United States, Canada, Puerto Rico, Europe, and the Cayman Islands. The RPA contingent of the target population was 732 and was limited to members who participated in the online RPA directory and provided email addresses.

[41] Since the fieldwork of AIA archaeologists is largely concentrated in the Old World, in terms of representativeness it was important to sample from the Society for American Archaeology (SAA), whose members work primarily throughout North and South America. The SAA offers its members access to an online directory that includes more than 7,000 member names. Not all SAA members participate in this online directory, however, so the SAA potential respondents were those who both participated in the online directory and provided an email address. The SAA directory provided another 6,573 potential survey respondents.

represented in the database. I used Boolean operators to combine country or region names with "archaeology," "cultural heritage," "anthropology," "history," and any other terms that might yield information on practicing archaeologists or current archaeological projects in those areas. Finally, I scoured government agency websites, archaeological fieldwork bulletins, and online educational resources, which yielded an additional 503 contacts. No contact was entered into the database more than once.

Collectively, these search efforts yielded a total of 14,429 archaeologists working throughout the world. Table 1 in the online appendix (www.ajaonline.org) summarizes the sources from which potential survey respondents were compiled; table 2 shows a complete listing of sources from which the sample population was drawn. Despite the impressive total of 14,429 archaeologists contacted, the sample population is limited in several respects. First, contact information in many of the sources summarized above was available only for members who had participated in a recent annual meeting or congress; clearly, members who had done neither were not included in the sample. Second, only online sources were included in the construction of the sample population. Many universities and organizations in the developing world, for example, simply did not have websites from which any member contact information could be pulled. For some entities, in fact, a website was available one day and the next day either experienced server errors or vanished altogether; for others, the contact information provided was out of date. Third, at this point in the sampling there was no guarantee that the individuals for whom contact information had been pulled were even practicing archaeologists, since many organizations are also open to the public. Last, I searched only information that was available in English, Italian, French, Spanish, Greek, Turkish, or Romanian; sources in other languages were consulted when translation assistance was available.

Finally, in addition to sampling difficulties, there are a number of challenges associated with not only surveys but online surveys in particular. First, not all archaeologists, especially those working in under-

developed countries, have Internet access. Second, spam-blocking technology may have routed the emailed survey invitation to some archaeologists' junk-mail folders. Last, while online surveys are more cost efficient and expedient than those delivered through the post,[42] whether online surveys have improved response rates is unclear.[43]

Despite the limitations discussed above—and without advance email notification, financial incentives, telephone solicitation, or mailed survey instructions—the online survey, sent to a total of 14,429 archaeologists working throughout the world, still garnered an impressive response rate of more than 16% (n=2,358).[44]

Survey Contents

The survey was a mixed methodological online format yielding both quantitative and qualitative data. This article presents findings focused on three issues:

1. Respondents' experience and training in the field (i.e., their practical and academic training; the number of archaeological projects on which they have worked; and the extent, location, and nature of their fieldwork experience).[45]
2. Respondents' personal encounters with looting and site destruction.[46] "Looting" was operationalized as "the removal of culturally significant material from archaeological sites for commercial gain, the act of which destroys archaeological context or evidence needed to learn from the site."
3. Respondents' assessments of the local nature of archaeological site looting where they personally participate in archaeological fieldwork.

The survey also collected participants' demographic information, including age, gender, level of education, occupation, country of origin, country of residence, and native language.

While most of the survey questions offered mutually exclusive response options,[47] many questions also provided open-ended response fields in which participants could provide more detailed feedback about their experiences with and opinions about the presence, nature, and frequency of archaeological site looting. At the end of the survey, a sizeable blank

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[42] Salant and Dillman 1994; Flaherty et al. 1998; Sheehan and McMillan 1999.

[43] Sheehan 2001.

[44] Respondents are referred to only by study participant (survey token) number and, where available, profession and location of fieldwork.

[45] Survey respondents lacking professional archaeological training and/or archaeological fieldwork experience of any kind were thanked for their time and automatically filtered

out of the survey population.

[46] Personal experience with looting is defined as firsthand observation on one or more archaeological sites of looting or physical evidence of looting activity, such as holes, pits, missing objects, or other damage to the site not part of systematic archaeological excavations (Proulx 2010).

[47] E.g., many questions asked archaeologists to rate their agreement with a particular statement; response options were presented on a 5-point Likert scale.

response field was also provided in which archaeologists could expand even further on their comments. Respondents were also asked at the end of the survey whether they wanted to participate further in the study by answering structured follow-up questions by telephone or email, and 662 (28%) respondents agreed. Those respondents were then asked to elaborate on their opinions about and experiences with looting and archaeological site destruction. Blank response fields, open-ended survey questions, and follow-up interviews by phone and email yielded a total of 3,009 qualitative comments.

DEPENDENT VARIABLES: OPERATIONALIZATION

Geography of Looting

Participants were asked to assess looting activity in the country where they had personally performed most of their archaeological fieldwork (1 = *not happening at all*; 2 = *decreasing*; 3 = *fluctuating*; 4 = *remaining the same*; 5 = *increasing*).[48] For this question, scores of 2, 3, 4, or 5 were taken as implicit indications that respondents perceived some degree of looting to occur at sites where they had worked, whether the looting was increasing, decreasing, fluctuating, or holding constant. Responses to this statement were collapsed into two dichotomous categories. Respondents who indicated 1 on this question were recoded as 0 (*looting does not happen where I work*); respondents indicating 2–5 on this question were recoded as 1 (*looting occurs in some form where I work*).

Personal Experience with Looting

Archaeologists' opinions about looting and site destruction may vary significantly depending on whether they have personally experienced looting in the field.[49] Survey participants were thus asked whether they had ever personally observed looting activity or evidence of looting activity while engaged in fieldwork (0 = *no*; 1 = *yes*). Descriptive statistics for these selected dependent variables are presented in the online appendix (table 3).

INDEPENDENT VARIABLES: OPERATIONALIZATION

Location of Archaeological Fieldwork

If looting and archaeological site destruction are phenomena that may vary from one region, country, and archaeological site to the next, then archaeologists' perceptions of such phenomena should vary significantly depending on where they work in the world. The survey asked archaeologists, "Throughout your entire career in archaeology or a related field, in what country have you participated in the majority of your archaeological fieldwork of any kind?" Since this question yielded 118 different responses,[50] country responses had to be aggregated by continent/ geographic region for certain analytical procedures.[51] Table 4 in the online appendix presents all the countries reported as locations of archaeological fieldwork experience among survey respondents, and table 5 shows how countries were aggregated for analysis.[52]

Most archaeologists who participated in the online survey and subsequent follow-up interviews were living in the countries in which they had performed most of their archaeological fieldwork. Of the 2,358 respondents, 44.8% had carried out most of their fieldwork in the United States. Other top countries

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[48] Since many field archaeologists have engaged in fieldwork in a variety of locations, participants were asked to answer the survey questions by focusing on the location where they have done most of their fieldwork. If respondents had information about looting at a site other than the one specified as their primary fieldwork location, they were encouraged to share that information in the open-ended response fields as well as in a follow-up interview.

[49] In some analyses, the dependent variable, personal experience with looting, was alternatively employed as an independent variable and is noted as such in the analysis/findings.

[50] The software employed to program the online survey would not permit the creation of an extensive country dropdown menu with hundreds of options for this question. Instead, respondents had to manually type in the country/ region where they engaged in most of their archaeological fieldwork; if they typed in "United States" or "USA," they were given the option to specify a state as well.

[51] The variable, location of fieldwork, was aggregated for several analytical procedures because the reported 118 country responses were far too many for any form of regression analysis. After some experimentation with varying levels of aggre-

gation, I collapsed the responses into continent/geographic regions as defined by the CIA World Factbook (https://www. cia.gov/library/publications/the-world-factbook),which yielded a manageable 10 categories: 1 = *North America*; 2 = *Central America and Caribbean*; 3 = *South America*; 4 = *western Europe, central Europe, and the United Kingdom*; 5 = *eastern Europe, southeastern Europe, and Eurasia*; 6 = *Asia, Southeast Asia, and southern Asia*; 7 = *Oceania*; 8 = *Africa*; 9 = *Middle East*; and 10 = *other*. By making use of the "fixed factor" feature in IBM SPSS Statistics, I created eight dummy variables from these regions. North America served as the reference category, since it is recommended that the group with the largest number of responses serve as such (Field 2005). Because the 118 country responses were aggregated into broader geographic regions for regression analysis, countries were left disaggregated in as many other discussions and analyses as possible, in concern for the loss of specificity in information.

[52] The CIA World Factbook represents only one method for defining world regions. E.g., countries included in "Eurasia" in the World Factbook may be referred to elsewhere as "central Asia" (e.g., www.worldbank.org) or "western Asia" (e.g., www.un.org) (Proulx 2010).

reported as primary locations of fieldwork experience were Greece (4.36%), the United Kingdom (3.77%), Mexico (3.3%), Israel (2.88%), Peru (2.75%), Turkey (2.29%), Australia (1.48%), Belize (2.08%), Canada (2.75%), and Egypt (1.14%).

Extent and Type of Fieldwork Experience

If looting and archaeological site destruction vary not only by location but also by time, then archaeologists' perceptions and experiences may vary significantly depending on how long they have been in the field and the nature of their fieldwork. The following survey questions were thus selected for analysis as independent variables:

1. In what type of archaeological fieldwork have you participated (archaeological survey, archaeological excavation, post-excavation analysis, site conservation, other)? (0 = *not selected, serving as a reference category*; 1 = *selected*).
2. When did you first participate in archaeological fieldwork? (0 = *2000–present, serving as a reference category*; 1 =*1990–1999*; 2 = *1980–1989*; 3 = *1970–1979*; 4 = *1960–1969*; 5 = *1950–1959*; 6 = *before 1950*).[53]
3. In how many archaeological projects have you participated? (0 = *< 10 archaeological projects, serving as a reference category*; 1 =*≥ 10 archaeological projects*)?[54]

Complete descriptive statistics for these independent variables are presented in the online appendix (table 6).

THE TYPICAL SURVEY RESPONDENT

Of the respondents, 59.1% were male; 27.9% fell within the age range of 31–40; and 82.6% indicated that English was their native language. With regard to level of education and occupation, 55.2% of respondents held a doctorate or equivalent level of education; 36.5% held a master's degree or equivalent as their highest level of education to date; 38.2% of respondents were employed as college or university professors; and 22.4% were employed as professional archaeologists working in other types of organizations, institutions, or agencies at the federal, state, regional, or local level.

Additionally, 29.9% of respondents reported first participating in some type of archaeological fieldwork between 1990 and 1999, and archaeological site

excavation was the most commonly selected type of fieldwork experience among respondents (81.8%). More than 70% reported having participated in 10 or more archaeological projects in their careers. In sum, the typical study participant is an English-speaking, higher-educated male who is professionally trained in archaeology and living and working in the United States, with anywhere between 10 and 20 years of archaeological experience, most of which has been on excavation projects in the field.[55]

ANALYTICAL PROCEDURE

Since the survey was of mixed methodology, both quantitative and qualitative analytical procedures were employed. As regards the quantitative analyses, binary logistic regression was employed where the dependent variable was a categorical dichotomy, and ordinal logistic regression was employed where the dependent variables were ordinal. With regard to the qualitative data (N=3,009), a coding strategy was established by means of an emergent approach after all open-ended responses had been collected.[56] Responses were grouped into categories according to common response themes, which included archaeologists' personal experiences with and opinions about the nature, scope, and frequency of site looting. All open-ended responses were processed manually without the help of qualitative data analysis software. Both quantitative and qualitative data are presented together in the findings below, organized by dependent variable.

FINDINGS: THE GEOGRAPHIC SCOPE OF ARCHAEOLOGICAL SITE LOOTING

General Impressions

Participants were first asked to share their general perceptions about archaeological site looting around the world. When asked whether they thought looting was a common occurrence in all countries with archaeological heritage, 1,959 respondents (89.6%) agreed or strongly agreed. Of the 2,183 participants who responded to this statement, only 11 (0.005%) strongly disagreed; they were working in Australia (n=1), Denmark (n=1), Sweden (n=1), Switzerland (n=1), Syria (n=1), the United Kingdom (n=1), and the United States (n=5). When asked whether they felt that looting happens in only a small number of

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[53] Participation in archaeological fieldwork includes such activities as excavation, survey, study season, conservation, site preservation, cultural-resource management, and other archaeological activity.

[54] In counting the number of archaeological projects in which they had participated, respondents were asked to count the times they had worked on a single site as part of one proj-

ect, whether the project spanned one field season or multiple seasons.

[55] This respondent profile is probably a result of sampling procedures and limitations, which are discussed earlier in this article.

[56] Neuendorf 2002.

countries, 93.6% of respondents either disagreed or strongly disagreed. When asked whether they felt that there was in fact a global market for looted antiquities and other archaeological materials, of the 2,177 participants to respond, 2 (0.1%) disagreed, 20 (0.9%) neither agreed nor disagreed, 357 (16.4%) agreed, and 1,798 (82.6%) strongly agreed. Based on the responses to these three questions, it can be said that most respondents generally perceive looting to be a common occurrence around the world, not an issue limited to a handful of countries. According to archaeologists' general impressions, then, looting does not appear to be an isolated phenomenon; it is instead a globally pervasive problem.

Assessments of Local Looting Activity

Surveyed archaeologists were next asked to assess the looting activity in the area where they have participated in the majority of their fieldwork. Of the 1,835 respondents who answered this question, only 39 (2.1%) indicated that looting does not, in their opinion, occur where they work; conversely, 1,796 (97.9%) surveyed archaeologists noted that looting does occur in some capacity where they work, whether it is increasing, decreasing, fluctuating from one season to the next, or remaining constant. Of the 118 countries reported as primary locations of archaeological fieldwork among respondents, looting activity in some capacity was reported in 103 (87%) of them. Table 7 in the online appendix shows archaeologists' responses by aggregate location of fieldwork, and a complete, disaggregated, country-by-country presentation of this information is presented in table 8.

The preceding descriptive statistics suggest that, based on field archaeologists' assessments of looting in the countries where they personally participate in fieldwork, looting is not an isolated problem confined to some regions or countries. Rather, it appears to be a pervasive phenomenon. Moreover, commenting further on the global scope of looting, many archaeologists noted that they thought looting at archaeological sites around the world is in fact an understated problem. Archaeologist 11488, who has been excavating throughout the eastern United States since the 1970s, wrote, "I feel that many people underestimate the extent of looting and the [illicit] antiquities market." Archaeologist 5557, who has worked extensively throughout Switzerland, made a similar comment: "Pillage is extremely commonplace, and people just don't

realize this." According to Archaeologist 30760, working in Iowa, "Not enough people including myself are aware of the nature and full extent of this problem."

Other archaeologists commented on the geographic variability of archaeological site looting. Archaeologist 41494, an American graduate student excavating in Mexico, wrote: "I think it is really common, [but] occurs at different scales." This is a point worth noting, since while looting activity appears to be globally pervasive, it certainly varies in terms of magnitude, frequency, and destructiveness. Remarking further on the geographic scope of looting, Archaeologist 40405, an American university professor who has been engaged in fieldwork since the 1970s and now works primarily in Bolivia, made a similar point:

> I work in a rather isolated area that does not have the "flashy" sorts of objects that many collectors are interested in. For this reason, I think I see less looting than many others—for instance archaeologists on the coast of Peru where looting is absolutely rampant.

Archaeologist 42970, who works in cultural heritage management in the western United States, added:

> Looting in California is not on the scale that it is in regions with ancient high civilizations or even the American Southwest. Artifacts in California are mostly limited to projectile points that don't command high prices like pottery/figurines/textiles/gold; although California basketry is highly valued, it rarely is looted because it doesn't preserve well.

Other respondents noted that archaeological site looting is not limited to the destruction of archaeological resources on land.[57] Archaeologist 17929, who works in the southeastern United States, wrote:

> I work primarily with maritime sites, where looting is particularly rampant and heinously destructive. I think this is a huge issue that needs to be addressed from the international level all the way down to the fishermen in coastal villages.

Archaeologist 21892, a nautical archaeologist working in Norway, added:

> My experience is mainly with underwater sites. Due to enhanced and relative[ly] cheap scuba technology we have seen an increase in the looting of sites on deeper water since about year 2000. Until then these sites (below 60 m depth) in the coastal waters were usually untouched—no[w] they are to a large degree disturbed,

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[57] Consideration of the damage to submerged archaeological resources is also important, since if site-looting damage on land is underestimated, then it is likely that damage to underwater sites is similarly underdocumented. For an excellent investigation of the looting of marine archaeological resources, see Dromgoole 2006.

mainly by amateur divers with a very material interest in the history of seafaring.

Based on a combination of these quantitative data and qualitative feedback, there appears to be a general consensus among surveyed archaeologists that looting at archaeological sites is globally prevalent. That an overwhelming 97.9% of surveyed archaeologists indicated that looting has in fact occurred in some capacity where they work is an interesting finding that, in combination with archaeologists' general impressions of the global looting situation (discussed above), lends credibility to the conclusion that archaeological site looting is not a problem limited to a mere handful of countries. While there has been speculation throughout the literature that archaeological site looting is a ubiquitous problem, this study lends firm empirical support to that assertion. In response to the broader question regarding the geographic distribution of archaeological site looting, the answer, according to surveyed field archaeologists, is simple: everywhere. If it is in fact widespread, then, just how often are archaeologists encountering it, and how frequently is it happening from one region or country to the next?

PERSONAL EXPERIENCES WITH ON-SITE LOOTING

Surveyed archaeologists were asked whether they had ever personally encountered looting or evidence of looting activity while participating in fieldwork of any kind, and 78.5% (n=1,662) replied yes. Only 458 respondents (21.6%) answered no to this question.[58] Most affirmative responses were from field archaeologists working throughout the United States (34.0%), followed by Peru (3.6%), Mexico (2.4%), Belize (2.3%), Greece (2.2%), Italy (2.1%), Turkey (1.7%), and Jordan (1.6%). In sum, the overwhelming majority of surveyed field archaeologists—close to 80%—have personally experienced looting in some capacity, so much so that these personal encounters appear to be commonplace.[59] Archaeologist 5025, working in Cyprus, echoed this sentiment:

> The possibility that you'll meet with looters while you're working on site is just a given, especially where I work . . . as graduate students on an excavation for the first time we are definitely told that we will have interactions with looters at some point. It's just a known aspect of archaeological fieldwork.

Of those who responded affirmatively, only 24.1% reported that they had personally encountered looters on-site and looting activity in progress. Most respondents instead reported having discovered looters' trenches, holes, pits, or other damage due to unauthorized excavation activity, including, "bones and flakes scattered around near an area that appeared systematically excavated"; "sieve screens set up at a site where no archaeological teams were working"; "stashes of hidden looted artifacts near the site" (as though the looters intended to make a surreptitious return for them at a later date); and "human burials disinterred, ruin walls collapsed or disassembled, pottery vessels broken, beer cans and cigarette wrappers and other trash left at sites."[60] Nearly half of these respondents also reported objects stolen from their sites.[61]

Those respondents who reported having any personal experience with looting were also asked to estimate the frequency with which they had encountered looting activity at the site level. Most of these surveyed archaeologists (n=576, or 35.2%) reported that they had experienced looting or residual evidence of looting activity on two to five individual archaeological sites over the course of their fieldwork careers. Archaeologist 41491, an American graduate student working throughout Central and South America, observed:

> Nearly every large archaeological site I have worked at or visited in the Maya area has looter trenches and looter pits in the major temples. In fact, I can't think of a Maya site without looter pits.

Respondents were also asked to gauge the frequency with which those sites where they had observed looting had been victimized, and nearly half of the respondents (n=492, or 45%) estimated that those sites had been looted on average on between two and five occasions. Archaeologist 50075, an American museum employee working primarily in Peru, noted:

> I have seen hundreds of sites looted, and looted sites have been looted thousands of times. One can see the damage in satellite imagery. Some sites look like they were used for missile target practice.

Moreover, when participants were asked whether they felt the looting activity had been getting better

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[58] There were 149 missing cases for this value, which were removed from the analysis.

[59] Proulx 2011b.

[60] Proulx 2011b.

[61] Of those respondents who had encountered looting or evidence of looting activity, 12.7% reported having done

nothing, whereas 50.6% photographed the damage, 44% notified other fieldwork team members, 44.6% notified local archaeological authorities, and 29.7% notified local law enforcement. For a more detailed discussion of actions taken by archaeologists upon encountering looting, see Proulx 2011b.

or worse since January 2002,[62] 28.2% (n=628) thought that although it was fluctuating and some years were better than others, it was not decreasing in the long run; 27% (n=600) thought it was holding fairly constant and neither decreasing nor increasing appreciably; 19.6% (n=437) thought it was increasing; and only 5.9% (n=131) thought it was decreasing. Taken together, the majority of respondents felt that looting was either increasing or at the very least not decreasing appreciably. Archaeologist 2137, a Danish graduate student with fieldwork experience on more than 10 projects, echoed this sentiment:

> Looting in Jordan, I believe has not increased in resent [sic] years, however, next door in Iraq the looting has gone through the roof, as several sites have come close to destruction because of it. It no longer looks like a coherent tell, but instead resembles a piece of Swiss cheese.

Another archaeologist, who has been working in South America since the 1980s, noted:

> Looting has dramatically increased in Peru in the last 10 years. Looters have switched from just looting cemeteries and mounds to looting every type of site. Teams of looters will work over a site until it is completely destroyed.

Archaeologist 3424, who also works in South America, made a similar observation:

> In Peru, there has definitely been an escalation in looting activities, and in professional looting activities using mechanical equipment.

If nearly a quarter of surveyed archaeologists have observed a noticeable increase in looting activity on sites where they have worked, what could be driving this? Archaeologist 34339, a Lebanese university professor, cited "lack of state control" and "economic reasons." Another respondent, Archaeologist 4027, suggested that this increase in looting activity may be closely related to land development:

> In Cyprus where I have conducted most of my archaeological fieldwork, the increase in looting is closely linked to property and touristic development which exposes new archaeological sites which are immediately prey to looting.

Other respondents, such as Archaeologist 37243, a Czech university professor working in the region of Moravia, felt that the increase in looting activity had more to do with globalization:

> [The] recent increase in looting . . . is correlated with two main variables: 1. Spread of new technologies: especially metal detectors. 2. The fall of communism that increased the flow of goods and opened international markets.

Archaeologists 3811 (United States) and 35485 (United Kingdom) blamed the Internet, noting respectively that "I suspect that eBay and other online auctions have worsened the situation" and "[f]rom the amount of artefacts—both real and obviously fake—I see offered for sale on Ebay, there can only have been an increase in site looting." In sum, the majority of surveyed archaeologists have not only had personal experiences with looting but have had such experiences at multiple archaeological sites on multiple occasions. Moreover, most also felt that site looting had not decreased appreciably and that in many places around the world looting activity had been increasing for a variety of reasons.

OFF-SITE ENCOUNTERS WITH LOOTING ACTIVITY

The majority of responding archaeologists (87.1%) also reported off-site interaction with looters, both admitted and suspected. Admitted looters often spoke openly about their illegal digging endeavors to the respondents.[63] Some archaeologists reported having been

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[62] There is nothing "special" about framing frequency questions from January 2002. The online survey was released at the end of December 2007, so this date yields a manageable five-year time frame in which respondents could be expected to recall a reasonable number of specific details regarding their personal experiences with looting and archaeological site destruction. Other time frames that were tested included 10-year, five-year, and one-year periods; the five-year time frame was ultimately selected. The 10-year time frame was too broad, and archaeologists who participated in a test had trouble recalling explicit details about their experiences with looting. The one-year time frame was determined to be too small, since archaeologists are typically engaged in fieldwork for only a few weeks out of the year. To ask about their experi-

ences within a one-year time frame, in other words, was overly limiting—in effect, it asked archaeologists to discuss only their experiences during the last field season. There was also some early experimentation with frequency questions about participants' experience over 10-year, five-year, and one-year periods. While this would have been helpful in constructing a more detailed picture of the fluctuation of looting activity around the world, it was determined that the multiple sets of frequency questions were too time-consuming and confusing for respondents, who often had trouble distinguishing the proper time frame in which an experience with looting had occurred.

[63] Proulx 2010.

presented with looted wares by the looters themselves, who apparently expected the respondents to admire, appraise, or even purchase items from their collections.[64] In fact, when asked whether they had ever been asked to purchase an item they thought had been looted, nearly half (49%) of the 2,024 archaeologists who answered this question responded affirmatively. Archaeologist 15853, a German university professor who has participated in a variety of excavations throughout the United Kingdom, recounted the following:

> A metal detectorist came [to me] to show an object he had found "in a plough field" and asked for its monetary value. It was clear that the object must have come from a closed grave.

While it does not appear to be uncommon for looters with illicit goods for sale to approach archaeologists, these occurrences seem to be especially prevalent in Central America, South America, Asia, Africa, and the Middle East, as reflected in the online appendix (table 9).

Why might local looters feel so free to showcase their looted wares to archaeologists? Survey respondents provided a variety of explanations. Archaeologist 33652, who works in the southern and southeastern United States, wrote:

> The first reason is ego ("discoverer's bias" and bragging rights). Second, desire to obtain insight on cultural significance/interpretation and commercial values specific to the specimen(s). Third, desire to gain information on archeological site locations, techniques for interpreting artifacts, site materials, locations, etc. [F]ourth, ignorance for example in that some looters are naïve enough to see professional archeologists as sympathetic to their activities, etc. Fifth, some looters are anti-government-anti-science-anti-academic to the point that they enjoy "messing with" archeologists—pure entertainment for them, i.e. "Look what I found—you can't 'touch' this or me."

Archaeologist 31087, who works in the western United States, cited another reason:

> Many locals feel free to show their findings to us because they know they are not going to ever be punished for their activities. . . . They are actually proud of what they are finding. . . . Thus they view themselves as helping to salvage what can be salvaged.

Other respondents suggested that such interactions with looters were driven by economic necessity. Archaeologist 9535, who works in the northeastern

United States, noted, "In most field settings, archaeologists are seen as having access to wealth and power. So people try to access that through trade or sale or sometimes gifts." Archaeologist 500754, who works in Peru, wrote, "Sometimes I am approached because individuals don't know I am an archaeologist. Other times I am approached because individuals think that because I am an archaeologist I will want to buy what they have looted." Finally, Archaeologist 5197, who works in El Salvador, noted simply, "Hey, a customer is a customer."

Archaeologist 11566, who has worked in Belize, suggested that perhaps archaeologists' good rapport with the locals can best explain why looters feel comfortable to show archaeologists their looted goods. After all, the success of an archaeological field project is largely contingent on the establishment and maintenance of good relationships with the locals:

> I worked with some locals who would protect me with their lives, and I them. I know they had looted in the past. I have eaten in their dirt-floored homes. They are not getting rich by looting. Although they may be getting by [with] looting.

In sum, while close to 80% of surveyed archaeologists reported personal encounters with looting onsite, even more field archaeologists—close to 90% of those surveyed—reported encounters with admitted and/or suspected looters off-site.

LIKELIHOOD OF EXPERIENCING LOOTING FIRSTHAND

As noted above, the overwhelming majority of surveyed archaeologists—78.5%—have had personal experience with looting in some capacity. But are there any significant differences in archaeologists' likelihood of experiencing looting depending on where in the world they work or how much field experience they have? To test this, I ran a binary logistic regression procedure, the results of which are presented in the online appendix (table 10). A significant likelihood ratio chi-square value ($\chi^2 = 224.133$; df = 20; $p = 0.000$) derived from the model's omnibus test indicates that the independent variables included in this model provide statistically significant (i.e., not attributable to chance) explanatory power for the dependent variable. As table 10 shows, there were several significant differences:

1. The year in which respondents began their careers in field archaeology, $\chi^2 = 44.73$ (df = 6; $p < 0.001$).

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[64] Proulx 2010.

2. Whether they have participated in archaeological excavation, $\chi^2 = 10.01$ (df = 1; $p = 0.002$).

3. Whether they have participated in archaeological site preservation, $\chi^2 = 10.79$ (df = 1; $p = 0.001$).

4. Whether they have participated in some other type of archaeological fieldwork, $\chi^2 = 4.84$ (df = 1; $p = 0.028$).

5. The geographic region in which respondents conduct the majority of fieldwork, $\chi^2 = 64.52$ (df = 8; $p < 0.001$).

6. The number of archaeological projects on which respondents have worked, $\chi^2 = 1904$ (df = 1; $p < 0.001$).

None of the other independent variables included in the model (e.g., whether a respondent had participated in post-excavation analysis or site survey) was significant.[65] Taken together, these data can be interpreted to mean that the likelihood of a field archaeologist personally experiencing looting depends on the extent and type of archaeological fieldwork he or she has performed and the location of such fieldwork. See the online appendix (table 11) for these variable differences.[66]

The model predicts that archaeologists who began working sometime between the 1960s and the 1990s will have lower log odds of never having personally encountered looting compared with archaeologists who began their careers during the 2000s (the reference category). In other words, archaeologists with more time and experience in the field are less likely to report that they have not personally encountered looting at any point during their careers. Similarly, archaeologists who have participated on more archaeological projects throughout their careers are less likely to report not having personally encountered looting. This makes sense, given that archaeologists who have simply spent more time in the field and have participated in more projects have had more opportunities to encounter looting, compared with their less experienced counterparts.

The same can be said for type of archaeological fieldwork experience. For archaeologists with site ex-

cavation and preservation experience, the log odds of not having observed looting would decrease by 0.64 and 0.44 units, respectively, compared with the log odds of those archaeologists who have not participated in any field excavations or on-site preservation activities. Field archaeologists engaged in either excavation or conservation, in other words, are more likely to report having personally experienced looting than are their colleagues who have not excavated or worked in site preservation.[67]

Interpretations similar to those discussed above can be made in regard to fieldwork location, with North America serving as the reference category. As indicated in the online appendix (table 11), there were significant differences in a respondent's likelihood to encounter looting personally if he or she was working somewhere in Oceania, Africa, western/central Europe, or the United Kingdom. Regression analysis, having controlled for other variables, revealed that archaeologists working in these places were more likely not to have personally experienced looting than their counterparts working in North America. This is an interesting finding, given that even the most cursory examinations of the extant literature do not place North America among the regions with the most serious looting problems. It could indicate that the looting problem throughout North American has been particularly understated.

In sum, the odds that field archaeologists will personally encounter looting vary significantly depending on how long they have been in the field, the type and extent of fieldwork they have undertaken, and the location of their fieldwork. Archaeologists with more time and broader experience in the field have simply had more opportunities to encounter site looting. While data presented earlier showed that personal experience with looting was reported in a much broader spectrum of countries than indicated in the extant literature, it also appears that the chances of happening upon looting on-site vary geographically. The odds of experiencing looting are greater throughout North America than in Oceania, Africa, and central/western

[65] Perhaps when compared with archaeological site excavation and preservation, surface survey and post-excavation analysis afford less intimacy with the archaeological landscape, putting archaeologists with excavation and preservation experience in a differential position by which to encounter site looting.

[66] The results in the online appendix (table 11) are based on the logits of the variables, which means that the coefficients represent the log odds of the dependent variable (whether a survey respondent has personally experienced looting). Since the reference category for the dependent variable is whether

a respondent selected "no" (coded as 0), indicating that they have not in fact personally experienced looting as such, the results must be interpreted based on the log odds of a respondent selecting "no" in response to this question.

[67] Archaeologists without "other" types of fieldwork experience have lower log odds (by 0.41 units) than archaeologists who do have experience with these types of fieldwork. "Other" types of fieldwork reported among survey respondents included but were not limited to "archaeological illustration," "GIS analysis," "teaching field school," "archaeological part development," "educational tours," and "aerial survey."

Europe and the United Kingdom; the likelihood that a field archaeologist will personally encounter looting are not significantly higher or lower in Central America, the Caribbean, South America, Asia, eastern Europe, or Eurasia than in North America. These geographic differences are likely due to differential enforcement and protection efforts, domestic legal landscapes, or the archaeological landscapes themselves.

DISCUSSION OF KEY FINDINGS

Based on the feedback of surveyed archaeologists working around the world, looting and subsequent archaeological site destruction are universal. Looting activity in some capacity was reported in 103 (87%) of the 118 countries reported as primary locations of archaeological fieldwork among respondents. The overwhelming majority (97.9%) of respondents reported that looting was occurring in some capacity in the country or region where they conduct fieldwork, and 78.5% of respondents reported having had personal on-site experience with looting at some point during their careers. While there was some variation in archaeologists' experiences and odds of personally encountering looting, field archaeologists' encounters with looting are hardly surprising given that they work regularly on the very sites of interest to looters. Though experiences with residual looting activity are more commonplace on-site, interactions with looters themselves are generally more common off-site. Most surveyed archaeologists have observed looting on multiple sites, and those sites have been looted on multiple occasions.

That archaeological site looting is globally pervasive, commonplace, iterative, and not decreasing appreciably is a critical finding. Looting—and, consequently, the role it may play in the antiquities trade—can no longer be dismissed as simply exaggerated,[68] nor can concerns about looting be cast off as the mere products of scaremongering archaeologists[69] with overblown imaginations and thinly veiled preservationist agendas. The quantitative and qualitative data presented above clearly lend empirical support to the conclusion that the global looting phenomenon is not an exaggerated problem. Such empirical support in turn provides a firmer, quantifiable foundation on which to base cultural heritage policy and practice

because in the end, as Brodie and Doole note, "when the hard political decisions are made, it's the figures that count."[70]

That archaeological site looting is not a problem simply limited to economically underdeveloped "source" countries is another important finding. One rationale offered by those who champion the internationalist perspective on cultural heritage[71] and advocate free trade in antiquities (supporters of this view are traditionally auction houses, museums, dealers, and collectors) is that such open trade would economically benefit impoverished nations.[72] Yet surveyed archaeologists reported looting in countries and regions of the world reflecting a variety of economic statuses. This study makes clear that the "archaeology and culture of demand countries themselves are not immune"[73] and that the justification for an open antiquities trade on the grounds that it is an important economic resource for impoverished peoples of underdeveloped source countries is a weak one.[74]

CONCLUSION

This study represents a fledgling effort to document the nature, scope, and frequency of archaeological site looting in "glocal" perspective by focusing on an international sample of practicing field archaeologists who represent but one attitudinally heterogeneous group on the "source" end of things. Surveyed archaeologists were offered an unprecedented forum in which to share their perceptions of and personal encounters with looting, and they provided a colorful spectrum of observations and opinions with as many common denominators as variables. While there may be nothing especially groundbreaking about asking archaeologists to share their personal experiences with and opinions about archaeological site looting, this study's design and sample make it innovative in its global scope, aim, and execution. Simply put, this study lends empirical support to the claim that looting is an iterative problem that is both globally and temporally pervasive, not confined to certain areas of the world or particular types of archaeological resources.

While we may never be able to measure exactly what has been materially and intellectually lost to pillage and plunder,[75] there is no uncertainty that the surveyed field archaeologists' reports of looting originated in many different parts of the world or that most

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[68] Brodie 2002; Renfrew 2002.

[69] Brodie et al. 2001.

[70] Brodie et al. 2001, 1.

[71] Merryman 1995.

[72] Brodie 2002.

[73] Brodie 2002, 2.

[74] For an in-depth examination of dealers' and collectors' perspectives on looting and the antiquities trade, see Mackenzie 2005.

[75] Roosevelt and Luke 2006.

of those archaeologists have had personal experience with looting both on-site and off. With hundreds of archaeologists around the globe reporting similar experiences with looting, it no longer seems feasible to categorize looting as an isolated problem limited to underdeveloped countries or exaggerated for political purposes. In broadening and refining our understanding of looting and site destruction in a glocal sense, this study represents an important step toward a more globally informed, locally nuanced response to archaeological site looting and its role in the illicit antiquities trade.

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