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A Review of Archaeological Organization and Practices in Taiwan

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Abstract

Since the mid-twentieth century, the worldwide practice of archaeology has taken many different forms, especially in terms of its management: state-based, regional/federal-based, city-based, private, commercial/contract-based, academic, amateur, etc. Although archaeology, as a profession, is generally organized in accordance with the dominant ideologies of the time, on a national level it is adjusted to address specific needs and domestic ideological dynamics. While archaeological management practices are more complex and nuanced than framed by a simple dichotomy, such a structure usefully highlights overlapping similarities and differences. On the one hand, Japan, France, Italy, Greece, and many others made the initial choice for a mainly state-based archaeology, in which the state handles the practice and regulation of archaeology. On the other hand, countries like the USA, UK, Canada, and Australia chose a largely commercially-based archaeology, which is essentially a privatized and de-regulated practice. Such stark differences made us question whether archaeologists in both systems do the same job and have the same objectives? Furthermore, what is the situation in Taiwan? What choices have been made and what still needs to be done to define the future of archaeology in Taiwan? Even though archaeology largely relies on public institutions and their members, archaeological practice in Taiwan is now mainly done within a 'salvage archaeology' or 'contract-archaeology' model involving public and private operators. Funding for salvage

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archaeology comes through the 'polluter-payer' principle, which is developer-based and embedded in a market economy. This specific market configuration comes with well-known issues experienced worldwide, but the organization of archaeology in Taiwan presents some unique successes and challenges due to the history of its specific development. It retained large public archaeological institutions and structures that mainly support research, giving a more hybrid character to Taiwanese archaeological practices. It is suggested here that we are entering a period of transformation in Taiwan with the more common application of salvage practices and the advent of private operators, which may present several choices for the structural orientation of archaeology in Taiwan.

Keywords: Archaeological heritage management, Organizational structure of archaeology, Rescue archaeology, Market economy, Taiwan

當代臺灣考古學的組織與實踐

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中文摘要

自二十世紀中期以來，考古學實踐在全世界發展出許多不同的樣貌，特別在管理與控制的不同層面，包括國家主導的、地區／聯邦主導的、城市主導的、私人主導的、商業考古、學院派考古或業餘考古等不同體制。然而，考古學作為一門專業，往往受到當代主流思想的塑形，而更重要的，則是在一個民族國家的尺度下隨著其內部思潮的變遷而調整。

本文從一種簡化的二分法進行觀察與分析（當然，全球尺度考古學管理的實踐自然是更加複雜且細微），包括日本、法國、義大利或希臘等地區，係採取國家主導的考古工作（即考古學實踐以及管理由國家來進行），而美國、英國、加拿大或澳洲等國，則大體上選擇商業化的考古工作模式（即採行私人化與鬆綁管制的實踐）。此兩種系統下的考古學者是否進行著同樣的工作，並且懷抱相同的目標？臺灣的狀況又是如何？臺灣過去選擇了什麼樣的方向，以及未來可能會面臨怎樣的決擇？

透過分析顯示，即使在臺灣的考古學研究仍大體仰賴公立機關進行審查或執行，現今的考古學實踐主要在「搶救考古」的模組下運作，透過「污染者自付」原則（受到 1992 的瓦萊塔會議之啟發），也就是土地開發者出資委託考古家執行，導致將考古學放入了一個競爭性的市場經濟之中。這種競爭性市場結構伴隨的問題在世界各地歷歷可見，然而特定基於本地開發過程所衍生的特殊問題，卻是臺灣的考古管理所特有的。本文認為我們正面臨在一個轉捩點上，是否應持續以市場經濟邏輯為主導，或者轉而從質疑的態度面對當代的資本主義思維，重新將考古學導向社會文化的面向，而非遵循追求產值增長的教條。

關鍵字：考古遺產處理、考古學組織結構、搶救考古、市場經濟、臺灣

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Introduction

The present study is part of a long-term line of research that investigates how archaeological practices are structured around the world. Moreover, this research examines how the effects of dominant political-economy policies and their ideological background affect current archaeological work and archaeologists. Since 2011, I have dedicated most of my research efforts and publications to exploring and interrogating the links between knowledge and power and "to address the structures of power and authority" (Hamilakis, 1999: 60, 75). In keeping with this endeavour, as with the recent publication of Frank Muyard (2022) dedicated both to the history of Taiwan archaeology and to its present state, this research paper will focus on the current organisation of archaeology in Taiwan.

Semi-directed interviews[1] conducted across the Island between 2016 and 2018 form the basis of this research as well as all subsequent discussions. Additionally, this study took place with the support of students from the National Taiwan University (NTU) and from the National Cheng Kung University (NCKU). Twenty-four participants (quoted anonymously here) working within the archaeological community shared their perspectives as well as quantitative data on Taiwanese archaeology. Some adjustments to these data were done in 2020-21. However, it should be noted that most figures concerning management, budget, and a large part of the archaeological activities are not available, absent, or still difficult to access, making a compilation of strictly quantitative data nearly impossible at present. As such, the current analysis relies essentially on qualitative data gathered through direct testimonies of a representative sample of archaeologists (i.e., approximately 55% of the current population of archaeologists active in Taiwan, comprising a total of 45 to 55 individuals).

Questioning the nature of archaeological practices in Taiwan

1. Contextualising Taiwanese archaeological practices in a global political-economy

[1] Memorandum of understanding, interview consent forms, various authorisations, and list of questions are available on demand.

Every country possesses cultural heritage legislation developed according to the dominant ideology of the time, which implies a specific conception of the role occupied by archaeology in society. Generally, this falls into three categories: 1) privatised (in a strict capitalist interpretation), so that archaeological practices should be made compatible with the market economy; 2) state-based (in a socialist system and/or in some social-democracies which sustained some public services essentially inherited from the pre-1980s era), implying that protection of cultural heritage is a citizens' right supported by taxes and taken care of by civil servants; and 3) in-between or hybrid (with a mixture of various compromises between the two previous tendencies).

Yet, a hyper-capitalistic hegemony, which emerged in the 1980s, was progressively implemented globally (Harvey, 2007). This quickly had an effect on archaeological management policies (notably through the internationally influential European Valletta convention of 1992) and asserted that archaeology needed to be closely integrated with land-use planning and supported financially by the 'polluter payer-principle'. It resulted in the emergence of a "developer-funded archaeology" (Willems and Dries, 2007: 66), dedicated to what is called today: 'salvage archaeology', 'rescue archaeology', 'preventive archaeology', or 'contract archaeology'. Since then, a globally dominant discourse, very much visible in Anglo-American literature dealing with archaeological management, has stated that: "Early involvement of archaeologists in the development process can provide a better protection to sites and a better planning process" (Cleere, 1989: 12). While this assertion seems to be common-sense, this statement is particularly questionable in the sense that this 'early involvement' does not necessarily provide 'better protection' (if any) to archaeological sites. In fact, it only provides greater legitimacy (within a development-led logic and its adapted legal framework) for archaeologists to extract material and data from a limited space defined by a developer, but without assessing the significance of a site in scientific or social terms. At the same time, while such an approach does provide archaeologists with more job opportunities, we must interrogate ourselves as to the nature of such jobs and their social justification. It should be kept in mind that the aim of 'salvage archaeology' is directed towards the removal of archaeological sites before their destruction. The main objective of such 'early involvement of archaeologists' is then only to facilitate construction development. Therefore, this model has nothing to do with the 'protection' of archaeological sites

and built heritage for the benefit of citizens, but rather offers much more with a quick cleaning of sites in the interest of a developer.

In addition, the widespread reluctance of most governments to invest in the establishment of archaeological institutions with permanently employed archaeologists has resulted in the progressive and global conversion of archaeology towards an Anglo-American version of the profession, even in the systems traditionally considered state-based such as France (Zorzin, 2016b) or Japan (Zorzin, 2013). The defining characteristics of this market-compatible model are:

1. The polluter-payer principle directly finances salvage archaeology, and the developer selects the salvage archaeology operator.
2. Archaeological operators (private or state-based) conduct 'salvage archaeology' in a competitive market by winning contracts.

Taiwan is embedded in a capitalist framework, in a very similar way as Japan and South Korea, all under the strong ideological influence of the USA (Cai, 2008: 117-150). For archaeology, such a context would imply that all actors would be expected to participate in the competitive market economy, resulting in a fully privatised archaeological system. Yet, as in Japan, this is not the case in Taiwan. As such, considering Taiwan's former and present economic and political context, what structural 'category' of archaeology would Taiwan fall into? What could explain the specific development of archaeology in Taiwan? What are the tendencies and a foreseeable future for the structure of archaeology in Taiwan?

2. Taiwan: A state-based archaeology? A competitive system, regulated or unregulated? Or, a hybrid system?

Archaeology in Taiwan has always been and still is fundamentally related to research institutions. Historically, the main figures have been the National Taiwan University (NTU), formerly called the "Taihoku Imperial University" (臺北帝國大學) (Blundell, 2001; Liu, 2001; Nobayashi, 2001; Wu, 1969), and the national research institute - Academia Sinica 中央研究院, with the Institute of History and Philology 歷史語言研究所 (Liu, 2011; Murowchick, 2012). The state has sponsored archaeology since the beginning of the Japanese colonization in 1895 as a mission serving the Japanese governor and directed by Japanese scholars. Nowadays, to a certain extent, state sponsorship continues through academic institutions. At first glance, and

compared to other archaeological systems in the world, archaeological practice in Taiwan seems to correspond to the definition of a state-based archaeology.

However, its configuration is more complex because it cannot be equated directly with the once centralised state systems such as the one of France before 2003 (Demoule and Landes, 2009; Schlanger, 2006, 2007, 2016; Zorzin, 2016b), or the regionalised one present in Japan until recent transformations (Habu and Okamura, 2017; Okamura and Matsuda, 2010; Uozu, 2019). Both French and Japanese archaeological systems are now partially privatised (Blein, 2019; Zorzin, 2013). In comparison, Taiwan has no state archaeological service *per se* equivalent to the INRAP in France, the "boards of education (*kyouiku iinkai*) of local government on both prefectural and municipal levels" in Japan (Okamura and Matsuda, 2010: 99), the central Archaeological and Museums Council in Greece, or the *Soprintendenze Archeologia, belle arti e paesaggio* in Italy. Instead, Taiwan still possesses a dominant, non-centralised, state-based academic and museum network (Figure 1 – ¾ of the figure). Nevertheless, it is embedded in the neoliberal framework in effect in all the countries cited above, whether they still support a state-based archaeological system or not. This dominant doctrine, for which Taiwan has taken part since the mid-1980's (Tsai, 2001: 359), is based on the belief that "market openness, fiscal austerity, and privatisation of public sector" (ibid.) should be prioritized for the benefit of a thriving society[2]. However, these assumptions have been generally and repeatedly proven to be false by economists like Piketty (2014, 2020); for archaeology, they have proven to be hardly compatible with ethical and sustainable practices (Aparicio Resco, 2016; Hamilakis and Duke, 2007; Hamilakis, 1999; Hutchings, 2018; Hutchings and La Salle, 2015; Kehoe, 2007; Parga-Dans, 2019; Shanks and McGuire, 1996; Zorzin, 2015a, 2015b, 2016a). Nevertheless, in archaeology, and more specifically in salvage archaeology, such a doctrine would provoke: 1) the establishment of competition between operators within an open market; 2) archaeology to be de-funded from the

[2] In Taiwan, since the 1990s, democratic life is essentially dominated by two parties: the "Democratic Progressive Party" (DPP) and the "Chinese Nationalist Party" (KMT). They respectively belong to the 'Liberal International' and the 'International Democrat Union' groups, which is comparable to the dualism of the North American political system, divided between 'progressive' and 'conservative'. However, both have followed the same neoliberal economic doctrine since the 1980's (Tsai, 2001).

state and replaced by the developer-funded system; and 3) ultimately to have private operators replace state-based operators.

In terms of regulations for archaeological activities in Taiwan, the state has defined the guidelines for the treatment of heritage at large by the "*Cultural Heritage Preservation Act*" (CHPA – Ministry of Culture, 1982) and its later updates (2016a). Yet, as no central state body dealing with archaeology was created in Taiwan, no one in a permanent position in the government apparatus can directly oversee the implementation of its regulations and play an independent and neutral role (i.e., without financial dependence on the client/developer, or the obligation to gain contracts). In Taiwan, this is in fact the role of an interim committee composed of archaeologists (essentially recognized scholars), who work and compete within the archaeological network. It needs to be emphasized here that this established committee-apparatus is particular to Taiwan, and largely contributes to its distinctiveness. Despite some issues that we will develop later in this contribution (notably the fact that the members are placed in possible conflicts of interests by being both judge and party within the competitive market), most interviewees agree that this interim committee contributes to the positive functioning of archaeology in Taiwan. It has also been successful in opposing some cases of potentially destructive development. However, as with any other system implemented across the globe, it comes also with some issues which this article will try to address.

Since 1997, five successive amendments of the CHPA (Ministry of Culture, 2016b) have made significant progress. Yet, it has been pointed out that, since 1982, the main problem of the CHPA was the absence of forceful mechanisms to enforce its regulations. As a result, cultural heritage suffered under the *laissez-faire* attitude of local authorities and was at the mercy of potential conflicts of interests with local developers (Tsai, 2012). As underscored by Hsia Chu-Joe, a Professor at Graduate Institute of Building and Planning, NTU, in Taiwan, "the real enemy of conservation efforts has been the prevalent development-centric mentality" (cited in Tsai, 2012; and see also Hsia, 2006: 91-101).

All in all, archaeology in Taiwan can be defined as an 'in-between' or hybrid system. It is composed of a vast majority of state institutions and some private operators but is simultaneously driven by a public mission. At the same time, it is firmly embedded in a competitive and

deregulated market economy when it comes to salvage archaeology. As such, this system produces an archaeological practice that is somewhat paradoxical: it is both a public service (for the preservation, research, and display of archaeological remains) conducted by scholars, and a collaborator with development by mitigating the destruction of heritage through contract-archaeology, following the standards of the free-market economy, i.e., minimum time and cost spent by the developer to respect its legal obligations.

Although the neoliberal influence did not come with a massive privatization of archaeological operators in Taiwan, since 2012 there has been a clear inclination towards the privatization of salvage archaeology (Chen, 2014; and see Figure1 – bottom-right). This occurred together with the disengagement of the state, leading to a lack of direct regulation of archaeological activities. As an example, there can be ineffective enforcement of the existing regulations when it directly opposes development, as highlighted by Liu Yi-Chang (Tsai, 2012; see also the recent case of Hanben in Zorzin, 2018). The fact that developers are corporate groups or, more commonly, state agencies (e.g. Ministry of Transport), does not make a difference in Taiwan, as they are all implementing the same neoliberal logic (Tsai, 2001). This favors competitive mechanisms and market-driven goals and does not necessarily prioritize the common good (especially when it concerns culture or ecology).

Finally, in the case of Taiwan, it is possible to evaluate to what extent 'salvage archaeology' is dominant in the practice of archaeology[3]. As a limited example, we gathered some information for Taichung County from 2011 to 2019: 96.5% of interventions (160 operations) were salvage archaeology, while the remaining 3.5% (6 operations) corresponded to research programs. However, to have a full understanding and complete picture of the current dynamics in Taiwan, data gathered from all counties or, at least a representative sample, will be necessary to form a clear image of trends over the last decade and to define future trends. Over the last three decades, archaeology in Taiwan is trending towards a privatized and deregulated model but it possesses

[3] However, it could be determined that state funding comes from very restricted resources: National Science Foundation; Institute of History and Philology - Academia Sinica, with its own research funding for archaeological projects (about 5 million NT$/year); Museums; National Bureau of Cultural Heritage for non-rescue archaeological projects (about 20-30 million NT$/year).

numerous particularities, exceptions, and nuances in its implementation. We will now focus on deconstructing in detail the functioning of the Taiwanese archaeological network.

Salvage Archaeology: An attempt of deconstructing the industry through archaeologists' voices

Today, pressure on urban and rural areas caused by the pace of development remains high in Taiwan with a relatively stable GDP growth rate fluctuating between - -7.88% (1st quarter of 2009) and +12.02% (2nd quarter of 2010), with an average rate of 3.22% between 2008 and 2021 (DGBAS, 2022). Even in 2020, as one of the few countries in the world not experiencing a recession, Taiwan's GDP has managed to stabilize around this average in the face of the ongoing Covid-19 crisis and of the US-China trade war, with an average annual rate of +3.36%, (ibid.). Economic growth rate in Taiwan even continued rising by +6.57% in 2021 despite global economic major disruptions (ibid.).

Since the 1980s, the construction of infrastructure and new buildings brought about a more systematic implementation of salvage archaeology thanks to the CHPA and its amendments, but there were also some negative consequences of these activities. It was stated by a scholar from Academia Sinica that, "In Taiwan, archaeologists have less time, energy, and budgets to devote to problem-oriented research" (Chen, 2011: 59), notably because of the lack of archaeologists available to cope with the development demand. The problem of the 'rushed nature' of salvage archaeology has often been discussed in Taiwan, but the outcome of such activities is still quite challenging for many as it seems to negatively alter the nature of the archaeological work. This is illustrated by interviews of archaeologists about fieldwork which are representative (i.e., opinions very often expressed):

> [Shu-fen]: the problem with the systematic use of salvage archaeology is that we can't keep the sites in situ, and we always have to do "preservation by records". Paradoxically, the recording process must be done under high time pressure and with very limited financial means, and this cannot comply with the minimum ethical requirement for a proper archaeological excavation before the destruction of a site.

> [Shu-hui]: Under time pressure, archaeologists often have to use the wrong excavation methodology, notably 'aleatory levels', too systematically, when a 'single context' method should have been used… not to mention the recurrent problems of water invasion. In these conditions, salvage archaeology in Taiwan equates, sometime, to the 'murder' of a site.

Today salvage archaeology constitutes a major part of archaeological activities in Taiwan. Even if is not structured nationally by a central institution, there are archaeologists in non-permanent administrative positions (i.e., on 1-year contracts) present in the administration of certain counties (within local sections of the Bureau of Cultural Affairs) who try to fill the role of assisting in daily/routine activities (See Figure1, top-left). Such work is carried out in parallel to the interim national committee mentioned previously, which possesses the pivotal task of validating the selection of archaeologists/operators and evaluating their reports. All in all, the salvage archaeology industry is open to archaeologists coming from research centres such as Academia Sinica, universities, museums, private units in archaeology, as well as to non-archaeological consultants (engineers, architects, environmental specialists, etc.) in certain cases.

The latter can obtain contracts as soon as there are no archaeologists present in an evaluation committee, and when 'excavations' are not named as such but labelled as 'dismantling investigations' as for example. According to my interviewees, it is not an uncommon situation, and it allows excavations to be conducted without any archaeological expertise involved in the fieldwork, and without applying the standard regulations for archaeological activities. The absence of both of these results inevitably in damaging archaeological sites and not recording them properly.

1. Analysing the salvage archaeological process induced by the CHPA

Regardless of the archaeological institution involved (i.e., academia, museum, or private operator), the procedure in case of development can be understood as follows: a developer (being a private corporation or a state administration) has a construction/development project which requires excavations or soil disturbance. At the location of the development, regardless the County, City, or Special Municipality 直轄市, administration is the administrative entity that asserts the legal obligation of archaeological investigations to the developer and eventually

facilitates the procedure. As illustrated in Figure1 (top-left), this government apparatus (or its local manifestation) has almost no archaeologists, as is the case for Taipei, with zero experts in a densely populated city of 2.65 million inhabitants. This absence is an issue because, in an environment driven by extremely high development pressures, archaeology can be perceived as an obstruction to development, investments, and profit-making. As such, archaeologists employed by cities/municipalities are vital in controlling development projects. Otherwise, there is very little chance a site would be preserved without sufficient understanding of the archaeological remains, archaeological process, powerful stakeholders, acquaintance with the development industry, and public support/lobbying. Such a case would trigger a 'salvage archaeology' response, according to national policies, but with no or very limited possibility for further involvements (preservation, research, public archaeology, etc.), other than just applying the law and producing a report allowing the destruction of the site. Thus, archaeology is essentially reduced to a technical operation.

In any case, the options available for developers differ depending on whether the developer is part of the public administration or a private corporation. According to the regulations of CHPA, there are two ways in which this can be done. I will refer to them here as: Option A for private developers, or Option B for public developers.

(1). OPTION A: Private/Corporate development project

A. A private developer usually directly contacts a researcher/professor/expert in archaeology to ask them to carry out archaeological investigations before a development starts. This means there is no public call for tender. A list of recommended contacts should be provided by the Bureau of Cultural Affairs, or perhaps the developer has already worked with an archaeologist before. In either case, individual archaeologists are contacted first, especially those who are well known, in Academia Sinica, NTU, NCKU, National Museum of Natural Science (NMNS), and National Museum of Prehistory (NMP). More recently, an increasing number of individuals at some private companies are on this initial list. The fact that the individuals contacted are prominent is not an obligation specified by law, but this is more part of a habitus favoring senior researchers because they have years of

experience in salvage archaeology, prepared teams, and funds to support big projects as requested by the law (Ministry of Culture, 2021, See Art. 4 & 5). Some of them also are well connected with the national committee in charge of the project's follow-ups and are themselves part of the same committee. These are reassuring factors for any developer seeking an archaeological operator which fulfils all the criteria defined by the law (ibid.), and who is eventually able to deliver results on time.

B. It is the developers that choose the archaeologist/unit, and they are the ones who also pay for the fieldwork (following the 'polluter-payer' principle). The selected archaeologist is, according to interviewees, most often part of the same list comprising seven senior professors and researchers as well as some cultural anthropologists.

C. If the archaeologist contacted first turns down the offer, then they would be asked to suggest another potential candidate.

D. In certain circumstances, such as when there are no notable archaeologists available to take on the projects or they are too busy to proceed, then, other individuals (less prominent), smaller institutions, or smaller private units might be able to obtain the contract with the developer.

E. After the designation of the archaeologist in charge of a project, the process will be implemented as follows:

   a. A compulsory desktop assessment, an archaeological survey and test pits must be completed by the archaeological team, for the developer to be allowed to proceed to the next legal step of a construction project.

   b. An evaluation report must be produced by the archaeological team and validated by the national committee of archaeological experts (for sites designated culturally important), or by the local Bureau of Cultural Affairs (for low potential areas or unlisted sites).

   c. If it is deemed necessary by the national committee of experts, a phase of archaeological excavation would be initiated, resulting in the production of an excavation report. In this case, a contract is signed between the private developer

and the archaeological operator. This would define the budget, including the cost of materials and working force, as well as the time required. It would also specify in advance the area that can be covered by the archaeological excavation without extensions to the allotted excavation time or trench sizes unless a new excavation application is submitted.

d. After validation, the final report remains at the local Bureau of Cultural Affairs and at the developer's headquarters; a total of approximately 10 reports are produced and distributed to various administrative divisions of Taiwan.

(2). OPTION B: Public development project

A. When a development project is proposed by a public structure, such as the Ministry of Transport, it can be posted on the Internet as a call for tenders. As such, this bidding system, defined as: "an occasion when companies are told they can compete for work by offering their best price" (Cambridge Dictionary, 2021) creates de facto a 'market' for salvage archaeology in Taiwan (Figure 2), with regular invitations to tender (every 6 months)

Figure 2: Example of a tender for Public Construction Commission Executive in Yuan (http://web.pcc.gov.tw/prkms/prms-searchBulletionClient.do?root=tps)

As a matter of comparison, a non-competitive structure for archaeological projects (comparable to the French INRAP before 2003) would imply the employment of an internal/state working force. In this model, the selection for a project from such a group would be based on a range of criteria (location of the archaeological services, knowledge/competencies, research question, team capacities, laboratory capacities, etc.), and not on which provider proposed the shortest time and lowest price like in a free-market economy. In a non-capitalistic configuration, archaeology is kept outside of the open market and protected from competition and its known deleterious effects on the quality of the work (Zorzin, 2016b). This is not currently the case in Taiwan.

B. Anyone in the archaeological network (Figure 1), with a degree in archaeology or anthropology, with the relevant experience, and with the demonstrated capacities to support a team, analysis, research, and storage (Ministry of Culture 2021, See Art. 4 & 5) can answer the call for tenders. In this configuration all actors enter a competitive process to win a contract. The quality criteria for the selection of the archaeological unit are supposed to be guaranteed/regulated by the archaeologist's capacity to obtain the certification of qualification (ibid.) through the national committee of experts. As such, given equal competencies and qualifications of different archaeological operators, the choice falls to the public developer. In the end, this choice would be essentially guided by proposed time (the quickest), and cost (the cheapest), not by scientific or social outcomes, for which a developer has no interest and no competence whatsoever.

C. See point (e) in Option A for the next steps.

Variation for Option B: with a public developer, it is necessary for the final report to pass the review of the national committee of experts to receive the full payment of the salvage excavation project.

(3). Discussion of the issues raised by contractual Options A and B

A. A competitive market?

One of the issues in the process of establishing a contractual relationship between private developers and archaeological entities comes from the fact that Option 'A' does not appear to be openly competitive while, in fact, it is very much so in its practice. At first glance, it might not look like it abides by market rules because it does not include an invitation for tender. Yet, it is competitive because the developers (as they are increasingly aware of how things work) can contact multiple archaeologists/ archaeological operators and request evaluations, assessing the resulting quotes mostly by focusing on criteria like the speed of excavation and on price. As such, competition is fully present but not in the open. It is a matter privately discussed between the developer and each archaeologist/ archaeological operator.

Furthermore, since there are no proper standards to evaluate archaeologists, developers usually pick the cheapest one, which forces archaeologists to cut their budgets almost systematically. So far, there are no formal standards at the national level for things like excavation methods, budgets, material sorting, or the production of archaeological reports. Therefore, the budget is expected to decrease under the pressure generated by the competition coupled with the need to obtain contracts: the financial viability of an archaeological operator (including employee's salaries, equipment, laboratories, research, etc.), whether it is private or public, depends on obtaining them. If the leader of an archaeological unit is a scholar (i.e., a civil servant), their salary does not depend on gaining a contract, yet all other employees and the structure of the entity itself depends on it, making the acquisition of a contract a matter of survival.

Based on comparisons with other countries, such as France or Canada, when private operators initially are present or begin to multiply (in both private and public sectors), the effects of competition really start to be felt already after five to ten years (Confédération Générale du Travail, 2013: 11-18). In Taiwan, the effects of competition between operators were predicted to be felt during the decade before 2020, but it still needs to be evaluated quantitatively to what extent competition is now fully effective or not.

Nonetheless, if the choice made by the developer was not considered suitable by the national committee of experts, notably due to the professional qualifications of the team, the application for excavation might be rejected. Then, the developer would be requested to make a new arrangement with the archaeological operator chosen to find a qualified archaeologist. However,

this process leads some archaeological operators to use the same qualified names repeatedly to secure contracts, even though these individuals are not available. The result is that the fieldwork will seem to lack a competent leader and there will be an unavoidable degradation in the quality of work. This issue should be also correlated with the fact that there are very few archaeologists who are qualified to monitor archaeological activities (e.g., surveys, test-pits, excavations, etc). In such a competitive configuration, it seems that an increase in the number of archaeologists would be necessary and urgent. However, we will see below that this conclusion might be a questionable one, as it does not challenge the development-led logic currently applying to the fieldwork.

B. The national interim committee of experts

The strength of the interim committee of experts resides in its role as a national regulator. According to the testimonies collected by this study, the role of the committee in defending the public's interest (i.e., to preserve the Cultural Heritage of Taiwan), has been truly effective in many cases. The decision to protect a site (i.e., the refusal to validate a development project on a designated site, or adjustments to its implementation) belongs to this interim committee. This has resulted in some development projects being successfully stopped to protect significant archaeological sites.

In contrast, the decisions taken by the committee regarding which archaeological sites are designated to receive preservation by records before destruction, is, also according to my interviewees, sometime based on an economic consideration. This is fueled by the so-called 'development-centric mentality' mentioned earlier (Tsai, 2012), as well as the socio-economic pressure that comes with it, resulting sometimes in favoring development over preservation of sites *in situ*.

Furthermore, the committee is facing another problem when it comes to regulating the activities of other actors (notably private salvage operators) which regularly compete for contracts with the members of the committee themselves. The members of the committee can block the validation of a project by a certain company, while the leader of that company has no say in the activities of the scholars. This configuration is ethically questionable because the academic members of the committee are at risk of being both judges and competitors. As a matter

of comparison, in a partially state-based structure such as France, a civil-servant, trained as an archaeologist, and hired by a regional authority (*Direction Régionale des Affaires Culturelles - DRAC*), would act as the regulator between the developer and the archaeological operator. This individual would not have any direct role or potential financial interest in an archaeological salvage contract. They would be in a neutral position to implement the regulations, check the quality, as well as to request modifications (to the archaeological operator and/or the developer) in terms of evaluating the price and temporal duration of projects, team compositions, etc.

C. The effect of competition and of the contractual relationships between developers and archaeological operators in Option B, but also applicable to Option A

One consequence of competition is to risk stark declines in prices as soon as the pressure rises on operators to gain contracts. For archaeology, that means reducing the resources to accomplish the numerous basic tasks. That is especially the case for post-excavation operations (e.g., analyses, research, and publications) which are less visible, often abstract, distant in time, and are not immediately quantifiable in terms of areas or volumes. As such, it is easy for developers not to pay for post-excavation tasks as they often come after the production of the report, and the required time is often minimized in the initial evaluation and negotiation of budgets. Fortunately, in Taiwan, some of the material might be analyzed through projects funded by the state, which compensates for the lack of developer's funds dedicated to the task.

Furthermore, after the establishment of a contractual relationship with a private or public developer, very little margin is left over for re-negotiations in case of major discoveries (see Zorzin, 2018, with the case of Hanben). The contractual relationship fixes timelines, which does not provide space for the unexpected, even though this is inherently part of archaeological fieldwork. This places archaeological operators/ archaeologists at risk of being taken to court by the developer for not respecting the initially defined schedule, even though archaeologists cannot and should not have to predict an exact excavation schedule. Since the contractual relationship also is based on the smallest amount of area required for the development to proceed, this tends to transform archaeological sites into small, fragmented pieces. Such an approach considerably reduces the general understating and significance of an archaeological site. An example of this comes from the case of Shihsanhang, where development prevailed in the 1990s (Lee, 2006: 49,

53-54), and where only a very small part of this recognized major archaeological site could be excavated, and even less preserved and displayed.

Since 2005, the high demand for salvage archaeology coupled with the minimal time and means granted for post-excavation work produced by the development-led logic has resulted in the considerable delay in the production of archaeological reports. "*The Regulation for Examination of Qualification to Excavate on Archaeological Sites*" (2021: Art. 8) states that a report must be produced before accepting the next contract, and that the accepted delay is fixed at 3 years after the completion of an archaeological activity. In fact, some reports are simply never produced or emerge only after significant delays due to the overload of work experienced by the few active archaeologists in Taiwan. Again, the first reaction here might be to solve this problem by increasing drastically the number of archaeologists. To a certain extent, that would work in the short-term, but that would also mean fully integrating archaeology within the development-logic instead of challenging the initial social, economic, or ecological relevancy of a development project. This brings us back to a fundamental question that needs to be answered collectively and acted upon: are archaeologists technicians complying to market requirements or do they challenge the latter if too many concessions have to be made?

D. Use of reports - What future for archaeological data?

Of the reports that have been written, many are kept by archaeologists who are very unlikely to provide them to the person requesting them. Moreover, old reports (before the digital era) are most of the time impossible to find. As stated by Chia-hao: "[…] *archaeologists in Taiwan* [as in many other countries] *form an old/middle-aged group who have the tendency to keep their own data for themselves, not-allowing other people to use it. But as a scientific discipline, they should make the data accessible and let other people make their own analyses and provide their own perspectives, and, in the end, to accumulate the knowledge within the discipline. This is a major problem. They tend to protect their territory*". Furthermore, accessibility of the reports is not guaranteed because of the high turnover of the employees of the local Bureau of Cultural Affairs, making it difficult to locate reports. Yet, the Bureau is currently extending its storage of archaeological reports, allegedly housing thousands already, suggesting that accessibility will soon be made much easier, and hopefully will include a centralized registration system.

Integration of Taiwanese archaeology within developmental/ environmental procedures: A synthesis of the major issues at stakes

1. Archaeology as a technical operation conducted by non-archaeologists

Since 1994, even without structured governmental guidance, archaeology was *de facto* integrated into the Environmental Impact Assessment (EIA). It was codified only informally under four general steps of the Archaeological Heritage Assessment (AHA): desktop assessment, field investigations (survey and/or test pits), assessing of the value and significance of the site, and recommendations. However, there are no obligations for the developer to use the services of archaeologists to proceed to the AHA, which were and still are conducted partially by profit-oriented engineering or non-archaeological consultant companies. As a result, the latter simply fail to comply with the minimum requirements of the AHA, compromising the integrity of potential archaeological sites (Chen, 2011: 68). They are in fact only truly dealing with visible and surface heritage remains but are likely to destroy archaeological sites as they do not recognize them and have no interest in preserving them, given the potentially high financial costs. Equally, developers are very unlikely to be caught in the act during the destruction of a site. The decision to accept the AHA report belongs to the local county Bureau of Cultural Affairs. As described above, this sometimes can occur without the presence of any competent archaeologists within the Bureau (as is the case in Taipei), potentially mixing local interests and political agendas into the decision-making process. Given that numerous pre-salvage archaeological procedures are not controlled by archaeologists and are not structured by official guidelines, this results in the recurrent problems of defective investigations and mistaken recommendations made by inadequately qualified companies. These deliver results to local counties or municipalities that often are not concerned with archaeological sites or with the potential value and wider significance of cultural heritage.

2. Rushed salvage excavations with poorly adapted methodologies, and the secondary status of salvage archaeology.

These issues are not only related to the simple lack of systematic archaeological investigations done by trained archaeologists and the general shortage of trained field archaeologists. Even though the excavations are conducted by archaeologists, the current

organization of salvage archaeology (i.e., contract-based) pressures archaeologists into making certain methodological choices which might be harmful to both the archaeological sites and the capacity of archaeologists to interpret them. An example of this was given by several interviewees:

> [Ya-ting]: How many archaeologists [are working] in Taiwan? and how many excavations are going on in Taiwan? They are all working in different institutions like universities or museums…so, how can they have time to be in the field at all time, and especially when they have three or four projects going on. Who is going to be on the site? All those students and workers, and assistants, of course… who are not trained in archaeology. The only thing they can control is by digging by arbitrary layers of 10cm and just collect the artefacts! If you are good enough, you might find features and then you will have the chance to record them but you won't really have the time to think about the connections between different features. All archaeologists are more or less doing the same thing.
>
> [Wen-hsiung]: In salvage archaeology, there is a discrepancy between who is in charge and who is really on site. The ones on site are probably students, and some experienced workers. It depends on who [oversees] the project: some archaeologists will go on site very frequently, but some will go only once a week or even less… so it really depends on people.

Furthermore, as stated by Chih-chiang below, salvage archaeology has been the entire responsibility of a few academic archaeologists in Taiwan until very recently, with the following consequences:

> [Chih-chiang] Now, there are many archaeological and research projects, but the developers are the ones who can choose the archaeologists to do the projects, who are most of the time the same [scholars]. Most of them have more than one project at the same time, so if we assume that an archaeologist's responsibility is to keep an eye on the field… how can you do three projects at the same time!?... […] They admit that this is a very big problem, and we need much more people working in archaeology! […] If someone is a professor at the university or a researcher, they can take contracts

> and register a project through their research divisions or university department. I think that if they have 5 projects, maybe 1 or 2 projects would be registered with the main divisions, but there are three more contracts signed directly with the professors, as a consultant. They won't admit that they are acting as a private company/consultant, but they only want to be considered as academics. […] This is the same situation everywhere in Taiwan. I think that most of the professors won't stay in the field when the project is running, but they will come once a week, or once a month, because they have other things to do.

This is what was presented by my interviewees as the *status quo* of the practice of salvage archaeology in Taiwan. To be fair, it was also mentioned that certain sites differ from this general trend, and there are some scholars who have enough time or take the time to pay closer attention to specific projects. In certain cases, they use customized methodologies for the excavation and for the data collection of a specific site. They even disseminate knowledge by promoting site visits though the involvement of media (Cheng, 2020; Chiang, 2018, 2020; KaoguHTSKY, 2021).

However, and overall, this situation of rushed excavation and degraded methodologies generate what is often experienced and described by many archaeologists as a 'second-class [salvage] archaeology' compared to a research environment. This is also the case in numerous other countries with a CRM-centered archaeology such as the UK or Canada, or even with state-based salvage archaeology such as France.

Salvage archaeology does not receive direct support from the state or from the counties to negotiate the necessary time and funds to properly conduct archaeological investigations. There is no motivation to do so if salvage archaeology is seen only as an actor of the development industry. As a result, the small number of archaeologists active in Taiwan cannot deal properly with the high amount of work, even if they wanted to. As such, to cope with the demand, some professors in academia started running their own salvage archaeological units within the universities, parallel to their academic activities. Yet, as practical as this solution can be in terms of training, redistributing resources, reduction of costs, control of the entire operations, storage of material, and bridges for research, it also could be a detrimental choice for archaeology in Taiwan. There is a high chance that this semi-independent operator will split from the university

in the future, and this model overly emphasizes the technical aspects of archaeological practice. In the UK, this type of dual association (i.e., academia/museum and salvage archaeology) was established but in some cases ended with the privatization and separation of the salvage activities from its original research and public matrix (e.g., the Museum of London Archaeology). Another approach to cope with the high demand placed on salvage operations is the creation of private operators, which happen in Taiwan since 2012 (See Figure1 - bottom-right). This is also an immediate practical solution and rather efficient one, but a risky one in the long-term (See Zorzin, 2015a, 2015b, 2016). The use of a private operator could be a hazardous path to take in terms of its perennial existence under an increasing competitive environment. Given the obligation to obtain contracts to survive, archaeological entities in such a structure might find it increasingly difficult to resist potential pressure from developers. Indeed, they may push them towards complacency in dealing with archaeology according to the needs of the developers, namely the rapid pace and low price of proposed archaeological work. Yet, all types of salvage archaeology (private or public) are susceptible to this issue if unprotected by an external regulator, and by the enforcement of laws. Here the problem does not necessarily come from the opposition between private or public, but more from the opposition between research-based/state-funded/ regulated archaeology and salvage contract-based/developer-funded/unregulated archaeology.

3. A shortage of archaeologists?

The archaeological community in Taiwan comprises around 45 to 55 active archaeologists. However, the actual working community in archaeology should be re-evaluated at between 150 and 200 individuals, ranging in positions from university professors, laboratory experts, employees of museums or private operators, research assistants, to fieldwork technicians (Figure 1). If we privilege the higher estimation, we evaluate that 62% of the people working in archaeology do so in various public institutions (with the vast majority employed in academia); the remaining 38% do so within private operators. The appearance of the latter only began in 2012-2013, and the creation of four companies at that time remains a controversial topic among the archaeological community. With Taiwanese archaeology operating in a capitalistic system regulated by the rules of supply and demand, the small number of professionals recognised as archaeologists became an issue given the high demand generated by the legal obligations of the

implementation of the CHPA. Now, the first solution to effectively overcome the current issues would be to increase the numbers of archaeologists to around 400 qualified individuals. This is a large increase, compared to the current estimate of 45-55 archaeologists.

Yet, while increasing the number of archaeologists might appear to be a straightforward solution, the outcomes of such change would depend on the long-term orientation chosen for the organisation of archaeology in Taiwan:

(1). In the case of the choice of a privatized system for archaeology, it would constitute a further acceptance of archaeology merely as an armature of the development industry. In this case, by prioritizing development, the aim of salvage archaeology will always be preservation by records. As such, it can give the illusion of preservation through the production of reports. Yet, as shown earlier, excavation reports and the scant amount of time and means attributed to them, cannot allow archaeologists to produce reflexive, analytical, interconnected, and meaningful publications. In some cases, excavations will result in further research and even in the display of some artefacts in museums, but this remains marginal in relation to the large proportion of salvage archaeology projects conducted nowadays. In this specific configuration, an increase in numbers of active archaeologists would be qualitatively irrelevant.

(2). In contrast, a state-preventive archaeological network like the one of France or Japan could constitute a viable solution, but not if the development-led logic is still dominant and applied as suggested above in a privatized system. If a Taiwan state-archaeology system is chosen, it is only if the laws and the regulations can be modified to more firmly protect archaeological remains and research that an increase in the number of archaeologists would make a significant difference for Taiwanese society, as state-archaeologists would be in a better position to oppose development and facilitate preservation. In that case, increasing the number of archaeologists to establish a presence in every county, and in every main city of the island would, indeed, be good and necessary, but that would not be enough without challenging the whole economic system archaeology is embedded into.

Some conclusions

Taiwanese archaeology is fundamentally structured on a state model, non-centralised, and partially state funded. The state-based characteristic of archaeology is manifested by public institutions and the role of civil servants: most archaeological experts are employed by state-run universities, research centers, and museums. However, archaeology in Taiwan never developed a national or regional structure, and a systematic and new form of archaeology has developed since the 1980's: 'salvage archaeology' or development-led archaeology. Since the implementation of the CHPA in 1982, salvage archaeology is not paid for by Taiwan's citizens through taxes, but essentially by developers (unless the developer is a state body) through the 'polluter-payer' principle. This has modified the relationship of archaeological fieldwork practice from civil servant to citizen, to civil servant to developers, with a contract acting as the new regulator between them, manifested in contract-archaeology. In parallel, things like analyses, research, teaching, evaluations, publications, and exhibitions have remained essentially conducted within the public sector, paid for and conducted for the citizen. However, since 2012, archaeological practice itself has been partly detaching from the public sphere and being integrated into the development industry through the creation of private operators.

We tried here to deconstruct the process of salvage archaeology while documenting two possible options: a corporate development project or a public development project. Some of the main issues we identified are listed below. These issues are shared by most nations where archaeology has been fully integrated into a competitive-market structure and made compatible with the imperative of economic growth:

1. The existence of a regulating committee formed by scholars is a unique and highly valuable specificity of the Taiwanese archaeological system, notably in its cumulated experience and in its independence in the decision-making process. However, the very limited number of its members and their competition with each other for contracts and access to archaeological material and data can cause this decision-making process to be contentious. Furthermore, and on a larger scale, its members cannot necessarily directly oppose development, simply because development is central to capitalist 'common-sense' and, so far, is practically unchallengeable in Taiwan.

2. Because the activities are of a "salvage" nature (i.e., they are taken by developers/ archaeologists in reaction to an event or discovery by whatever means are available at the time) rather than a preventative approach (in which all actions are taken in prevention of a development project and conducted by a large number of experienced, well-trained archaeologists using a highly organized structure dedicated to archaeology), minimal time and financial margins are left for changes or to redefine priorities during the unpredictable archaeological process.
3. Archaeological knowledge production is often limited to grey literature, but as mentioned, and despite clear regulations, reports are consistently delayed or are not produced at all.
4. In the case of an 'invitation for tender', it is expected that the cheapest bid will win the competition, regardless of archaeological standards (themselves still not clearly defined). This results in a subsequent decline in the quality of excavations and reports. Such a phenomenon has been experienced globally in all places where a competitive system between archaeological entities was made compulsory.
5. Overall, archaeological practice in Taiwan suffers from the absence of professional archaeologists on site: archaeology is often done by workers and/or students not fully trained in archaeology.
6. There is a lack of archaeologists in local municipalities, cities, and counties. Some geographical voids in terms of archaeological competencies, such as in the municipalities of Taipei City or New-Taipei City are a worrying matter, because it does not allow archaeology to be considered within the decision-making processes. By default, archaeology is treated as a nuisance.

The practice of archaeology in Taiwan is conducted by a limited but vibrant, knowledgeable, and skilled community. However, as stated earlier, in its present development-led configuration, the only way to comply with the minimum standards for archaeological practice and solve some of the immediate issues presented here would be to proceed urgently to a drastic increase (+800%) of fully trained archaeologists both present in the field and at various levels of administration.

However, at this stage, a fundamental question should be asked and answered collectively: is this development-driven archaeology, fully integrated into the capitalistic logic, what we want for Taiwan? Alternatively, and in opposition to that approach, the advent of a more socially involved archaeology (such as 'public archaeology', 'indigenous archaeology', etc.) and one less dependent on development, might rather require challenging the current economic model, and urgently redefining the aims and modalities of our discipline, perhaps focusing on a 'slow science' approach, based on an economic 'de-growth logic' (Flexner, 2020; Zorzin, 2021). This is indeed not yet realistic within the current and dominant ideological framework of Taiwan, but that should not stop us from opening a constructive reflection on the definition and the aims of our work.

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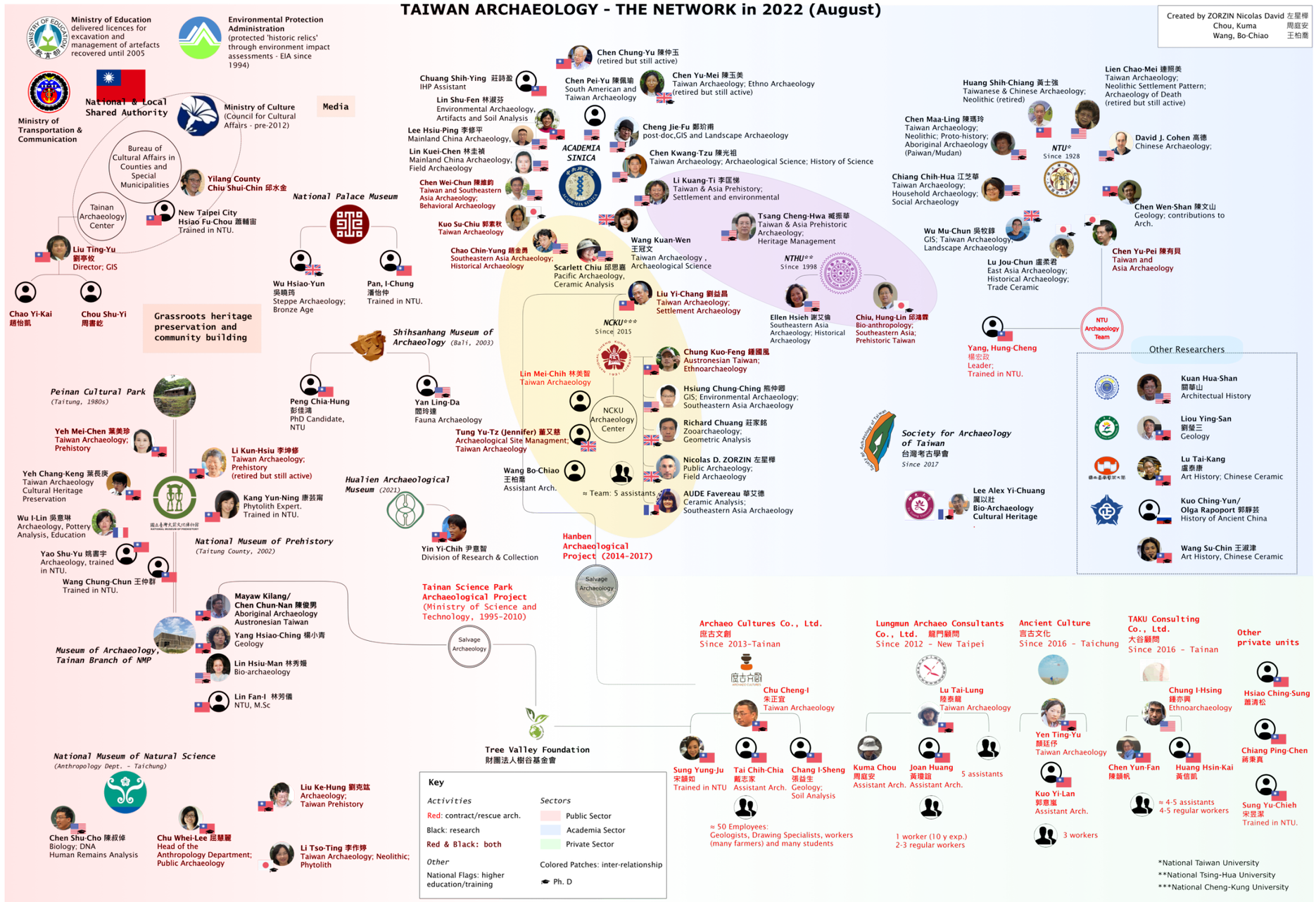

Figure 1: Taiwan archaeology- the network in 2022 (August)