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Development and Disciplinary Complicity: Contract Archaeology in South America Under the Critical Gaze

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Abstract

In South America, as elsewhere, development projects have to go through environmental permitting, a component of which is the archaeological assessment of the areas to be impacted. Because such an assessment is paid for by the development companies seeking such a permit, it has come to be known as contract archaeology. Given the accelerated pace of development projects in the region, it is not surprising that contract archaeology has grown exponentially. The academic literature dealing with it and related fields has also witnessed a rapid growth, which this article seeks to review. In doing so, it discusses the literature that accepts and promotes contract archaeology (*a*) as a part of environmental permitting; (*b*) as the primary stimulus responsible for widening the job market, whose structure has transformed disciplinary practice to a large extent; and (*c*) in terms of its relationship with the archaeological record and with heritage education. This article also reviews a growing literature, both supportive and critical, that assesses contract archaeology.

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INTRODUCTION

Modernity/capitalism and archaeology have had a close, centuries-old relationship as the latter provided the epistemic means for legitimating the former's ontology. Yet, a more direct, overt relationship between archaeology and capitalism is more recent, having been forged and developed in the last three decades: From being instrumental in providing empirical data supporting a modern progressive temporality and sense of identity, archaeology has become a disciplinary practice geared to the commodity form. Several scholars—from Fredric Jameson to Zygmunt Bauman, from David Harvey to Beatriz Sarlo—have long posited that the commoditization of the past is a trademark of postmodernity, one of its main differences from any previous cultural (onto)logic. But archaeology had not been directly involved with such a commoditization until recently. Contract archaeology (CA), a particular form of disciplinary practice defined by contractual relationships designed to meet corporate needs, is a part of the global trend from the 1980s that transferred the responsibilities of the state to private companies and the market (Demoule 2012, Hamilakis 2015), so much so that for the first time in history disciplinary paths have been defined largely by private, corporate interests at the expense of those of the nation and society (Webley et al. 2012).

Although “the logic of capital was embedded in the process of the constitution of modernist archaeology, right from the start” (Hamilakis 2015, p. 723), development is now the master trope guiding the new relationship of the discipline with capitalism (Haber 2015a, Hutchings & La Salle 2015), especially as its naturalization even dictates disciplinary agendas, such as the provision of epistemic arguments to suit its demands. Prominent in this regard is the role of CA worldwide, which is not a minor thing. To illustrate, (a) CA employs more than 90% of active archaeologists; (b) it has fostered profound curricular transformations, something not achieved by any other event in the history of the discipline, not even by the advent of the scientific paradigm in the 1960s; (c) it has undermined the reflexive stance of archaeology toward the global order because its uncritical functionality is tied to capitalism in support of development projects that are negatively impacting human populations as well as infringing on the rights of nature—in doing so, it has led the discipline into an uncritical, unreflecting cul-de-sac, where social and political responsibilities are rare, to say the least; and (d) it has diminished the possibilities for the discipline to rebuild its metaphysical and ontological apparatus, already clearly hierarchical and neocolonial.

The pace of development projects in South America has greatly accelerated since the last half of the twentieth century. Thus, it is not surprising that the expansion of CA has also been dramatic. While CA was a relatively marginal endeavor in the region three decades ago, it has now become dominant in archaeological practice in most countries, with the exceptions of Venezuela, owing to the virtual paralysis of its economy, and Paraguay, where some development projects have been exempted from environmental permitting. In Brazil, some 95% of all active archaeologists are engaged in CA projects (Pierro 2013, Zanettini & Wichers 2014); even more starkly, the number of excavations in the country grew 19,300% in 20 years as a result of CA projects, as reported by the journal *Folha de S. Paulo* in 2011. In Colombia, 90% of the archaeological permits issued between 2002 and 2011 were for contract projects (Londoño 2013). Even in Peru, a country well known for its archaeological resources and for the weight of its institutional apparatus, 65% of all projects were related to CA as of 2005 (González 2010).

These figures should not be surprising, however. CA is linked to development projects, which lately have increased in South America more rapidly than in other areas of the world owing to two primary factors: (a) the current relative political stability in the region after decades of turmoil and conflict; and (b) the resulting opening of new frontier areas, especially for the exploitation of commodities (notably oil and gold). These frontiers hold the commodities that capitalism eagerly needs, but they are also home to a diverse and vulnerable population, including afro-descendants,

peasants, and indigenous peoples. As development has increased its pace and its impact, CA has grown. This growth is reflected in the literature. However, it is in Brazil, one of the world's largest economies, where most of the literature on CA in South America is published.¹

Although CA has been professionally assessed and sometimes critiqued in some countries of the former First World,² its contextual critique has been strongest in South America. This finding should not be surprising, given that the social disciplines have long been involved with political issues in South America; in addition, social movements (of which some archaeologists are also a part) have been active in contested and sensitive topics in which CA also has stakes, such as heritage, education, territorial claims, and development projects. Yet, given its tremendous impact on the discipline and the very fact that an overwhelming majority of archaeologists worldwide work in CA, CA receives very little critical attention as compared with other disciplinary issues. For instance, whereas archaeological theory is widely discussed, CA is carried out amid a consensus that has prevented a critical posture. This situation is slowly changing, especially in South America, as this review attempts to show.

CONTRACT ARCHAEOLOGY, DEVELOPMENT, AND ENVIRONMENTAL PERMITTING

Archaeology is one of various disciplines that contribute their expertise to the technical assessments demanded by environmental permitting, a legal obligation with which most development projects must comply in advance of construction. Environmental permitting has been adopted worldwide since the 1980s owing to a global awareness of the tremendous ecological impact of development projects, and South America is no exception (Villarroya et al. 2014). Furthermore, in most countries within this region, explicit legislation regulates the relationship between archaeology and environmental permitting.³ In Brazil in 1986, for instance, archaeological research became required for all development projects subject to environmental permitting (Caldarelli & Cândido 2017).

The rationale of the relationship linking archaeology, environmental permitting, and development rests in “the definition of tools and strategies for socio-environmental sustainability in a capitalist context” (Funari & Robrahn-González 2008, p. 22) or, as an ardent supporter of CA stated, “The protection of the environment cannot be considered as a dilemma against development, but as one of its elements” (Ratto 2010, p. 357). In CA, the relationship between the discipline and development appears as an innocent instrumentality, as a mere technical service. CA has become a bureaucratized provider of past cultural data, just another requirement in the environmental permitting process (Tantaleán & González 2017). It is not surprising, therefore, that the fulfillment of this task has been pursued by technical means; technification, that is, the reduction of most disciplinary procedures to technicalities of all sorts, has become the dominant discourse in CA. I thus disagree with Bezerra (2008, p. 144), for whom “the lack of trained archaeologists has promoted certain ‘technization’ of archaeological research”; it is not the “lack

¹This fact is evident in this article: The vast majority of the literature I review has been produced in Brazil. For example, whereas I cite just two papers on this topic from Ecuador and none from Paraguay, those from Brazil number in the dozens.

²Especially in the United Kingdom (Everill 2009), the United States (King 2009), Spain (Parga-Dans 2010, Almansa 2015, Aparicio 2017, Marín & Parga 2017), Canada (Zorzin 2011; La Salle & Hutchings 2012; Hutchings & La Salle 2013, 2015), Australia (Zorzin 2015b), and Japan (Okamura & Matsuda 2010); see more general accounts in Schlanger & Aitchison (2010) and Demoule (2012).

³See Lopes & de Souza (2010), Monticelli (2010), and Soares (2017) for Brazil; Beovide & Caporale (2009) for Uruguay; Echeverría (2009) for Ecuador; Calla & Villanueva (2017) for Bolivia; ICANH (2010) for Colombia; and CONICET (2017) for Argentina.

of trained archaeologists” that has fueled the drive for the technification of disciplinary interventions but the need to serve the contract market. Technification is typical of CA (Ayala 2015, Bezerra 2015, Haber 2015b, Ribeiro 2015, Gnecco 2017, Pellini 2017a), but CA did not invent it. Despite that disclaimer, technification defines CA because it operates in a wider field that, for the sake of brevity and precision, I call modern-capitalist. The relationship between archaeology and technique is growing and is becoming overwhelming. Archaeology claims that its research procedures have become autonomous, objective, and neutral by technical means, which helps to obscure the fact that they are linked to the penetrating and powerful cosmology of modernity. Thus, they are presented as technical operations in a cultural and political vacuum. The subject that represents (the archaeologist) is banished from the scene of representation and replaced by machines, protocols, and techniques of all kinds. The autonomization of representations, the dream of modernity, has finally been achieved. The archaeologist has lost any traces of ontological status and has become a neutral intermediary, perhaps nonexistent; in fact, the archaeologist has become a phantasmagoric being instead of a creative mediator—s/he has become an inanimate appendix of a device that embellishes technique in order to mask its ideology.

This modern dream is realized in a particularly dramatic way in CA because the contract is defined as a technical service even before signing. The technical autonomization of CA operations (dates, typologies, reports) allows one to believe that it represents nothing, nobody; in fact, however, it represents development, no matter how hard one tries to deny it. Technification is not the means that contract archaeologists use to achieve certainty in their representations or, to put it in the parlance of modern knowledge, to become more scientific; rather, they turn to it because it allows them to believe that they are only innocent, neutral, and objective instruments, albeit determined and evaluated by administrators and managers located well above them.

Since its inception in South America some three decades ago, CA unfolded rapidly and in a relatively untroubled manner. Yet, recent public, neoliberal policies have promoted the swift implementation of development projects, avoiding delays and obstacles, among them obstacles caused by environmental and heritage regulations (Tantaleán & González 2017). With the relaxation of environmental permitting, CA has been subjected to a closer scrutiny by governmental agencies, not to implement higher standards but to prevent unnecessary interventions. As a result, the contract market has shrunk, many contract archaeologists have lost their jobs, and employment conditions have deteriorated. Events known to have occurred elsewhere (Everill 2009; Schlanger & Aitchison 2010; Zorzin 2015a,b) have finally materialized in the region to become all too familiar.

THE RATIONALE OF CONTRACT ARCHAEOLOGY

CA is widely promoted and justified by its practitioners on three main grounds: (a) It enlarges the labor market of archaeologists by offering vast numbers of professional opportunities; (b) it expands the understanding of the past by investigating an archaeological record unknown until its exposure by development projects, sometimes in frontier areas where conventional research has not been undertaken, thus saving from definite loss an inevitably endangered heritage; and (c) it educates people about heritage issues (protection, stewardship, etc.), especially the local people groups who live near development projects. Given these arguments and the good that CA supposedly does for archaeology and for society at large, it is not surprising that CA has received almost unanimous acceptance by the archaeologists in South America. Such a consensus has also translated into an utter silence regarding the relationship of CA with the socio-natural impacts produced by development projects (Ayala 2015, Gnecco & Dias 2015). Below, I revise each of these three justifications for CA.

CA and the Job Market

The rapid and impressive expansion of the job market is touted by the promoters of CA as its most important effect. Indeed, it is undeniable that CA has increased the availability of professional and nonprofessional jobs in archaeology by a significant number. Before CA, job opportunities were restricted to university positions, museums, and research institutions. CA has created thousands of jobs, which, among other things, have lured students to engage archaeology as a secure (and relatively well-paid) source of employment. Furthermore, CA is said to provide countless training opportunities otherwise unavailable on academic research projects (Pereira 2009). In this sense, as a source of employment and training, CA has been seen as “a blessing” (Funari & Robrahn-González 2008, p. 20).

This widening of the job market has had enduring consequences, however. Because the growth of CA is exponential (mirroring capitalist expansion itself), the field needs more archaeologists who are willing to work in contract settings. Thus, eager to have well-trained archaeologists, CA has fostered the transformation of academic curricula, which have been subjected to a profound reengineering to meet the CA needs: New undergraduate programs, characterized by their short length and technical emphasis (Bezerra 2008), are being created to mass-produce the archaeologists demanded by the contract market. Brazil has witnessed a literal explosion of new undergraduate programs⁴ (Bezerra 2008, Zanettini & Wichers 2014). This trend has also impacted existing programs, which have been made more flexible (for instance, a mandatory honors thesis has been eliminated in some programs) to shorten the time to degree completion (González 2010).

The net result of this trend is obvious: It is no longer the case that archaeologists turn to CA occasionally to earn money; instead, students are trained to be contract archaeologists from the start. As Solange Caldarelli, a former university professor and now owner of one of the largest contract companies in Brazil, candidly stated, “Today, a great deal of archaeologists enter the profession in a different way than when I started” (Pierro 2013, p. 73). In the process, the ties between archaeology and anthropology, already weak, have been severed. Furthermore, archaeology students drop out of school to enroll in contract companies, as salaries are relatively high. This kind of profound curricular transformation had never occurred before in the history of the discipline, and it points to the force and influence that CA has over archaeology. Despite this impact, these transformations are routinely dismissed as yet another step in the discipline’s maturation.

The close ties between academia and contract companies are notorious. In spite of the critiques of CA from academic circles (more on this later), the fact is that some company owners, partners, and employees also work in academic settings. The situation worsens when those very individuals also hold positions in the institutions responsible for establishing academic policies (Zarankin & Pellini 2012).

CA and the Archaeological Record

CA has opened new territories for disciplinary interventions and, according to its supporters, has expanded our knowledge of an endangered past (Cáceres 1999, Caldarelli & dos Santos 2000, Funari 2001, Cáceres & Westfall 2004, Ferreira 2008, Beovide & Caporale 2009, Pereira 2009, Ratto 2009, Monticelli 2010, Ratto 2010, Zarankin & Pellini 2012, Caldarelli 2015). Their argument posits that development threatens the past by threatening its material traces, thus creating an endangered past; at the same time, it allows an unprecedented opportunity to investigate a past that would otherwise remain unexposed. However, this argument is tautological: Development

⁴Fourteen undergraduate programs in archaeology were created between 2004 and 2017, plus seven programs of specialization (Bezerra 2008, Viana et al. 2014, Zanettini & Wichers 2014, Sousa 2017). As a result, more than 500 students are offered archaeological training annually.

creates an endangered past that can be profitably studied but that would not have to be studied had it not been endangered by development. Besides, it does not face the very root of the endangerment of the past (development) but instead accepts, as a fact, that it is endangered and then seeks to profit from the situation (Gnecco & Dias 2015).

There is more to this issue, however, and it has to do with the existence of the market and development as inevitable events.⁵ It is a well-known historical fact that capitalism became the dominant socioeconomic formation in the world owing to the widespread creation of markets (land market, labor market, commodities market, etc.). Capitalism's creation was a deliberate, historical act, not a natural event. It was so deliberate that it demanded immense and rapid transformations, masterfully described by Polanyi [1997 (1944)]. National governments engaged capitalist expansion by adopting policies that transformed the political, social, and economic outlook of their communities. A new social pact had been forged (between society and capitalism), which replaced the pact so cherished by the political theorists of the seventeenth and eighteenth centuries (between society and the government). At its heart, the argument about the expansion of the labor market is also tautological: It expands because contract activities need archaeologists, but it also promotes contract activities by providing archaeologists (Gnecco & Dias 2015).

CA and Heritage Education

Another area where CA has left its imprint is heritage education, a way to open and legitimate academic spaces for community-engaged disciplinary practice. It is also a way to educate the public in matters that only archaeology is supposed to study and to help strengthen the multiplicity of local and national identities, empowering them to defend their interests, values, and perceptions (Horta et al. 1999, Funari & Robrahn-González 2008, Scatamacchia 2009). The argument about heritage education posits that past material traces exposed by development projects and investigated through CA can be converted into heritage and then taught to local populations. The return of knowledge to the community in the form of educational outreach is supposed to help “mitigate the implementation of works of great environmental impact” (Scatamacchia 2009, p. 99). Exhibits, publications, and training of teachers and workers are intended to show what archaeology is and what it does and, by extension, why and how the archaeological heritage should be preserved for the benefit of the community, including the production of revenue (Pereira 2009, Scatamacchia 2009, Ferreira 2013).

In Brazil, heritage education has been mandatory since 2002 (Scatamacchia 2009), although it had been practiced for at least two decades prior to that time (Silveira & Bezerra 2007). Heritage education programs linked to CA are booming, as they offer a means of countering the critiques received from academia, especially regarding the inaccessibility of CA findings and CA's isolation from various stakeholders, mostly local ones. Heritage education programs have allowed CA to become socially responsible; the use of this term, formerly reserved for corporations, is a clear symptom that archaeology has entered a corporate phase.

DISCIPLINARY AND PROFESSIONAL PREOCCUPATIONS REGARDING CONTRACT ARCHAEOLOGY

In CA, there is rarely reflexive critique; in its ranks, consensus reigns on its overarching purpose and role. The debates that do occur are often focused on internal issues, particularly those that

⁵The discourse on development naturalizes the idea of its inevitability, rooted in an evolutionist ideology (Escobar 1995, Ribeiro 2008).

seek to define or limit contract practices: the democratization of the contract market to prevent large companies from winning the lion's share; unfair competition and the imposition of cartel procedures; imposition of credentialing to exclude some practitioners (which does not seek greater epistemic sophistication but greater disciplinary surveillance); and establishment of minimum work standards in accordance with the characteristics of the moment of capitalist relations (Piazzini 2001, Zarankin & Pellini 2012). These debates are illustrative: They are guild oriented, no doubt, but they are also corporation oriented; this notion is a novelty to which the discipline seems to have become accustomed, and not reluctantly.

Yet, the practice of CA has begun to show limits, a fact that is concerning interested parties. Most of these concerns fall within the limits of disciplinary practice. CA is gauged and judged for what it is (or is not) from a disciplinary, even professional perspective, usually steeped in the rhetoric of science. CA has long been criticized from an academic point of view, chastised for its lack of professional rigor⁶ and scientific standards, the unfair economic competition among contracting parties, the dominance of economic interests over academic ones, the poor accessibility of its findings, and the almost negligible number of publications it produces, to name the most recurrent (Chmyz 1986, Cáceres 1999, Caldarelli & dos Santos 2000, Funari & Robrahn-González 2008, González 2010, Zarankin & Pellini 2012, Londoño 2016, Pellini 2017a, Tantaleán & González 2017). These critiques have created a schism: On one side are the true, serious, and professional academic archaeologists; on the other, the expedient, business-driven, and opportunistic contract archaeologists. The schism can be seen from a different perspective, however: on one side the pragmatic, heritage-committed, and devoted contract archaeologists; on the other, the elitist, ivory tower, and anachronistic academic archaeologists (Villa 2003, Cáceres & Westfall 2004, Zanettini & Wichers 2014, Gnecco & Dias 2015). Depending on one's viewpoint, the story of the good and the bad has been recast by CA's growth.

More importantly, the schism has had a lasting effect. It has blurred the intimate relationship between academic archaeology and CA, veiling that they partake of the same logic: CA is a late offspring of archaeology, not its bastard product. It seems, therefore, that emphasizing their differences only seeks to isolate academic archaeology from the logic of capital, sully the reputation of CA, which has then become a decoy—quite useful, in fact—because it also renders important services, such as enlarging the labor market (Gnecco & Dias 2015). Moreover, it is often the case that academic archaeologists engage in CA on the side, mostly as a means of earning additional income, as if nothing else were at stake (Zanettini & Wichers 2014). At the same time, academic archaeologists do their best to draw a clear line of separation with contract archaeologists, owing to worry about any possible contamination.

The disciplinary analysis of CA has not moved beyond this Manichean scenario, despite that its impact on the discipline in most countries is overwhelming. From the academic side (and sometimes even from within CA as well), critics mostly urge the adoption of better (i.e., more scientific) standards in CA research and the adoption of strict regulations at the institutional level (Zarankin & Pellini 2012). A much less common claim calls for CA, especially in indigenous lands, to submit to international canons, such as Article 6 of the International Labour Organization's Convention 169, which requires informed consultation with local communities (Dillehay 2004, Jofré 2015).

There are professional limits as well. The new corporate phase of archaeology has begun to preoccupy contract archaeologists in South America because of the unforeseen course that

⁶This claim is paradoxical, though, because the wave of professionalization that has swept through the archaeological establishment in the last two decades, especially in metropolitan countries, is clearly linked to the growth and spread of CA (see Wylie 2002, p. 229).

its practice has taken. Their concerns, already voiced elsewhere, especially in Europe (Everill 2009, Almansa 2015, Aparicio 2017, Marín & Parga 2017), have to do with working conditions, mainly because conditions are precarious and unstable (Pellini 2017a, Tantaleán & Gonzáles 2017) and because of the alienation these conditions produce in the archaeologist-worker (Zarankin & Pellini 2012, Rocha et al. 2013, Oliveira 2017, Pellini 2017a). Their preoccupations, therefore, are capitalist and are oriented to reverse the situation in labor terms, not to change the conditions that allow the existence of CA but the conditions that CA has established.

So-called ethical dilemmas have also been identified in CA and the related practice of heritage education. For Funari & Robrahn-González (2008, p. 20), the dilemma stems from the “collusion between archaeologists and the interests of capitalism,” which calls for ethical prescriptions and proscriptions. Thus, a political ethics should be adopted that prescribes ethically committed actions with and for the communities with which contract archaeologists interact, namely those impacted by development projects (Silveira & Bezerra 2007, Funari & Robrahn-González 2008, Rocha et al. 2013). Most ethical preoccupations, however, are professional and are centered around the rigorous implementation of the modern canons of knowledge: objectivity, neutrality, and scientific independence (Monticelli 2010, Ribeiro 2010). In this sense, Lima (2000) proposed an “ethics of preservation” for countering the destructive pace of development and, by connection, of CA. This approach would entail keeping detailed records, undertaking as little excavation as possible, maintaining the appropriate curation of findings, and making reports accessible. In short, the foremost ethical commitment of CA is to the “archaeological record”⁷ (Zarankin & Pellini 2012, Zanettini & Wichers 2014), highlighting a purely disciplinary definition of ethics and common ground among any kind of archaeological practice. Yet, these general discussions have not translated into concrete moves—such as the adoption of specific ethical codes by contract archaeologists, as in some European countries (Demoule 2012)—save for those actions related to credentialing that are intended to restrict the participation in the contract market to “real” professional archaeologists, however defined.

Archaeologists’ worries about CA, then, are focused on issues such as the precariousness of jobs, alienation, and the regulation of the contract market. Disciplinary and professional preoccupations, although interested in apparently dissimilar matters, actually coalesce around the same prescriptions: professionalization, regulation, and limitation. They are deeply concerned about the conditions of contractual practice: how it develops, who does it, under what circumstances, with what results. If their concerns do not escape the well-kept boundaries of disciplinary practice, it is not surprising that the solutions they propose are also disciplinary and, thus of course, capitalist. They propose the refounding of contractual practice around labor dignification (stable and better paying jobs, including social benefits) and the recovery of a certain independence, even if academic, which should translate into the definitive adoption of strict and orderly procedures—that is, professional ones.

CONTRACT ARCHAEOLOGY AS SEEN FROM AFAR

Other individuals outside the contract business and even outside disciplinary canons are concerned about CA. They do not limit their reflections to the practice of CA; rather, they are interested in CA as a practice. They have shown that the privatization of archaeology under CA is related to the technical implementation of protocols whose purpose is to release land for development (Fausto

⁷This is not novel, however. Hamilakis (2007, p. 23) noted that the main actor in most ethical codes worldwide is the reified and unquestioned existence of the archaeological record.

2006, 2017; Ferreira 2010; Rocha et al. 2013; Jofré 2015, 2017; Tantaleán & Gonzáles 2017), rather than to pursue knowledge (Zanettini & Wichers 2014, Caldarelli 2015). The privatization of archaeological activities (whether research-oriented or not) produces dire consequences in society, in archaeology, and in nature because (a) it subordinates archaeology to the managerial needs of development companies, eliminating disciplinary autonomy; (b) it transforms truly contentious issues (those set in motion by the steamroller of development: dispossession, displacement, violation of autonomy and dignity) into bureaucratic ones, mediated by disciplinary, professional, and technical interventions; (c) it furthers a growing estrangement between archaeology and society; and (d) it establishes new relational criteria, bringing archaeology closer to the market and away from people (Ayala 2015; Haber 2015a; Jofré 2015, 2017). In this process of estrangement, archaeology operates as an effective intermediary between global market needs and the needs of local people; its technical and professional language favors the former at the expense of the latter, yet claiming that it operates in good faith as an impartial mediator.

Despite what contract archaeologists say in favor of its practice—that it saves the archaeological record threatened by development; that it allows for the investigation of areas previously unstudied; that it extends archaeology’s work into broader arenas, especially heritage education—they cannot hide that economic profit is the fundamental element of articulation in their working relationship with the companies that hire them (Zarankin & Pellini 2012, Silva 2015, Gnecco 2017, Pellini 2017a). As Brazilian anthropologist Carlos Fausto (2017, p. 301) noted, “[I]n the science of contract the important element is the contract and not the science.” The archaeologist who hires is a capitalist who usurps the surplus value produced by his employees, which is all the more dramatic if these employees are also his students, as occurs not infrequently in the cases where the hiring archaeologist is also a university professor (Caldarelli & dos Santos 2000). We are even witnessing the emergence of social classes among archaeologists, some of whom have become capitalists at the expense of the majority who are becoming a proletariat (Zarankin & Pellini 2012, Rocha et al. 2013, Pellini 2017a).

In the frame of economic profit, everything acquires a mercantile character: the archaeologist who hires, the hired archaeologist-worker, the expert, the unskilled laborer, the survey, the excavation, the report, the judicial expertise. They all realize their value in the market, and they appear on the scene of the market thanks to the premeditated character of archaeology as a commodity (Ribeiro 2015). The economic profit of contract archaeologists derives from a relationship of subordination. Development companies call on archaeologists to provide them with the service they need. This search, which is done with only one need in mind, the land release report, and for which they pay, establishes a one-way relationship: In CA, there is no dialogue, only servility. This servility is tragic for the independence of archaeology, which was once so vaunted that it even led to its estrangement from anthropology. Archaeology’s leading role in the historical (and ontological) policies of modernity has become one of serving development through CA. With the contractual turn in archaeology, the discipline’s commitment is no longer with a transcendent entity that represents the people (the nation), but instead with transcendent entities (the market and development) that control politics and society.

CONTRACT ARCHAEOLOGY: AN ASSESSMENT

Why do we talk about CA in the first place? Why do we add the adjective “contract” to the noun “archaeology”? For some time now, the noun “archaeology,” which reigned solitary for more than two centuries, appears accompanied by other terms. Yet, the disciplinary power is so strong that the noun remains unquestioned, untouched by the adjectives that accompany it. Rather, those adjectives reinforce it, support it, and legitimize it. Which aspects of the noun “archaeology”

do these adjectives transform? Nothing structural. They modulate it; that is, they specify it and particularize it. Portuguese political philosopher Boaventura Santos (2011) noted,

It is necessary to take into account that nouns still establish the intellectual and political horizon that defines not only what is speakable, credible, legitimate or realistic but also, and by implication, what is unspeakable, incredible, illegitimate or unrealistic. That is, by taking refuge in adjectives, theory credits the creative use of the franchise of nouns but, at the same time, it accepts to limit its debates and proposals to what is possible within a horizon of possibilities that originally was not its own. (p. 26)

Thus, archaeology still defines what is “speakable, credible, legitimate or realistic” and, thanks to the binary structure of meaning in modernity, it also defines what is “unspeakable, incredible, illegitimate or unrealistic” in terms of the deep history that rests on the materiality of its record. To complete the task, adjectives are functional to the existence of nouns because they allow them to enter previously unknown or rarely visited realms. Accompanied by its adjective “contract,” archaeology enters a new landscape of possibilities that it did not know before, such as that of mercantile exchange, where it expands its definition as a provider of technical services to development projects, and it establishes a new criterion of what is possible, allowing it to limit its debates and proposals.

Yet, CA cannot be assessed neutrally and objectively; it is always viewed from a position. An assessment from a disciplinary, professional point of view, with its commitment to modernity and capitalism, is very distinct from an assessment undertaken from a critical standpoint. Viewed from the former perspective, CA has rendered useful services to archaeology: It has provided thousands of job opportunities, opened previously unknown professional niches, and permitted the study of an expanded archaeological record. If seen from the latter perspective, however, the view is not as positive. Paraphrasing Ribeiro (2008, p. 109), after three decades of prominence of CA, there is no more room for innocence. Indeed, some time ago Brazilian archaeologist Tania Andrade Lima (2000, p. 5) noted bluntly, “We hear talk of ‘responsible business interests’ and ‘legitimate commercial archaeology’ as if it were possible to reconcile scientific and commercial interests, themselves incompatible” (see Zarankin & Pellini 2012, Londoño 2016). Contract archaeologists do not seem to be worried about such an incompatibility, but they could hardly deny what the director of the Brazilian National Archaeological Center noted in 2013: “Archaeology related to economic ventures is a no-return way, so it is important that it can reverse its results for the community and academic research” (Pierro 2013, p. 75). What results is he talking about that can be assessed and, eventually, reversed?

The first issue that attracts my attention in this regard is the relationship of CA with the environmental permit, a bureaucratic instrument (Bezerra 2015, Jofré 2015) that engages the social and environmental impacts of development projects with technical and managerial measures (Zhouri 2007). Environmental permitting has profound implications for the communities involved, whose opinions are normally disregarded and which are engaged in a top-down fashion from asymmetrical and hierarchical positions and unequal power relations (Ribeiro 2015). Environmental permitting downplays direct popular participation and operates within an environmental adequacy paradigm (Zhouri 2007, Zhouri & Oliveira 2007), in which the environment is conceived as something apart from social relations, as a neutral landscape that can be managed by technical projects through mitigation and compensation to suit the needs of development companies but not the needs of the communities (Jofré 2017). Ribeiro (2008) has talked of “developmental dramas,” complex encounters that connect local actors and institutions with outsiders that plan the future of the communities: “From being subjects of their own lives, these populations become subjected to prescient technical elites” (Ribeiro 2008, p. 122), among which contract archaeologists rank

high. In this sense, Hamilakis (2015, p. 728) has noted that “archaeology due to its connotations of preservation and environmental values can operate as the ‘fig leaf’, the green pretext, and the environmental alibi for major, destructive and highly contentious projects, such as road works and airports.” Besides operating as an alibi, the protection of heritage and the production of knowledge in CA projects allow for the intervention of development in the daily lives of people. The transformation of places of memory into heritage (Jofré 2015, 2017) is an act of translation by which the unintelligibility of the local is read (and legislated) in global terms (Shepherd 2015), with the added effect of curtailing local claims to their particular histories (Zhouri 2007). CA has participated in heritage declarations by providing such a translation through disciplinary discourses (Ferreira 2010, Londoño 2013).

Furthermore, heritage education teaches what the past is, where to find it, and how to care for it, but it does so in purely modern terms (Silveira & Bezerra 2007). Heritage education, linked to contract projects as a way to meet the corporate needs of social responsibility, carries to local populations the historical message of modernity, bypassing local communities’ own conceptions of heritage, the past, and even archaeology. Because it educates according to the temporal guidelines of modernity, it has not sought to establish respectful and transformative relationships with other ontologies. The heritage education agent is an outsider that operates in the divide, separating the ignorant community from the illustrated knowledge (Ferreira 2010, Bezerra 2015, Verdesio 2017). In sum, as a part of the larger field of archaeology, CA feeds the ontology of modernity. In doing so, it deals with matters of the past but disregards matters of the present, which are composed primarily of the lives of the people groups affected by the development projects it serves (Ribeiro 2015).

There are no pan-national concerns regarding these issues in South America. Each country deals with them in its own way, normally within professional and disciplinary preoccupations (Tantaleán & Gonzáles 2017). There are some scholars, however, whose reflections on CA as a practice are accompanied by the radical critique of its embeddedness in modernity and capitalism (Haber 2015b, Pellini 2017a). Such a critique points out that CA must be understood (and measured) in its relation to development and, therefore, to its consequences. The consequences are many and large scale, especially when CA projects are linked to extractivism, which produces enduring and negative environmental and social effects (Gudynas 2013). Extractivism is responsible for much of the contemporary unarmed attacks against life (and not just human life) and cultural survival. If extractivist ventures run counter to life, the CA that underpins and legitimizes them does so, too, for it has become both an opportunistic partner and an accomplice of development (Fausto 2006, Ferreira 2013, Londoño 2013, Rocha et al. 2013, Bezerra 2015, Gnecco & Dias 2015, Haber 2015b, Jofré 2015, Ribeiro 2015, Silva 2015, Gnecco 2017, Jofré 2017, Oliveira 2017). Thus, the trumpeted technicality of contract archaeologists has led them to take sides with development at the expense of the relational life of many communities. Their explicit commitment to development projects, especially to those more contentious and nefarious, has led them to participate in displacements, environmental outrages, and infringements on life and dignity.

In the face of such a tremendous imputation, it is time for a tremor. Has it occurred? Timidly, it seems, but it is unquestionable that the disciplinary establishment, so conservative, has begun to be concerned.⁸ Even so, I am pessimistic about the possibilities of a radical reform of CA because it would imply, in any case, the very questioning of the discipline. Reforms, if any, will be fundamentally cosmetic and markedly disciplinary, in which the commitment to profit will

⁸The long silence of the Society for Brazilian Archaeology on topics related to CA recently began to break, as seen in symposia promoted in its last congress as well as with the publication in its journal, in 2015, of positions critical of CA.

likely remain. However, those concerned with CA as a practice may recall that Boaventura de Sousa Santos (2011, p. 28) pointed out that “we have modern problems for which there are no modern solutions.” CA is one of those problems. Being that CA is a modern problem, we cannot claim a modern solution for it (more openness, more transparency, and more accessibility). The terms of capital are not modified or improved as long as they are established and defined by profit. If we want to solve the problems of CA—or put more strongly, the problem that CA is—it is pointless to seek better working conditions or the democratization of the labor market, one of the most pressing concerns of contract archaeologists in South America. Nor should we seek to improve the quality of contract projects or make them more accessible. This is not a matter of better regulations. This modern problem requires nonmodern solutions, which will not come from within contractual practice but from its contestation, including the critique of the very ontology that gives it meaning and that, at the same time, it feeds (Pellini 2017a). Although still in its infancy, the contestation of CA has already begun, especially by those sectors of society that have suffered the destructive impacts of development (Jofré 2015, 2017). It will take more militancy, more networking, and more informed positions to consolidate a critical front capable of upsetting the pernicious consensus patiently built by the discipline around CA over the last three decades.

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LITERATURE CITED

- Almansa J. 2015. Trading archaeology is not just a matter of antiquities: archaeological practice as a commodity. See Gnecco & Lippert 2015, pp. 141–57
- Aparicio P. 2017. La arqueología mercenaria en España: neoliberalismo, precariedad laboral y mercantilización de la historia. See Pellini 2017b, pp. 199–225
- Ayala P. 2015. Neoliberal multiculturalism and contract archeology in northern Chile. *Int. J. Hist. Archaeol.* 19(4):775–90
- Beovide L, Caporale M. 2009. La arqueología de contrato en el marco de la gestión integral del patrimonio arqueológico de la región metropolitana de Montevideo. *Rev. Arqueol. Am.* 27:7–35
- Bezerra M. 2008. Bicho de nove cabeças: os cursos de graduação e a formação de arqueólogos no Brasil. *Rev. Arqueol.* 21(2):139–54
- Bezerra M. 2015. At that edge: archaeology, heritage education, and human rights in the Brazilian Amazon. *Int. J. Hist. Archaeol.* 19(4):822–31
- Cáceres I. 1999. Arqueología y sistema de evaluación de impacto ambiental. *Bol. Soc. Chil. Arqueol.* 28:47–55
- Cáceres I, Westfall C. 2004. Trampas y amarras: ¿Es posible hacer arqueología en el sistema de evaluación de impacto ambiental? *Chungará* 36:483–88
- Caldarelli SB. 2015. Arqueologia preventiva: uma disciplina na confluência da arqueologia pública e da avaliação ambiental. *Habitus* 13(1):5–30
- Caldarelli SB, Cândido MMD. 2017. Desafios da arqueologia preventiva: como gerir e socializar o imenso volume de materiais e documentos por ela produzidos? *Arqueol. Pública* 11(2):186–214
- Caldarelli SB, dos Santos M. 2000. Arqueologia de contrato no Brasil. *Rev. USP* 44:52–73
- Calla S, Villanueva J. 2017. Arqueología de contrato, estudios de impacto y gestión patrimonial en Bolivia. See Pellini 2017b, pp. 117–42
- Campos J, Rodrigues M, Funari P, eds. 2017. *A multivocalidade da arqueologia pública no Brasil: comunidades, práticas e direito*. Criciúma, Braz.: UNESC
- Chmyz I. 1986. As realidades sociais e políticas da arqueologia de salvamento no Brasil. *Arqueologia* 5:1–15
- CONICET. 2017. *Estudios de Impacto Arqueológico*. Buenos Aires, Argent.: CONICET

- Demoule J-P. 2012. Rescue archaeology: a European view. *Annu. Rev. Anthropol.* 41:611–26
- Dillehay TD. 2004. Reflexiones y sugerencias sobre la arqueología ambiental en Chile desde la perspectiva de un observador. *Chungará* 36:531–34
- Echeverría J. 2009. La arqueología de contrato en Ecuador: breves reflexiones. *Rev. Arqueol. Am.* 27:37–48
- Escobar A. 1995. *Encountering Development: The Making and Unmaking of the Third World*. Princeton, NJ: Princeton Univ. Press
- Everill P. 2009. *The Invisible Diggers: A Study of British Commercial Archaeology*. Oxford, UK: Oxbow
- Fausto C. 2006. Ciência de contrato e o contrato da ciência: observações sobre o laudo da empresa Documento sobre a PCH Paranatinga II (rio Culuene, MT). *Socioambiental*. <http://site-antigo.socioambiental.org/nsa/detalhe?id=2317>
- Fausto C. 2017. De la responsabilidad social de antropólogos y arqueólogos: sobre contratos, represas y algunas otras cosas. See Gnecco & Dias 2017, pp. 291–306
- Ferreira LM. 2008. Sob fogo cruzado: arqueologia comunitária e patrimônio cultural. *Rev. Arqueol. Pública* 3:81–92
- Ferreira LM. 2010. Arqueología comunitaria, arqueología de contrato y educación patrimonial en Brasil. *Rev. Jangwa Pana* 9:95–102
- Ferreira LM. 2013. Essas coisas não lhes pertencem: relações entre legislação arqueológica, cultura material e comunidades. *Rev. Arqueol. Pública* 7:87–106
- Filho MFL, Eckert C, Beltrão J, eds. 2007. *Antropologia e patrimônio cultural. Diálogos e desafios contemporâneos*. Blumenau, Braz.: Nova Letra
- Funari P. 2001. Public archaeology from a Latin American perspective. *Public Archaeol.* 1:239–43
- Funari P, Robrahn-González E. 2008. Ética, capitalismo e arqueologia pública no Brasil. *História* 27(2):11–30
- Gnecco C. 2017. Notas sobre arqueología comercial. See Pellini 2017b, pp. 5–17
- Gnecco C, Dias A. 2015. On contract archaeology. *Int. J. Hist. Archaeol.* 19(4):687–98
- Gnecco C, Dias AS, eds. 2017. *Crítica de la razón arqueológica. Arqueología de contrato y capitalismo*. Bogotá, Colomb.: Inst. Colomb. Antropol. Hist.
- Gnecco C, Lippert D, eds. 2015. *Ethics and Archaeological Praxis*. New York: Springer
- Gnecco C, Piazzini E, eds. 2003. *Arqueología al desnudo. Reflexiones sobre la práctica disciplinaria*. Popayán, Colomb.: Univ. del Cauca
- González A. 2010. Arqueología hoy. ¿Para qué? o ¿A costa de qué? *Rev. Investig. Cent. Estud. Arqueol.* 7:129–157
- Gudynas E. 2013. Extracciones, extractivismos y extrahecciones. Un marco conceptual sobre la apropiación de los recursos naturales. *Obs. Desarro.* 18:1–18
- Haber A. 2015a. Archaeology and capitalist development: lines of complicity. See Gnecco & Lippert 2015, pp. 95–113
- Haber AF. 2015b. Contratiempo: contract archaeology or a trench in the battle for the dead. *Int. J. Hist. Archaeol.* 19(4):736–47
- Hamilakis Y. 2007. From ethics to politics. See Hamilakis & Duke 2007, pp. 15–40
- Hamilakis Y. 2015. Archaeology and the logic of capital: pulling the emergency brake. *Int. J. Hist. Archaeol.* 19(4):721–35
- Hamilakis Y, Duke P, eds. 2007. *Archaeology and Capitalism: From Ethics to Politics*. Walnut Creek, CA: Left Coast Press
- Herrera A, ed. 2013. *Arqueología y desarrollo en América del Sur*. Bogotá, Colomb.: Univ. Andes
- Horta M, Grunberg E, Monteiro A. 1999. *Guia básico da educação patrimonial*. Brasília, Braz.: IPHAN/Mus. Imp.
- Hutchings R, La Salle M. 2013. Five thoughts on commercial archaeology. *Inst. Crit. Heritage Tour. Bull.* 1:1–4
- Hutchings R, La Salle M. 2015. Archaeology as disaster capitalism. *Int. J. Hist. Archaeol.* 19(4):699–720
- ICANH. 2010. *Régimen legal y lineamientos técnicos de los programas de arqueología preventiva en Colombia*. Bogotá, Colomb.: ICANH
- Jofré C. 2015. Mega-mining, contract archaeology, and local responses to the global order in Argentina. *Int. J. Hist. Archaeol.* 19(4):764–74
- Jofré C. 2017. Una mirada crítica de los contextos de patrimonialización en el contexto megaminero. See Pellini 2017b, pp. 143–75

- King TF. 2009. *Our Unprotected Heritage. Whitewashing the Destruction of Our Natural and Cultural Environment*. Walnut Creek, CA: Left Coast Press
- La Salle M, Hutchings R. 2012. Commercial archaeology in British Columbia. *Midden* 44(2):8–16
- Lima TA. 2000. *A ética que temos e a ética que queremos (ou como falar de princípios neste conturbado fim de milênio)*. Paper presented at the IX Meetings of the Brazilian Archaeological Society, Rio de Janeiro
- Londoño W. 2013. Arqueología para el desarrollo y arqueología del desarrollo: una visión desde Colombia. See Herrera 2013, pp. 147–65
- Londoño W. 2016. Arqueología por contrato y nuevos contratos arqueológicos. *Jangwa Pana* 15:117–28
- Lopes R, de Souza M. 2010. *Normas e gerenciamento do patrimônio arqueológico*. São Paulo: IPHAN
- Marín C, Parga E. 2017. La arqueología de gestión en Madrid. Atrapados en el modelo de especulación capitalista del territorio. See Gnecco & Dias 2017, pp. 189–219
- Messenger PM, Smith GS, eds. 2010. *Cultural Heritage Management: A Global Perspective*. Gainesville: Univ. Press Fla.
- Monticelli G. 2010. *Deixe estar: patrimônio, arqueologia e licenciamentos ambientais*. Porto Alegre, Braz.: EDIPUCRS
- Okamura K, Matsuda A. 2010. Archaeological heritage management in Japan. See Messenger & Smith 2010, pp. 99–110
- Oliveira JE. 2017. Arqueología de contrato, colonialismo interno y pueblos indígenas en Brasil. See Gnecco & Dias 2017, pp. 271–89
- Parga-Dans E. 2010. Commercial Spanish archaeology: its growth, development and the impact of the global crisis. See Schlanger & Aitchison 2010, pp. 45–54
- Patiño D, ed. 2001. *Arqueología, patrimonio y sociedad*. Popayán, Colomb.: Univ. Cauca
- Pellini JR. 2017a. Arqueología comercial: shock y anestesia. See Pellini 2017b, pp. 19–51
- Pellini JR, ed. 2017b. *Arqueología comercial. Dinero, alienación and anestesia*. Madrid: JAS Arqueol.
- Pereira E. 2009. O Museu Goeldi e a pesquisa arqueológica: um panorama dos últimos dezessete anos (1991–2008). *Bol. Mus. Para. Emílio Goeldi. Ciênc. Hum.* 4(1):171–90
- Piazzini CE. 2001. Arqueología, legislación y desarrollo: balance de los noventa y perspectivas desde la coyuntura actual. See Patiño 2001, pp. 23–40
- Pierro B de. 2013. Negócios do passado. Cresce a participação da arqueologia empresarial em canteiros de obras de infraestrutura. *Pesqui. FAPESP* 206:72–75
- Polanyi K. 1997 (1944). *La gran transformación*. Madrid: La Piqueta
- Ratto N. 2009. Aportes de la arqueología de contrato al campo de la investigación: estudios de casos en Patagonia y Noroeste Argentino. *Rev. Arqueol. Am.* 27:49–70
- Ratto N. 2010. Arqueología y la evaluación de impacto ambiental. *Xama* 19–23:357–76
- Ribeiro GL. 2008. Poder, redes e ideologia no campo do desenvolvimento. *Novos Estud.* 80:109–25
- Ribeiro L. 2010. Auto-regulação da arqueologia brasileira: responsabilização, credibilidade e fortalecimento profissional. *Arqueol. Em Debate* 1:8–9
- Ribeiro L. 2015. Development projects, violation of human rights, and the silence of archaeology in Brazil. *Int. J. Hist. Archaeol.* 19(4):810–21
- Rocha B, Jacome C, Mongelo G, Stuchi F, Valle R. 2013. Arqueologia pelas gentes: um manifesto. Constatações e posicionamentos críticos sobre a arqueologia brasileira em tempos de PAC. *Rev. Arqueol.* 26(1):130–40
- Santos B. 2011. Epistemologías del sur. *Utopía Y Prax. Latinoam.* 16(54):17–39
- Scatamacchia MC. 2009. A educação patrimonial relacionada à arqueologia de contrato no Brasil. *Rev. Arqueol. Am.* 27:85–99
- Schlanger N, Aitchison K, eds. 2010. *Archaeology and the Global Economic Crisis. Multiple Impacts, Possible Solutions*. Tervuren, Belg.: Cult. Lab Ed.
- Shepherd N. 2015. Contract archaeology in South Africa: traveling theory, local memory and global designs. *Int. J. Hist. Archaeol.* 19(4):748–63
- Silva FA. 2015. Contract archaeology and Indigenous peoples: reflections on the Brazilian context. *Int. J. Hist. Archaeol.* 19(4):832–42
- Silveira F, Bezerra M. 2007. Educação patrimonial: perspectivas e dilemas. See Filho et al. 2007, pp. 81–97
- Soares I. 2017. A variável arqueológica no licenciamento ambiental. See Campos et al. 2017, pp. 226–62

- Sousa JC de. 2017. Como se tornar arqueólogo(a) no Brasil: lista de cursos. *Arqueologia e Pré-História*. <https://arqueologiaeprehistoria.com/como-se-tornar-um-arqueologo-no-brasil/>
- Tantaleán H, Gonzáles A. 2017. La arqueología de contrato en el Perú: surgimiento, caracterización y perspectivas. See Pellini 2017b, pp. 177–98
- Verdesio G. 2017. La renovación de un despojo fundacional: la compleja relación entre la arqueología de contrato, la acumulación primitiva y los indígenas. See Pellini 2017b, pp. 53–79
- Viana S, Bezerra M, Eremites de Oliveira J. 2014. Múltiplas perspectivas sobre o ensino de arqueologia no Brasil. *Habitus* 12(2):199–204
- Villa FA. 2003. Arqueología de rescate y desarrollo sostenible en Colombia: crítica a un vínculo instrumental. See Gnecco & Piazzini 2003, pp. 327–42
- Villarroya A, Barros AC, Kiesecker J. 2014. Policy development for environmental licensing and biodiversity offsets in Latin America. *PLOS ONE* 9(9):e107144
- Webley L, Vander Linden M, Haselgrove C, Bradley R. 2012. *Development-Led Archaeology in Northwest Europe*. Oxford, UK: Oxbow Books
- Wylie A. 2002. *Thinking From Things. Essays in the Philosophy of Archaeology*. Berkeley: Univ. Calif. Press
- Zanettini P, Wichers C. 2014. Arqueologia preventiva e o ensino de arqueologia no Brasil. *Habitus* 12(2):239–56
- Zarankin A, Pellini JR. 2012. Arqueologia e companhia: reflexões sobre a introdução de uma lógica de mercado na prática arqueológica brasileira. *Rev. Arqueol.* 25(2):44–60
- Zhou A. 2007. Conflitos sociais e meio ambiente urbano. *Comunidades Meio Ambient. Desenvol.* 17:1–8
- Zhou A, Oliveira R. 2007. Desenvolvimento, conflitos sociais e violência no Brasil rural: o caso das usinas hidrelétricas. *Ambient. Soc.* 10(2):119–35
- Zorzin N. 2011. Contextualising contract archaeology in Quebec: political-economy and economic dependencies. *Archaeol. Rev. Camb.* 26(1):119–35
- Zorzin N. 2015a. Archaeology and capitalism: successful relationship or economic and ethical alienation? See Gnecco & Lippert 2015, pp. 115–39
- Zorzin N. 2015b. Dystopian archaeologies: the implementation of the logic of capital in heritage management. *Int. J. Hist. Archaeol.* 19(4):791–809



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