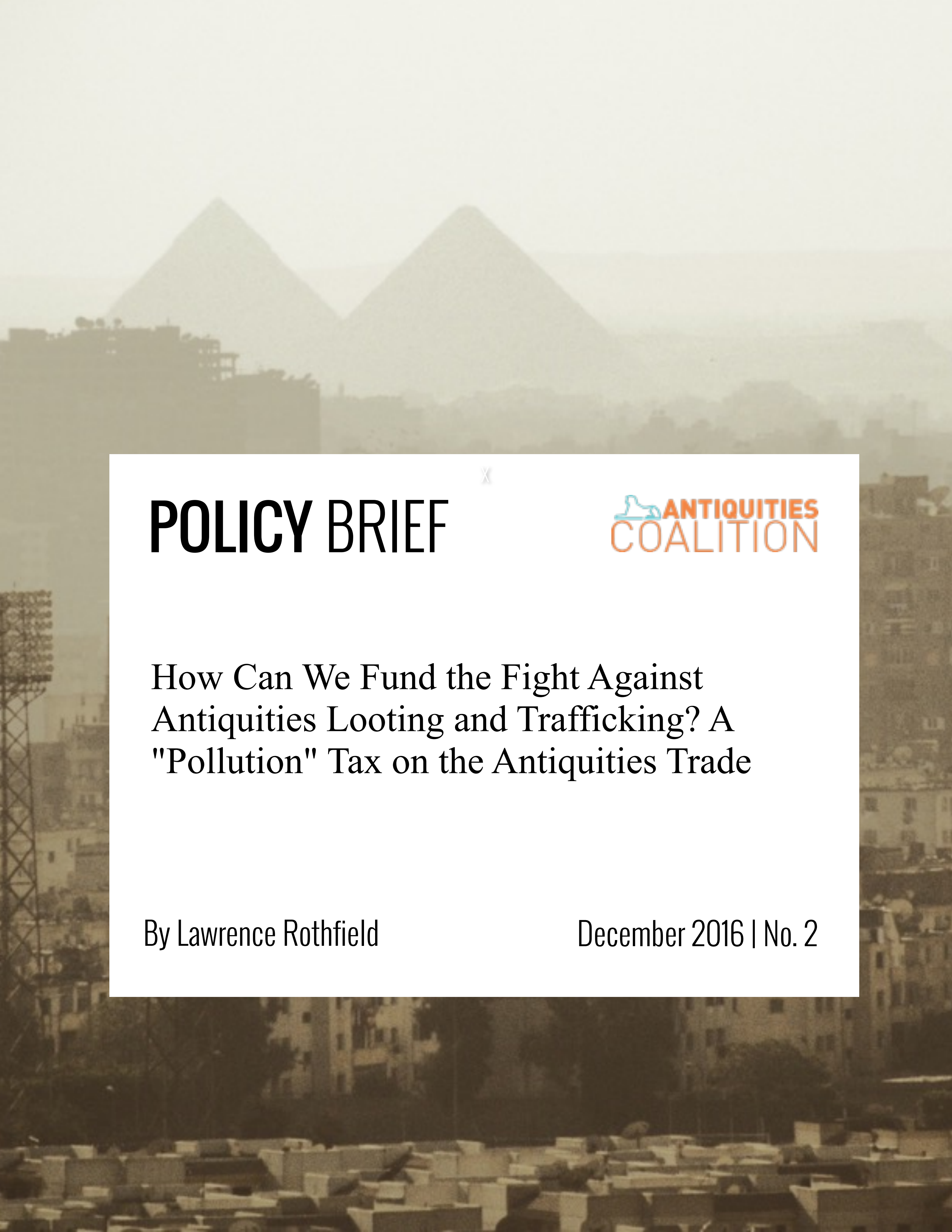

POLICY BRIEF

ANTIQUITIES COALITION

How Can We Fund the Fight Against Antiquities Looting and Trafficking? A "Pollution" Tax on the Antiquities Trade

By Lawrence Rothfield

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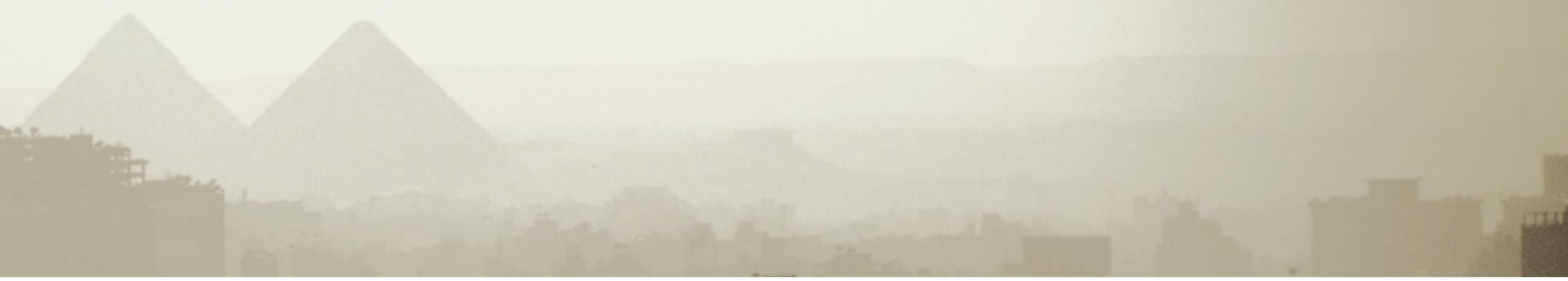


ABOUT THE AUTHOR

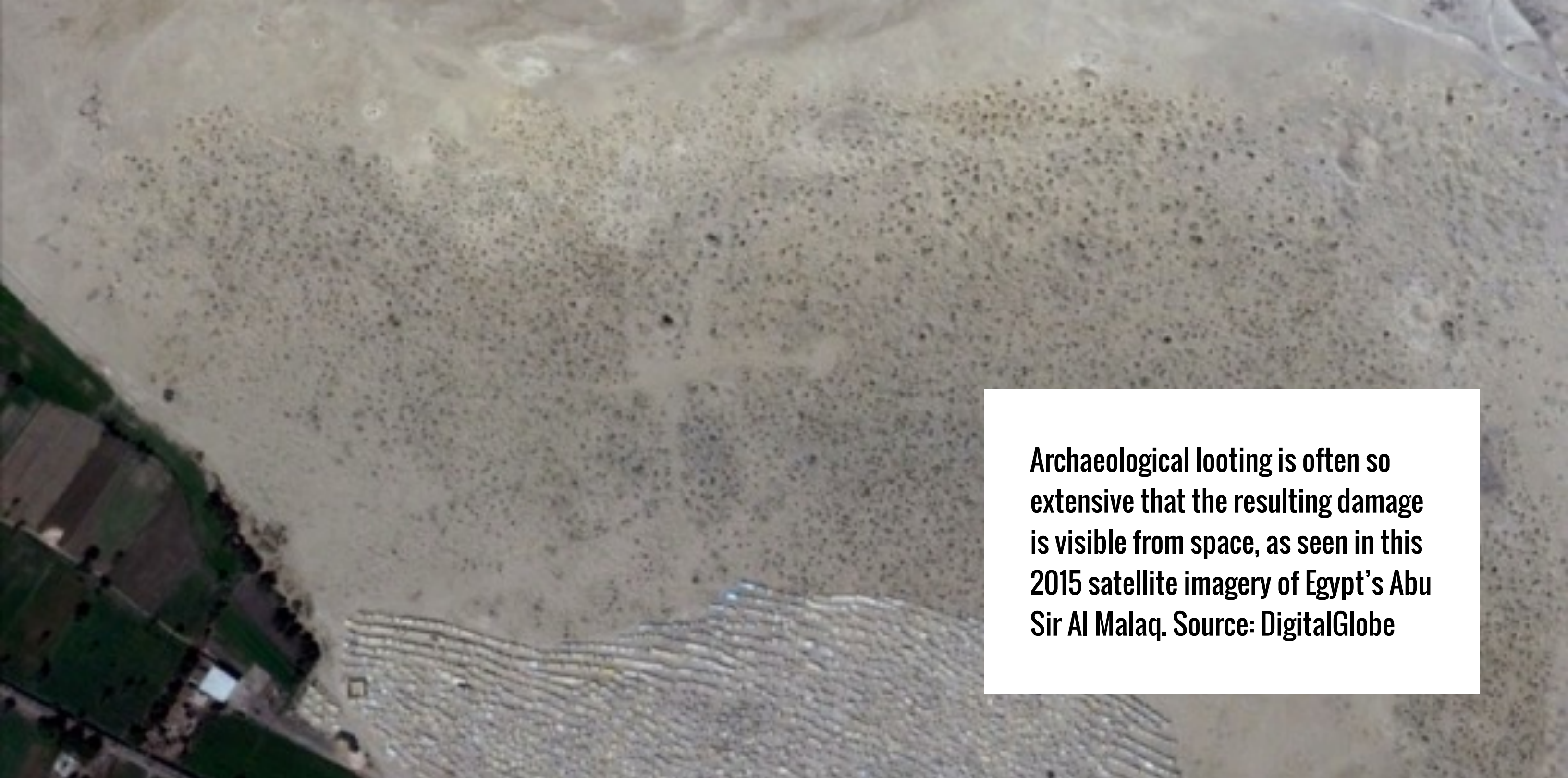
Lawrence Rothfield is associate professor of English and Comparative Literature at the University of Chicago, where he is currently directing a major three year research initiative on illicit antiquities markets, "The Past for Sale: New Approaches to the Study of Archaeological Looting." Former director of the Cultural Policy Center, Professor Rothfield's heritage policy publications include two books analyzing the disastrous failure to secure Iraq's sites and museums from looting in the wake of the 2003 U.S. invasion: *The Rape of Mesopotamia: Behind the Looting of the Iraq Museum* (University of Chicago Press 2009); and an edited volume, *Antiquities Under Siege: Cultural Heritage Protection after the Iraq War* (Altamira, 2008). His current work focuses more broadly on conceptualizing archaeological site looting as a policy problem that could be tackled using policy tools developed to deal with analogous collective challenges.

ABOUT THE THINK TANK

The Antiquities Coalition unites a diverse group of experts in the global fight against cultural racketeering: the illicit trade in art and antiquities. This plunder for profit funds crime, armed conflict, and violent extremist organizations around the world—erasing our past and threatening our future. Through innovative and practical solutions, we tackle this challenge head on, empowering communities and countries in crisis.

In 2016, as part of this mission, we launched the Antiquities Coalition Think Tank, joining forces with international experts, including leaders in the fields of preservation, business, law, security, and technology. Together, we are bringing high-quality and results-oriented research to the world's decision makers, especially those in the government and private sectors. Our goal is to strengthen policymakers' understanding of the challenges facing our shared heritage and more importantly, help them develop better solutions to protect it. However, the views expressed in these policy briefs are the author's own, and do not necessarily reflect those of the Antiquities Coalition.

We invite you to learn more at thinktank.theantiquitiescoalition.org.



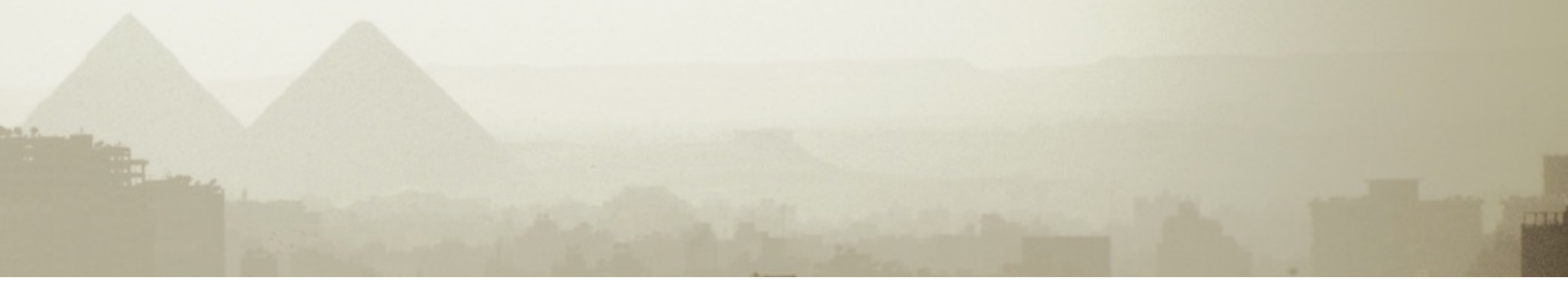
Archaeological looting is often so extensive that the resulting damage is visible from space, as seen in this 2015 satellite imagery of Egypt's Abu Sir Al Malaq. Source: DigitalGlobe

Executive Summary

To supplement and give teeth to the strict but ineffectual legal regime now in place against antiquities trafficking, a "pollution tax" should be imposed on antiquities purchased in "market" countries.

Almost every nation has laws against looting, smuggling, and trafficking in antiquities, supplemented by international bans and bilateral interdictions. Yet the playing field remains badly tilted against the site guards, customs officials, antiquities police, and prosecutors charged with enforcing these laws, in large part because enforcers lack the financial resources needed to do their job.

To supplement and give teeth to the strict but ineffectual legal regime now in place, economic thinking, and basic public policy research suggests it would be helpful to institute a "pollution tax" on antiquities purchased by residents of "market" countries. Such taxes—imposed on such transactions in goods like tobacco, gas, coal, etc.—are designed to internalize the social costs of economic activities so that the polluting industry either takes measures to clean itself up or pays the government to prevent or mitigate the harm the industry causes. An antiquities tax, tailored to fall more heavily on antiquities with weaker provenance or extremely high prices, and channeled into an antiquities-protection "Superfund" (as was done to clean up toxic chemical sites) or via existing governmental agencies, could provide a sustainable funding stream to pay for more robust monitoring and enforcement efforts against the illicit market and for better site security. Such a tax is likely to face substantial resistance from both dealers and archaeologists, but it is suggested that the concerns of both sides could be dealt with through sustained discussion and negotiation.



Introduction

The world is losing the war against looters and traffickers who are destroying our past to meet the market demand for antiquities.

Antiquities looting and trafficking has recently become front-page news, thanks to Daesh (also known as ISIL or ISIS), which reportedly has moved from licensing diggers and taxing sales of dug artifacts to hiring its own diggers and setting up its own distribution network of smugglers and middlemen.[1] But Daesh is only doing brazenly what gangs of antiquities looters, smugglers, and traffickers are doing daily with less fanfare everywhere from China to Peru, Bulgaria to the United States—wherever salable artifacts are buried. The world is losing not just the battle against Daesh-sponsored digging but also a much broader global war against the past, a war driven not by ideology but by market demand for antiquities.

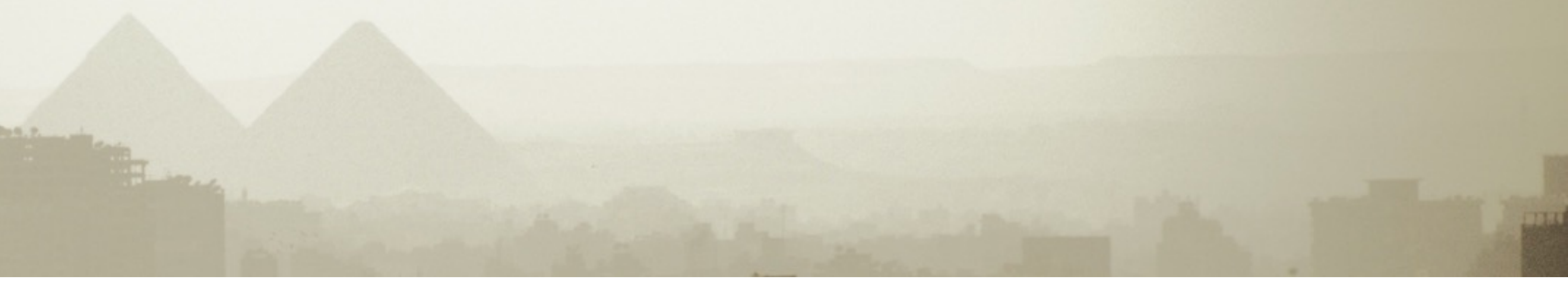
What is to be done? As is evident from the primary policy response to Daesh—United Nations Security Council Resolution 2199 calling for a global ban on the international trade in Syrian and Iraqi materials—the international community has opted for what could be called a command-and-control approach to the problem of archaeological looting: governments just say no to looting, to smuggling, and to trafficking antiquities. Such direct regulation takes the legal forms of asserting national property ownership of archaeological material (including not-yet-excavated artifacts) and prohibiting their export or import.

While strict laws have been enacted against the illicit trade, they have not been enforced stringently enough to deter potential criminals, in part because of high financial costs.

As a tool of government action, command-and-control regulation has many advantages, not least being the clarity and simplicity of its message: the law must be followed. But the mere enactment of a law does not guarantee it will deter potential criminals, whether they are locals enticed to dig by the prospect of making five dollars selling a pot to smugglers, or smugglers who know they can make five-hundred dollars reselling it to dealers, or dealers who know they can make fifty-thousand dollars reselling that same pot in New York or London or Abu Dhabi. To be effective, laws must be enforced stringently enough to make the potential reward of criminality not worth the risk.

And enforcement is not free.[2] With regard to antiquities, enforcement requires paying for site guards and customs inspectors to defend thousands of sites and keep borders from being violated, and for undercover agents and prosecutors to investigate and take down smuggling rings. Such costs can be quite considerable: more than one thousand Chinese police were involved in a 2015 operation against a gang of 175 looters, and the two and a half year sting operation that led to the arrest of twenty-one people in Four Corners, Utah ran up a bill of nearly half a million dollars.[3]

How such bills are to be paid is not a topic that has received much attention from advocates for heritage protection, nor is it well addressed in current law. When the United States signs a Memorandum of Understanding with another country, for example, the agreement is a quid pro quo in which each state party is simply asked to do its part, but specific funding benchmarks are very seldom stipulated. It is presumed that where there is a will there is a way for the state—or the international community—to do what it declares it wants to do. The unpleasant truth, however, is that even



leaving aside states in political crisis such as Iraq, Syria, or Egypt, most poorer countries simply cannot afford to cover the full costs of protecting their sites against armed gangs of looters or securing their borders from smugglers. And the international community has not stepped up to fill this gap. The only United Nations entity currently devoted to helping defray the costs of protecting heritage, the World Heritage Fund, focuses its four million dollar budget solely on World Heritage sites and limits its focus to conservation and development concerns. The United Nations Educational, Scientific, and Cultural Organization (UNESCO) has recently established a Blue Helmets heritage peacekeeping unit, but no funding mechanism for it has been stipulated either.

There is a seeming exception to this generally bleak picture. In the United Kingdom, where there is (unlike in the United States) a cabinet-level Department for Culture, Media, and Sport, the government has allocated £30 million from Overseas Development Assistance (ODA) funds to a new Cultural Protection Fund between 2016 and 2020. This fund is designed to assist local partner organizations in targeted countries in the Middle East and North Africa where heritage is under threat from rampant looting among other dangers. But, disappointingly, rather than improving site security or stemming antiquities smuggling, the fund seeks only to ensure that "cultural heritage under threat is researched, documented, conserved and restored to safeguard against permanent loss."[4] Archaeologists, curators, and conservators will be supported, but apparently not site guards or antiquities inspectors. Nor is similar allocation likely in the United States.

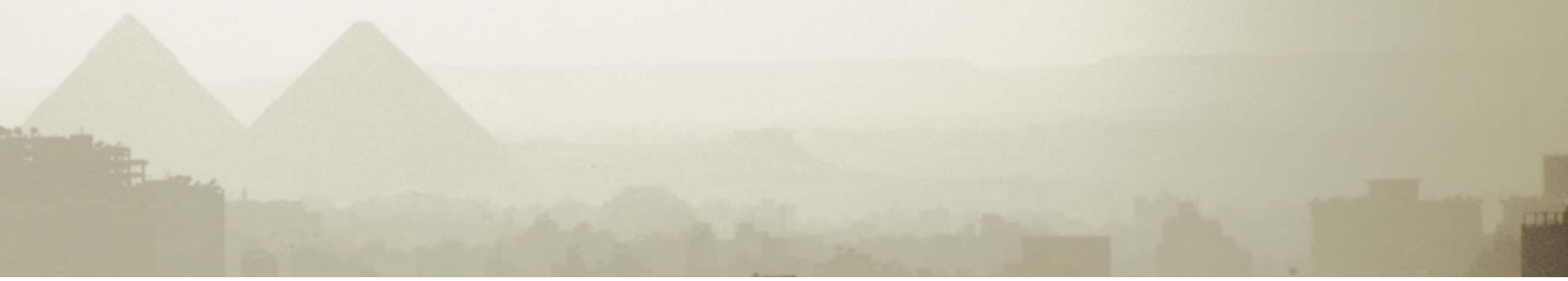
Policy changes and technological innovations can reduce the costs of enforcing existing laws.

One way to address the funding shortfall is via policy changes or technological innovations that would reduce the costs of enforcing existing laws. Creating a distinct customs declarations category for antiquities as differentiated from antiques; establishing reporting requirements for sales of antiquities like those that exist for banks and scrap metal dealers; setting a minimum standard for the number of documents attesting to ownership (what antiquities market researcher Neil Brodie calls "verifiable provenance")—these are just a few steps that would make it easier for the state to monitor the market. Similarly, improvements in satellite launching technology could make it cheaper for states to monitor their sites.[5] But none of these, in themselves, are likely to bring enforcement costs down dramatically enough to meet the challenge.

Reframing the Problem

To design an effective policy mechanism to finance heritage protection, we should think about antiquities looting first and foremost as an economic problem.

If we want to design an effective policy mechanism to finance heritage protection, we need to begin to think about antiquities looting—and societal steps taken to prevent it—as first and foremost an economic rather than legal or moral phenomenon. From an economic point of view, the problem is best understood as one of *externalities* associated with producing or consuming a market good. To produce an antiquity, archaeological material must be dug out of the ground, cleansed of its dirt, and transported to dealers. In this respect antiquities are akin to coal, another resource that is mined. It is no accident that Daesh's "government"



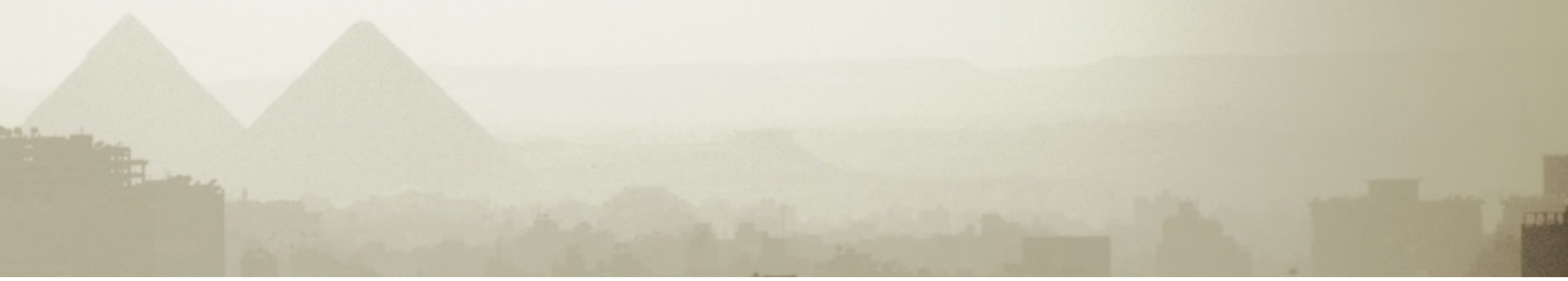
oversees the industrialized looting of archaeological sites under the auspices of a “Department of Precious Resources” (known as the *Diwan al Rikaz*) which also regulates mines and mineral extraction. Like coal, which produces energy that heats homes and generates electricity, antiquities do good for those who buy them. But like coal, which in being extracted and burned in the wrong ways also causes environmental harm not only to those directly engaged but to us all, so the extractive strip-mining of antiquities also causes social harm to us all by obliterating the historical record constituted by the stratigraphic context in which the buried artifact was embedded.

While the primary purpose of Pigovian taxes is to incentivize behavior change, they can and do raise substantial revenues.

The economic problem, then, is how to deal most efficiently with the social costs incurred by polluting industries. The solution, first elaborated by Arthur Pigou in 1932, is to internalize those costs: to make polluters take economic responsibility for the harm their activities generate. Under the “polluter pays” principle, polluting industries are required to bear the social cost of their behavior, rather than putting that burden on either impacted bystanders or the state. The form of payment is a tax, ideally a tax equal to the social costs caused by the industry’s operations.

Although this kind of levy is sometimes referred to as a “sin tax,” a Pigovian tax is morally neutral. It is not designed to punish those who have committed a sin, or deter those who would sin from doing so. That is the job of criminal law and moral strictures. Pigovian taxes, by contrast, are designed to mitigate harm in the present and to reduce harm in the future. They make no moral judgment—“dealers and collectors are the real looters, and should go to jail”—but instead make an economic judgment —“destruction of archaeological sites by looters occurs because of the activities of the antiquities market, and such destruction can be reduced by making the antiquities market pay the costs of securing sites, fighting international traffickers, and cleaning up the trade.”

Despite industrial looting by Daesh (shown here), which is known to finance their terrorist activities, the international community has been unable to come up with the funding to police the antiquities trade. Source: The Day After Heritage Protection Initiative



The antiquities trade is of course already subjected to taxes in various jurisdictions: in the United Kingdom, for instance, a value-added-tax is assessed; in New York, a sales tax. But these are general taxes, intended to raise general revenue, not special taxes targeted at one industry to compensate for the social harm it does.[6] This is a crucial difference, for two reasons.

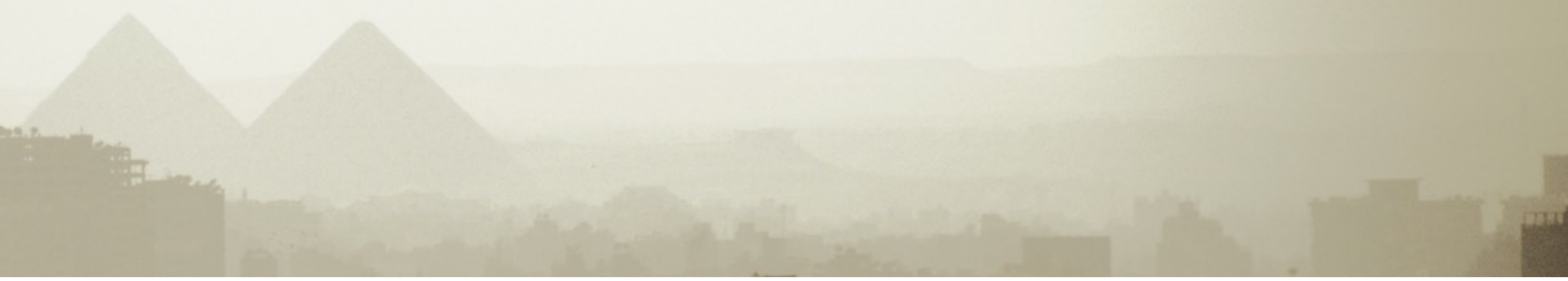
Any revenues generated by such a Pigovian tax should go directly to mitigate the harm being done.

First, because a Pigovian tax is tied to a named harm, it makes sense (though it is not logically required) that any revenues generated by such a targeted tax should go directly towards efforts to mitigate the harm being done. So, for example, taxes on cigarettes go towards governmental anti-smoking programs, and taxes on the petroleum and chemical industries went into the Superfund created to clean up toxic waste sites.[7] Similarly, revenues from a dedicated tax on antiquities sales might flow into something like an archaeological site Superfund, aimed at sustainably covering the costs of policing the antiquities trade and securing archaeological sites—costs that, as I have suggested above, are not being met now, even with regard to the extreme case of looting that supports Daesh.

The greater the amount of harm, the higher the Pigovian tax should be, in order to provide economic incentives for reducing that harm.

Second, unlike a sales tax, a Pigovian tax can be calibrated to the degree of harm being done by the business activity in question—the greater the amount of harm, the higher the tax. That gives polluting firms and industries an economic incentive to take steps themselves to reduce the harm they are doing. They can save money on their tax bills going forward by reducing the pollution they produce (by installing scrubbers in coal plants, for instance). Antiquities dealers and auction houses could similarly clean up their act and thereby reduce their taxes. If taxes on better provenanced artifacts were lower than on poorly provenanced artifacts, for instance, dealers could opt to concentrate their time and effort on trying to sell only better provenanced artifacts. Similarly, complying voluntarily with "know your customer" procedures to identify and share information about traffickers who proffer questionable pieces to a dealer, or simply agreeing to report to law enforcement the names of sellers and buyers of antiquities, would help authorities police the market, and could thereby earn the dealer a tax reduction.

It is important to acknowledge that, for most artifacts in a dealer's showroom or auction house catalogue, absence of verifiable provenance does not prove the artifact is "dirty"; as dealers point out, antiquities have emerged innocently in chance finds or from a grandparent's attic without paperwork.[8] But if such "recycled" materials or surface finds cannot be distinguished from freshly looted "dirty" artifacts, then there is some risk of inadvertently doing harm whenever any inadequately provenanced antiquity is sold. That is precisely the kind of risk, where either the source or the victim of an externality may not be absolutely specifiable, that a Pigovian tax is designed to price in.



How Much Could A Pigovian Tax Raise?

Any plan to impose a Pigovian tax on antiquities must take into account administrative costs–but collecting taxes is a relatively cheap governmental action.

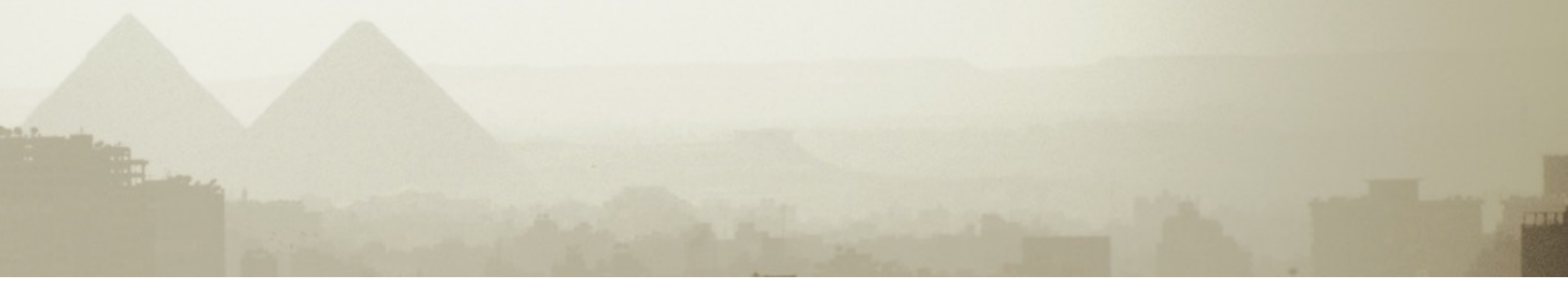
The primary purpose of a Pigovian tax is not to raise revenue but to incentivize sellers and buyers of a good to pollute less. (So, for instance, a five-cent tax on plastic carryout bags in Washington, D.C. shunts almost all revenue raised into a river cleanup protection fund, but the real impact has been on plastic bag consumption, which has gone down by at least eighty percent.) That said, Pigovian taxes can and do raise substantial revenues, depending on several factors, including the size of the market. The London-based International Association of Dealers in Ancient Art (IADAA) estimates that the entire legitimate antiquities market in 2013 was worth between €150 million and €200 million ($160-215 million). Because IADAA has not released the study or even described the methodology it used to arrive at this estimate, it is difficult to assess its accuracy. But taking it as a starting point, even a straightforward across-the-board non-Pigovian sales tax would raise many millions of dollars, depending on the rate.

Dealers are sure to object that rather than raise revenue, taxing antiquities will only destroy the trade, as buyers respond to the tax by shifting from antiquities to less expensive substitute luxury goods. This may well be true of some shoppers for lower-quality artifacts (for whom one knick-knack is as good as another)—and that would be a good thing, given the likelihood that a fair number of such low-end pieces were looted. But empirical studies have shown that the demand for high-quality products, especially where there are fewer of such products available, is inelastic: changes in the price of high-end sports cars, for instance, don't much affect demand compared to changes of price for intermediate-size cars.[9] And dealers' other main worry—that buyers seeking to avoid the tax would turn to foreign antiquities markets—could be somewhat calmed by requiring non-commercial importers of antiquities purchased abroad to pay sales tax on out-of-country antiquities purchases.

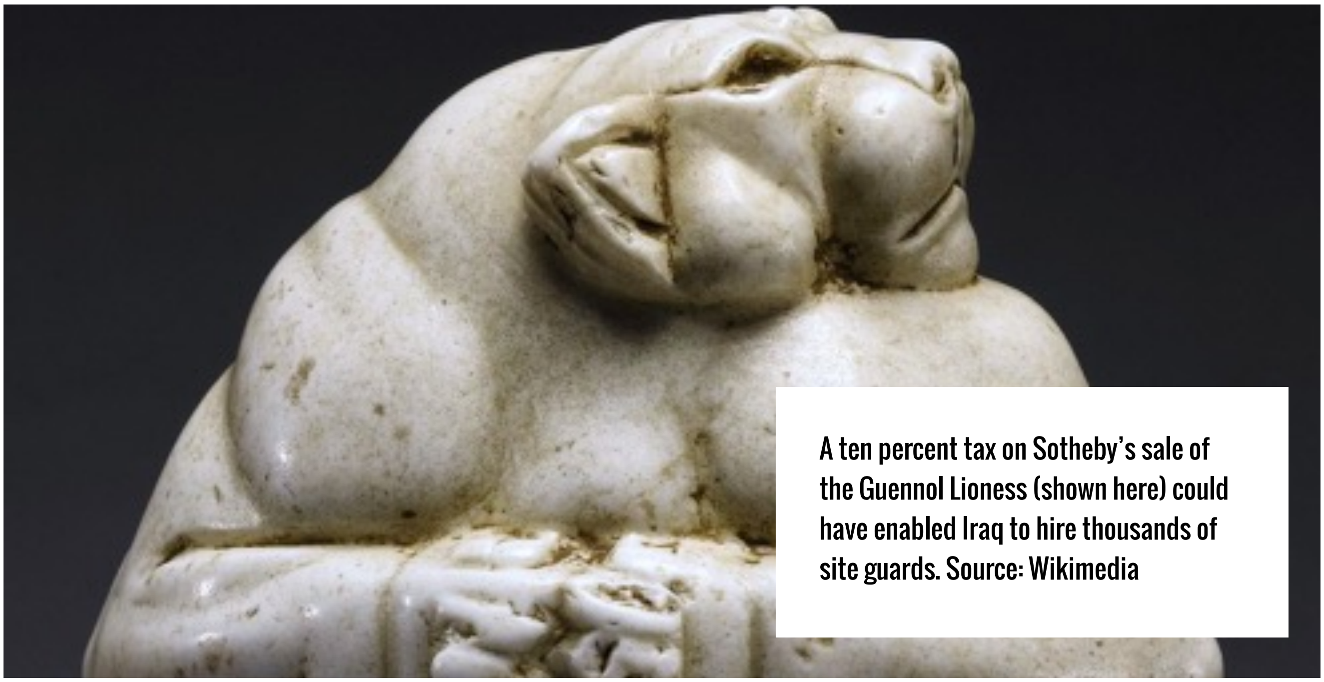
Price data for the licit market in antiquities is notoriously difficult to obtain. But from what is known it does seem clear that, at least for the major auction houses, the top end of the market accounts for a high—and within the past decade, increasing—percentage of total sales revenue.[10] Christie's London, for instance, reported sales of £34.5 million in 2010 and only £17.5 million in 2013—yet in 2014 just two sculptures, one from ancient Egypt, the other from ancient Rome, sold for £15.8 million and £9.4 million respectively.[11] The highest price ever paid for a single sculpture, $57 million, was spent on the Guennol Lioness, a Mesopotamian figurine sold by Sotheby's in 2007.

A ten percent tax on that single sale could have raised enough money to have enabled Iraq to hire thousands of site guards, guards that would have come in extremely handy during a period when Iraq's antiquities police were disbanded and sites were left almost totally undefended against looters.[12]

Similarly, two brave Egyptian site guards recently killed by looters might be alive today if they had been supplied adequate weaponry and back-up that tax revenues from the above-mentioned sale of the Egyptian sculpture might in principle have provided.[13] And the minuscule $2,500 reward the Bureau of Land Management is offering for information leading to the conviction of looters of archaeological sites in Utah would certainly be higher if a tax had been levied in 2011 on the $1.2



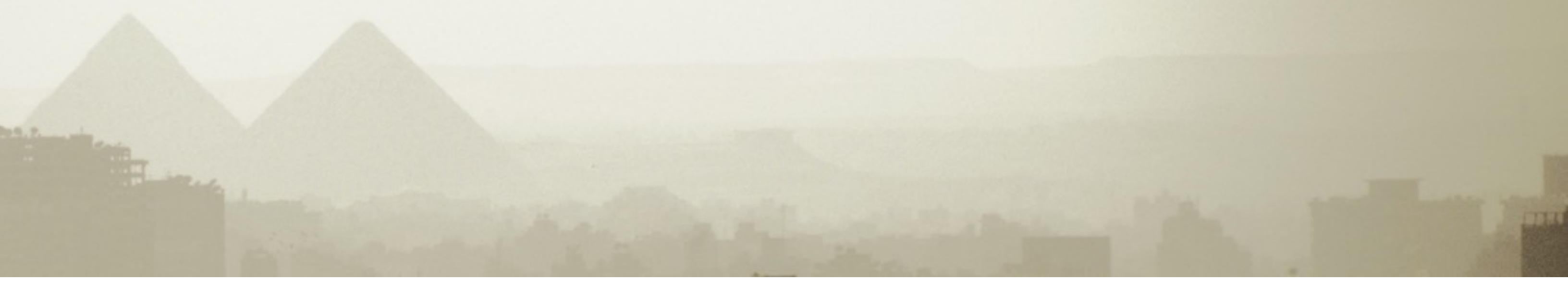
million Indianapolis auction of Native American artifacts, including a quartz butterfly banner stone that garnered $245,000.



A ten percent tax on Sotheby's sale of the Guennol Lioness (shown here) could have enabled Iraq to hire thousands of site guards. Source: Wikimedia

All of those ultra-high-end pieces came to market with ironclad provenances establishing they were excavated before 1970, it should be noted. Dealers and collectors might well argue that it makes no sense to tax sales of such "clean" goods on Pigovian principles. After all, no social harm, no tax. Of course, very few of the verifiably provenanced artifacts on the market were properly dug up by archaeologists. But even if we grant the presumption that there is no direct link between a well-provenanced artifact and a looted site, there *is* nonetheless a real connection between that artifact and site looting—especially if the artifact in question is high-quality enough to fetch eye-popping prices that garner widespread publicity. When an artifact sells for millions in New York, London, or Indianapolis, a powerful signal is sent to potential looters, whether half a world or half a continent away, that unimaginable riches may with luck be theirs. So, to take one notorious example, the sale of the Erlenmeyer Collection in the early 1990s announced to the market that there was in the West a new and extremely intense demand for top-end Mesopotamian artifacts (which by 2001 would bring a price of $424,000 for a single cylinder seal). Dealers in Baghdad responded by encouraging looting of Iraqi archaeological sites rich in cylinder seals.

Most antiquities on the high and mid-range market, however, are not coming from museum deaccessioning or from the liquidation of well-established private collections. Many of the roughly forty-thousand pieces purchased since 2009 by the Green family for their new Bible Museum, for example, are objects hitherto unknown to exist. A federal investigation into the importation of some of these objects has been underway for four years now, reflecting how difficult it is to pursue



legal remedies. A hefty tax on the thirty-million dollars or so the Greens spent amassing this collection of dubious artifacts might have given the feds the financial resources needed to move more quickly on this case.

Any plan to impose a Pigovian tax on antiquities must take into account administrative costs–but these would be minor to those costs saved.

Taxes don't collect themselves, of course, and the administrative cost of doing so needs to be taken into account. Were a Pigovian tax imposed on the buying and selling of antiquities, the Internal Revenue Service (IRS) would need to collect it and audit compliance. And if the system included transparency requirements, or some other system of documentation and reporting of individual artifacts, the cost might be not negligible. But monitoring financial transactions is surely relatively inexpensive compared to ferreting out artifacts hidden in cargo or paying the annual salaries of site guards. And the new focus on antiquities as a source of terrorist financing means that governments are much more likely to be much more willing than previously to put some resources towards this task.

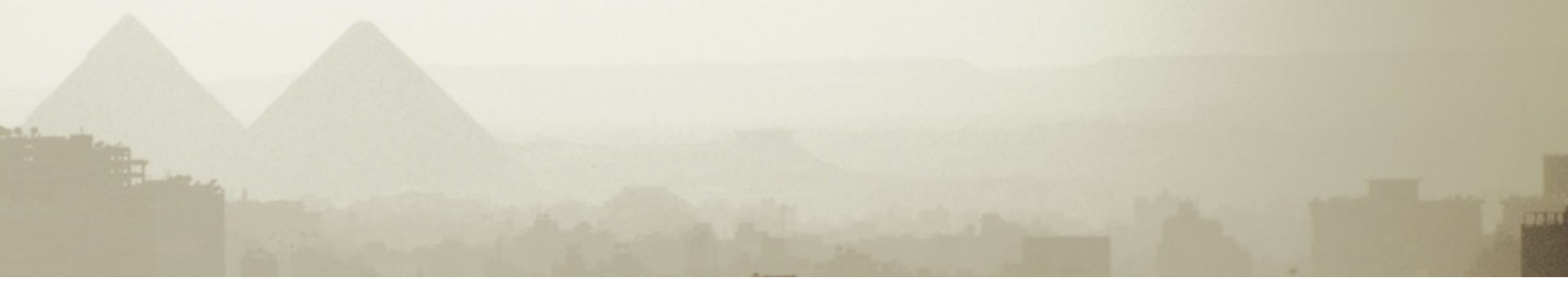
How Should The Tax Revenue Be Used?

As noted above, it makes sense—though it is not required in principle—to yoke a Pigovian tax on antiquities to a program designed to pay the costs of mitigating the social harm to the archaeological record caused by the antiquities market. What would such a program look like?

In an ideal world, a Pigovian tax on the antiquities trade would allocate revenues geographically, reflecting market demand for various categories of artifacts.

In the best of all possible worlds, the program would allocate its revenues geographically in ways roughly reflecting market demand for various categories of artifacts: if Native American artifacts generated twenty percent of tax revenue and Mesopotamian artifacts thirty percent, for instance, the revenues could be divvied up accordingly for projects focused on protecting Native American or Mesopotamian sites (with a percentage of funding reserved for technological research and development and other projects with potential global impact).

Since most threatened sites are located outside the territory of the United States in developing countries or on Native American lands, it would be necessary for whatever agency was designated to administer the program to be authorized to provide foreign aid as well as to work with domestic law enforcement agencies. Within the American framework, that could be done via a number of existing channels. For sites on Native American territory, for instance, there already exists an interagency working group established under a 2012 Memorandum of Understanding with Indian tribes. For overseas sites, funds might be disbursed through the interagency coordinating committee envisaged in the recently passed "Protect and Preserve International Cultural Property Act." Unfortunately, despite its name, the Act was not designed to address the problem of archaeological site looting, but to provide emergency conservation assistance in response to cultural disasters. The Act's lead agencies and organizations—the State Department's Cultural Heritage Center, the Smithsonian, and the United States Committee of the Blue Shield (USCBS)—are not experts at securing sites, working with local police in-country, or policing international antiquities markets. It is almost certain that, absent strict oversight and the inclusion on the committee of agencies like the Bureau of International Narcotics and Law Enforcement Affairs, United States Agency for International Development (USAID), or Department of Defense (DOD), that routinely work with foreign police and security forces, funding allocated to this inter-agency group would be diverted from security to conservation activities.



A more promising governmental vector for delivering foreign assistance might be the State Department's Cultural Antiquities Task Force (CATF) or "Special Projects." Created in 2004 and nested within the Cultural Heritage Center, with earmarked funds of one million dollars, this program supports overseas efforts to protect sites and recover stolen artifacts. CATF's activities have been limited primarily to workshops and training programs, some focusing on conservation rather than security despite Congressional instructions.[14] But several have involved in-country collaborations with security personnel and local administrators or stakeholders to develop better site security procedures—and in at least one case to provide resources needed to implement them.[15]

As an alternative to shifting the missions and dramatically beefing up pre-existing agencies or interagency groups, it might make more sense to establish a new semi-autonomous administrative entity custom-built for the purpose of protecting sites and policing antiquities trafficking. This might be housed within the government, or set up outside it, either as a freestanding foundation or government corporation with which the government could contract directly.

The most ambitious version of this kind of entity would be a new international organization along the lines of the United Nations-sponsored Green Climate Fund (GCF).[16] The GCF accepts contributions from governments (deposited in the World Bank as trustee), and fields proposals for low-emission and climate resilient projects and programs in developing countries from Mali to Vietnam to Armenia. President Obama has pledged $3 billion to the GCF. One could imagine, in principle, Pigovian tax revenues being pledged to a similar global fund for comparable archaeological site protection and antiquities policing projects.

But a pledge by the executive branch is one thing, appropriating tax dollars something quite different. Congress has refused to back President Obama's commitment of funds to fight climate change abroad. Is it realistic to expect the same legislators to agree to tax business in the United States to safeguard heritage abroad? If not, then it may be prudent to opt for a less globally effective but more politically achievable approach: a domestically-focused Superfund-style program, jointly administered by the Bureau of Land Management and the National Park Service, designed to better protect archaeological sites on American soil and fight antiquities trafficking within our borders.

Is A Pigovian Tax On Antiquities Politically Achievable?

To implement a Pigovian tax on antiquities, ideological and interest-group objections would need to be overcome.

There is, of course, no reason why a Pigovian tax on antiquities has to be used to beef up anti-looting efforts at all. It makes good policy sense in its own right. But what makes good policy sense is often politically impossible. To implement a Pigovian tax on antiquities, some daunting ideological and interest-group objections would need to be overcome.

Ideologically, Pigovian taxes in general face resistance from both the right and the left. As Eric Posner and Jonathan Masur note,

> For the right, they are unattractive because they are "taxes," and people on the right oppose taxes. For the left, they are unattractive because they seem to "price" intrinsically valuable goods like human life and the environment and because they seem to permit a firm to commit ongoing harm so long as it is willing to pay a fee.[17]

The right's antipathy toward taxes means that the only way a tax will be enacted is if the industry itself supports being taxed. So dealers, auction houses, museums, and collectors would have to be brought on board. To do so, some quid pro quo would be needed, perhaps in the form of an antiquities registry system, something several dealers have called for recently.[18] Such a registry could kill two birds by also "grading" the provenance and assessing the tax rate accordingly. Alternatively, dealers might be induced to support a Pigovian tax in lieu of other more onerous legal measures now being instituted in other countries (for instance, Germany's proposed new requirement law stipulating that artifacts may be bought and sold only with clear documentation on proof of origin and export licensing from the country in which the objects were housed).

Sustained outreach to both dealers and archaeologists would be critical, but both groups could benefit from such a tax.

Whether such a system could be designed in a way that satisfied both market stakeholders and the archaeological community is not clear, however, especially since for many preservationists, moral repugnance at the very idea of buying and selling antiquities makes any compromise difficult to stomach, even if a carefully regulated market with some inevitable abuses might be an improvement over current conditions.[19] But research shows that repugnance can be lessened or even overcome with sustained discussion.[20]

It is precisely such discussion and policy bargaining that this think-piece hopes to provoke. The alternative—more empty laws and under-enforced regulations, an antiquities trade that gives lip service to due diligence, and endemic destruction of archaeological sites—is unacceptable. We can do better.

Conclusion

In summary, the world is losing the war against antiquities looters and traffickers, despite the extensive domestic and international laws in effect, in large part because there is inadequate funding for enforcement.

- We should treat the illicit antiquities trade first and foremost as an economic problem, prioritizing those solutions that deal most efficiently with the financial costs caused by the global market in ancient art.
- "Pigovian" or "pollution taxes"—which have been used to make other industries take economic responsibility for the harm their activities generate—provide one such possible approach.
- Policymakers should thus explore a Pigovian tax on antiquities purchased in market countries, to provide the funding needed for protecting ancient sites and policing the illicit trade.
- Similar to taxes on cigarettes or "dirty" energy, this would encourage the market to lessen the harms it causes, while helping to cover the costs of mitigating those harms.
- The greater the amount of harm, the higher the tax could be (i.e. taxes on poorly provenance artifacts would be higher than those on better provenance artifacts).

- Revenues from such a tax could be channeled into a heritage preservation 'Superfund" (as was done to clean up toxic chemical sites) or to existing government agencies working in the field.

- Any plan should take into account the administrating costs of collecting a tax, as well as the political challenges it would face, including resistance from both dealers and archaeologists.

- However, these challenges are far outweighed by the many benefits, which would better allow governments to safeguard archaeological sites and disrupt the illicit trade while allowing a legitimate trade in ancient art to continue.

[1] Amr Al-azm, Salam Al-kuntar, and Brian I. Daniels, “ISIS' Antiquities Sideline,” *The New York Times*, September 2, 2014. http://www.nytimes.com/2014/09/03/opinion/isis-antiquities-sideline.html.

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[6] The UK's VAT on antiquities, which is set *lower* than the standard VAT, seems in fact to have been designed to reward, rather than punish, the industry, presumably for the social good it does in bringing artifacts to Britain.

[7] U.S. Government Accountability Office, “Trends in Federal Funding and Cleanup of EPA's Nonfederal National Priorities List Sites,” September, 2015. http://www.gao.gov/assets/680/673051.pdf.

[8] Chance finds, however, accounted for only between 1.23 percent (in 2014) and nine percent (in 2004) of finds reported under the United Kingdom's Portable Antiquities Scheme.

[9] Penny K. Goldberg, “Product Differentiation and Oligopoly in International Markets: The Case of the U.S. Automobile Industry,” *Econometrica*, Vol. 63 (1995), pp. 891–952. http://www.jstor.org/stable/2171803; Olivier Coibion, Liran Einav, and Juan Carlos Hallak, “Equilibrium demand elasticities across quality segments,” *International Journal of Industrial Organization*, Vol. 25, No. 1 (Feb. 2007), pp. 13-30. http://www.sciencedirect.com/science/article/pii/S0167718706000889.

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[12] For more on the challenges faced by Iraq in funding archaeological site protection in the aftermath of the 2003 invasion, see Lawrence Rothfield, *The Rape of Mesopotamia: Behind the Looting of the Iraq Museum*, Chicago: University of Chicago Press, 2009, pp. 122-158.

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[15] Evan Ryan, “Malian Cultural Heritage Security Workshop Gets to the Heart of the Matter,” U.S. Department of State blog, August 5, 2015. http://blogs.state.gov/stories/2015/08/05/malian-cultural-heritage-security-workshop-gets-heart-matter.

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