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Please cite this as: Olivier, L. 2024 Contemporary Archaeologies and Cultural Heritage in the Anthropocenic Age, Internet Archaeology 66. https://doi.org/10.11141/ia.66.2

Contemporary Archaeologies and Cultural Heritage in the Anthropocenic Age

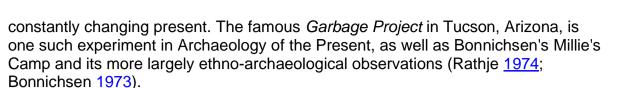
Laurent Olivier

The era in which the distinction between natural processes and human activity was clear has passed. Since at least the 'Great Acceleration' of the mid-20th century, we have entered a new phase where environmental changes, unprecedented in scale, are no longer purely natural. Instead, they stem from the growth of a hybrid aggregate, both natural and artificial. Consequently, things and places can no longer remain unchanged; they do not adhere to our previous conceptions. 'Non-human' entities now respond to our actions, rendering them inherently cultural and anthropogenic. Operating within the present, these entities not only act but also accumulate a form of material memory over time. Even seemingly inert matter is alive, facing the challenges of the Anthropocene: an era characterized by devastation and the destruction of material memory. Thus, the concept of heritage takes on new significance: what does it mean now, and what purpose does it serve? How do we define saving, protecting, or even acknowledging what we continue to call archaeological heritage? The most profound transformations of the Anthropocene are yet to unfold, underscoring the limitations of archaeological practice, which primarily focuses on human creations at a human scale.

1. Archaeologies of the contemporary past

One of the most striking transformations of archaeological practice in the last 25 years has been the development of a new chronological field of archaeology. The term 'Archaeolog*ies* of the Contemporary Past' was first coined in a book published in 2001 by the anthropologist Victor Buchli and the archaeologist Gavin Lucas (Buchli and Lucas 2001). What is it about? This is the extension of an archaeological enquiry into the periods of the recent past - that is to say particularly the last two centuries, with a strong focus on the 20th century - but also including the present.

This is the reason why there was an 's' - there are, indeed, several archaeologies. There are what may also be called the *Archaeologies of the Recent Past*, depending on the historical periods of the contemporary times they are focused on: 18th century, 19th century, 20th century... each with their own different problems. But there is also an *Archaeology of the Present*, which moves in time, depending on the moment it is focused on. We could also say that this is the archaeology of a



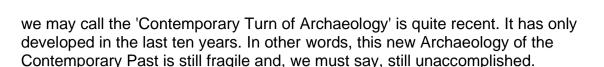
2. A very short history of Contemporary Archaeology

The French people used to claim that they invented the Archaeology of the Contemporary Past before anyone else. As early as the late 1970s, Pierre-Yves Balud and Philippe Bruneau (an anthropologist of art and a classical archaeologist respectively) had developed the idea that the archaeological field includes, by its very nature, modern and contemporary periods of history - that is to say 16th to 20th or even to 21st centuries (Balud 2003).

But this did not really penetrate the practice of archaeology, since it was seen for what it was at that time: some theoretical thinking in a trendy but marginal academic journal called *Ramage* which the two scholars founded. In fact, it is more likely that the development of Contemporary Archaeology (as a field practice and not as some speculative thinking) has been stimulated by the spread of preventative archaeology, since the end of the 1900s. Urban archaeology, together with the archaeology of buildings (what we used to call in French *archéologie du bâti*), have clearly shown that it is impossible to draw any limit between what is archaeological and what isn't. One cannot honestly decide to ignore the last stages of any site or construction because they would be too 'recent' for us. On the other hand, extensive archaeological projects have demonstrated that landscapes usually contain postmedieval or even contemporary archaeological features that need to be documented as well, since they are fully part of the history of these archaeological places.

At a more global scale, preventative archaeology has shown that these contemporary remains may constitute a strong body of archaeological data, especially related, for instance, to the two World Wars of the 20th century. In other words, it has gradually become obvious that these contemporary remains weren't just *disturbances*, but they were also fully archaeological in themselves. I say *obvious*, but in fact it has never really been the case; and it isn't fully accepted yet. In France, for instance, we had to wait until 2013 to hear the Minister of Culture at the time, Aurélie Filipetti, declare that the remains of 20th century world conflicts deserve the same attention as that of any other part of French archaeological heritage - meaning it wasn't the case previously.

It was not before 2016 that the archaeology of the so-called modern and contemporary periods was taken into account within the research programming of French archaeology defined by the CNRA, our *National Council of Archaeological Research*. Modern and contemporary remains weren't considered to be really archaeological before that. In the anglophone world, the interest in the Archaeology of the Contemporary Past isn't much older: the publication of an academic journal devoted to this particular archaeological field does not appear until 2014, with the *Journal of Contemporary Archaeology*. So, for most European countries, what



3. A European heritage

As Europeans, we enjoy a terrible privilege. World wars tend to be fought on the ground of our countries. The last two World Wars created a huge amount of destruction, especially to above-ground features, such as medieval and post-medieval buildings. Cities and infrastructures were particularly targeted, just like we are seeing today in Ukraine. But these conflicts have also created a large number of archaeological sites and features e.g. WWI trenches or WWII concentration camps.

From an archaeological point of view, this is a paradoxical privilege. For most other countries outside mainland Europe, these world conflicts have indeed been remote wars, which were fought abroad and overseas. There are no trenches in the USA, no bombed cities like Dresden. As Europeans, we are the keepers of this disturbing heritage. What does this mean? I see at least three fallouts for our European Archaeology.

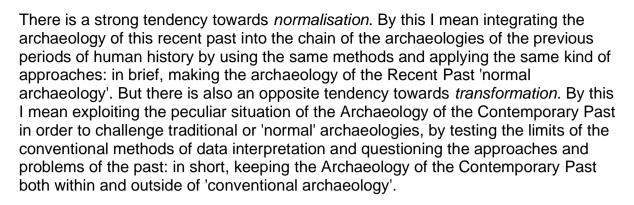
First, we possess an important archaeological heritage of the Contemporary Past, that is related to the major historical events of the recent past. It may look obvious, but, when you compare it with other countries around Europe, their Archaeology of the Contemporary Past is far less based on excavations and field methods. So, we enjoy European Archaeology of the Contemporary Past.

Second, this European Archaeology of the Contemporary Past cannot claim innocence and detachment. We know that we are dealing with a haunted past. The archaeology of world conflicts is also the archaeology of industrial barbarity and totalitarian terror, and that belongs to us. Some of the victims are still alive and their descendants are among us; some of us are even descendants of victims. In the very practice of our discipline, we have a duty regarding collective and individual memory - a devoir de mémoire.

Lastly, our European Archaeology of the Contemporary Past necessarily bears ethical values with regard to this recent past. In revealing what has been done to people and what people have been doing, European archaeology has a duty to truth and justice - and this is true all over the world.

4. Memory versus history

Of course, the situation is not so simple and not so easy. The specificity of Contemporary Archaeology is that we are dealing with living memories - the memories of the witnesses. This doesn't happen in any other archaeological field. This exceptional situation is creating tensions within archaeological practice that don't occur as strongly in the more traditional fields of our discipline. There are two opposing tensions which are modelling the practice of Contemporary Archaeology.

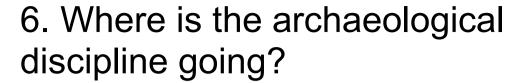


This isn't just some foggy theoretical debate. Wherever they go, whatever they dig, the archaeologists of the Contemporary Past are facing this insistent question: what do you bring that history doesn't? What is the point of excavating periods or events that are fully documented by a profusion of archives, books and stories, and even pictures, photos and movies? What are you going to reveal that isn't already known? In other words, what is the specificity of your archaeology compared to history? How would we answer this question? I am sure we have all been thinking about that. Personally, I would say that as Contemporary Archaeologists, don't bring anything new to history in itself. We won't reveal any new historical fact, or any new historical explanation, but we do bring to light the material environment of these events, and, more precisely, their material effect.

5. Temporality versus historicity

As an example, one of the most important events of the history of post-war Germany is the fall of the Berlin Wall in 1989. What would an archaeological approach bring to such an event? Probably very little about this historical fact in itself, but surely a lot about its context and consequences: transformations of industrial activity, development of urbanisation, reconstruction of infrastructures or even changes in consumption habits. So, the Archaeology of the Contemporary Past isn't really about the history of the contemporary period; it is much more about its materiality. To put it in technical terms, this kind of archaeology is bringing more information related to the *temporality* than the *historicity* of the contemporary period (Lucas and Olivier 2022).

We are archaeologists and not historians. It doesn't mean that we won't cooperate with historians, of course, but we are coming from another field which is not really historical: it is temporal. By temporal, I mean how the chronological milieu shapes the constitution of archaeological remains. This is what we see for instance, when we are studying Bronze Age sites. We are not reconstructing the historicity of this period, which remains completely unknown to us. We ignore who may be reigning at that time, which wars are being fought against which enemy, and we ignore as well which language is being spoken and what are, for instance, the names of the people and countries. But we *do* know, as far as possible, what their material environment was at that time.



The Archaeology of the Contemporary Past is growing within a new situation, compared to what it was only 50 years ago. Under the pressure of development projects, archaeologists now have to excavate the remains of all archaeological periods, from prehistory to the present, over huge areas. They are not just digging sites anymore, but networks of sites and even archaeological landscapes.

We have noticed that the birth of the Archaeology of the Contemporary Past has been favoured by this process. But what produces this transformation? The answer is over-urbanisation since the post-war period, which has been strongly accelerating over the last 25 years. This process has been called the 'Great Acceleration' of the Anthropocene (Steffen *et al.* 2011). This acceleration has a direct impact on the practice of our discipline. In concrete terms, the spread of urbanisation is creating an enormous amount of data and materials from all archaeological periods. This mass is growing constantly, making this accumulation uncontrollable. Our storage facilities are already nearly saturated, and some people are claiming that the only thing we should do with these remains is to rebury them.

When we are dealing with sites and remains of the Contemporary Past, the situation becomes even more difficult to handle. The amount of remains of all kinds is becoming gigantic, creating complex storage and conservation problems. The sizes of the sites themselves are immense, making them practically undiggable. It is impossible, indeed, to really excavate an airport, an industrial area or a suburb. This means that the pressure of the 'Great Acceleration' is pushing archaeology to its limits. Indeed, the Anthropocene does challenge archaeological practice in itself. There is a real risk that archaeology may be transformed into an activity that contributes more to the destruction of archaeological heritage than to its preservation and its transmission.

This isn't an exaggeration. We all know from our daily practice that the excavation process consists of breaking up archaeological contexts. We know as well that preventative excavations are very difficult to publish entirely since they are oversized. In France, only an average of 30% of archaeological projects produce a publication, and in most cases even that is only partial. This means that two-thirds of the excavations remain unpublished: that is to say lost to everyone and, above all, lost to the future. So, we observe that the pressure of the Anthropocene is compromising the constitution of archaeological knowledge and its transmission to future generations. We may say that our present archaeology is therefore a byproduct of the Anthropocene. We are in fact practising some sort of 'Anthropocenic Archaeology'.

7. What is the archaeological identity of our contemporary times?

Fine, you may say: you are talking about the present, but what does that have to do with the periods of the past we are studying? Just this simple fact: as archaeologists, we don't look at a past gone forever, like the prehistoric people in their caves. We are rather looking at a past that is still present and active today. We live in the contemporary period: this immediate past is our present.

But why? World War II is over, isn't it? Well, from an archaeological point of view, the present is what is materially transformed and what is materially changing. In other words, for archaeologists past and present are intermixed. This is precisely what we see in the ground when we are opening any excavation. Therefore, the present, from an archaeological point of view, is just some provisional last stage of the materiality of the past. It therefore follows that the present is nothing else than the remaining presence of the past. It means, basically, that we are part of the archaeological processes we are looking at.

A basic question does arise immediately: what is the archaeological identity of our contemporary period? Let me rephrase this: 1) What is the material imprint of our period on the Earth? 2) When did it begin and how long is it going to last? and 3) How is this imprint going to constrain subsequent human occupation on the Earth?

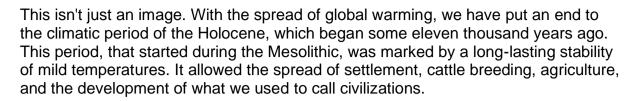
These are basic archaeological questions for our times.

8. Something huge is happening

Let's begin with our first question: what is the material imprint of our contemporary period, and how is this imprint archaeological? Well, if you consider that archaeological practice basically consists of documenting the material impact of human activity across the different periods of its history, then you will soon come to this conclusion: our present period is producing a huge amount of remains and features, far greater than those observed for any other period in our history.

To put it in a provocative way, we may say that our present is far more archaeological than any other period of the past. Compared to contemporary times, the Roman period, the Bronze or Iron Ages, the Neolithic and Palaeolithic have left relatively few remains, and their impact on the settlement of following periods is far less important than ours. Since the middle of the 20th century, our industrial activity has reached a strength more powerful than that of geological forces. For the first time in the history of the planet, we are transforming the Earth more quickly than geology does. The result is that we are presently creating a new geological era: the *Anthropocene*.

9. What have we done?



The goal of the 2015 Paris Agreement was to limit the increase of temperatures below 2°C before the end of the present century. But we already know that we won't make it. The increase is going to be around 4°C if we are unable to seriously reduce our emissions of greenhouse gases. Recent studies have shown that, with an increase between 1.5°C and 2°C, the climatic regime of the planet would reach a 'tipping point', which would project us into a 'hothouse' (Armstrong McKay *et al.* 2022). Life on the planet would then become impossible for humans and for most of the present animal and plant species (Steffen *et al.* 2018, 8257-58).

So, we are not just creating artefacts, features and constructions; we are also producing chemicals and gases, which are completely transforming the climatic regime of the Earth. Our planet reached such a thermal maximum 55 million years ago when it passed from the Paleocene to the Eocene, at the beginning of the Tertiary period. Geologists have shown that it took the atmosphere about 100,000 years to dispel the excess carbon (Stager 2011). This isn't good news for us. It means that it would probably take tens of millennia to moderate - if this is even possible - our impact on the atmosphere of the planet.

10. What are we going to leave for the future?

We are going to be leaving other worrying remains that are going to directly impact life on Earth in the long term. Remains like oil wells, for instance. There are about 50,000 oil fields in the world, 30% of which extract undersea deposits. There are, therefore, millions of oil wells, most of them leaking since they haven't been properly capped after having been exploited. This is too much work and too expensive, so they say. These oil wells will continue to eject oil and salty water on the ground and methane and benzene into the atmosphere - probably for the next centuries or millennia to come.

There is also radioactive waste. At Chernobyl, there are still 50 to 80 tons of corium, a burning lava resulting from the fusion of the reactor, mixed with melted metals and concrete. They are buried under the debris of the plant, but they are going to remain highly radioactive for the next fifty thousand years. At Fukushima, the amount of corium exceeds 250 tons, more than three times that of Chernobyl. This tonnage is leaking into the Pacific Ocean, and no one knows how to stop it.

In the world, there are more than 440 nuclear reactors, including nearly 60 on French ground. It is hoped that future generations would be able to develop enough technology and money to allow them to dismantle these potential sources of nuclear



disasters. It is preferable not to imagine the terrible consequences of this risky bet over the future if, by accident, this fails to be the case.

So, to the question 'how long is the imprint on Earth of our contemporary period going to last?', the answer is certainly for tens or even hundreds of millennia. It will strongly constrain the settlement and occupation of future landscapes at a chronological scale that directly compares with geological time.

11. Any archaeology is an archaeology of the present

All of that is very annoying, one might say, but why does this matter to us as archaeologists? Simply this: the world has already changed, meaning that any Archaeology of Contemporary Past is also an Archaeology of the Anthropocene. The old world is over, and we are just in the middle of an ultra-powerful archaeological process.

But when did the Anthropocene begin? We must say that there is presently no agreement among researchers. For most scholars, it started around the middle of the 20th century, when the so-called 'Great Acceleration' of the Anthropocene began (Zalasiewicz *et al.* 2015). But what about before that? For some others, it is the Industrial Revolution of the 19th century that triggered the spread of the Anthropocene (Crutzen and Steffen 2003). It is much more ancient than that, some other people claim: the first major impacts on the environment could date back to the 16th century and the European colonisation of America, or even to the Neolithic in Europe (Lewis and Maslin 2015; Ruddiman 2003).

But why is the Anthropocene so difficult to date? Because it is a gradual and cumulative process, bringing together a mixture of anthropogenic and natural agencies (Edgeworth *et al.* 2015). In this way, it is a deeply archaeological process. So not only have times changed, but also our understandings of the long-term transformations that we are facing. As the historian Dipesh Chakrabarty put it, the 'now of human history' is colliding with the 'now of geological and biological time frames', making a situation that has never happened before in the history of mankind (Chakrabarty 2021).

In other words, history is becoming disqualified by the dynamics of the Anthropocene. But we don't see that in most of the research dealing with the Archaeology of the Contemporary Past. Studies mainly do address historical issues - contributing to reducing this new archaeology to some material illustration of traditional history. Why are we so blind to what is happening now, even when it is in front of our eyes? Why are we so reluctant to really look at the archaeology of our present? Is archaeology just a way to convert a burning past into some neutral heritage - in other words is the business of archaeology to normalise the past? We may wonder.

12. We have entered a new age of devastation

The 'Great Acceleration' of the Anthropocene is not only damaging the natural environment of the planet, but it is also devouring the entire inhabited landscape, what the geographer Augustin Berque calls the *Ecumene* (2000). The *Ecumene*, for Berque, is the environment that may be inhabited by humans, the milieu that may be humanly inhabited. There are not so many places like this on Earth. In physically attacking the *Ecumene*, the Anthropocene is erasing its material memory. The spread of the Anthropocene is, therefore, not only challenging the practice of archaeology, but also the way we may think of the world around us, as well as our relationship with the past.

The traditional split between Nature and Culture appears henceforth ineffective: natural environment is strongly reacting to the deep changes imposed by human activity (Latour 2017). So, humans are not at the centre of the world anymore: 'non-human beings', if we may say so, are also acting within huge networks of interactions that are creating unpredictable series of transformations. The truth is that we don't know where we are going. And this is an extraordinary opportunity for archaeology to release itself from its old dependency upon conventional history.

13. Archaeology stands for resistance

If archaeology is the study of the materiality of the past, then it is much more concerned with the present than anything else. The human impact on the material world is much more dramatic and long-lasting today than it has ever been before our time. As archaeologists, our duty is to look at these changes. But we also have to look at the present as a living memory: the subject of archaeology being this dialectical relationship between devastation and memory, rupture and transmission.

When the Anthropocene is identified by the gigantic scale of the processes of transformation of the materiality of the Earth, archaeology can only work at a local scale. We are at our best when we are digging graves, pits, or houses; that is to say when we are dealing with things made by humans - not machines - and places inhabited by people, not masses. As the discipline of material memory, the role of archaeology is to work against the destruction of collective memory of any kind.

I am afraid we are trapped like fish in a barrel. I mean that we are part of the archaeological processes we are looking at. We are indeed the agents of the Anthropocene when accompanying the urbanisation projects that are destroying the *Ecumene* and the material memory it contains. So, a different kind of politics of memory is needed. We have to place the past not *aside* the present but *inside* the present, as a living memory, that we have to protect. Therefore, at heart, archaeology equals resistance or it means nothing. It is a way to claim another future for all of us together and not just a few people. Archaeology is not necessarily written by victors.

Bibliography

Armstrong McKay, D., Staal, A., Abrams, J.F., Winkelmann, R., Sakschewski, B., Loriani, S., Fetzer, I., Cornell, S.E., Rockström, J. and Lenton, T.M. 2022 'Exceeding 1.5°C global warming could trigger multiple climate tipping points', *Science* **337**(6611). https://doi.org/10.1126/science.abn7950

Balud, P-Y. 2003 *Défense et Illustration de l'Archéologie Moderne et Contemporaine*, Paris: Université de Paris-Sorbonne.

Berque, A. 2000 Ecoumène. Introduction à l'Étude des Milieux Humains, Paris: Belin.

Bonnichsen. R. 1973 'Millie's Camp: an experiment in archaeology', *World Archaeology* **4**(3), 277-91. https://doi.org/10.1080/00438243.1973.9979539

Buchli, V. and Lucas, G. 2001 *Archaeologies of the Contemporary Past*, London: Routledge. https://doi.org/10.4324/9780203185100

Chakrabarty, D. 2021 *Après le changement climatique, penser l'histoire*, Traduction française d'Aude de Saint Loup et Pierre-Emmanuel Dauzat, Préface de François Hartog, Paris: Éditions Gallimard. https://doi.org/10.4000/lectures.60656

Crutzen, P. and Steffen, W. 2003 'How long have we been in the Anthropocene era?', *Climatic Change* **61**, 251-57. https://doi.org/10.1023/B:CLIM.0000004708.74871.62

Edgeworth, M., Richter, D. de B., Waters, C., Haff, P., Neal, C. and Price, S.J. 2015 'Diachronous beginnings of the Anthropocene: the lower bounding surface of anthropogenic deposits', *Anthropocene Review* **2**(1), 33-58. https://doi.org/10.1177/2053019614565394

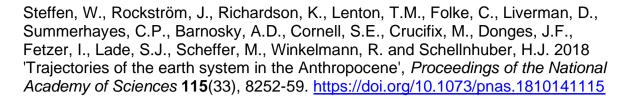
Latour, B. 2017 Où atterrir? Comment s'orienter en politique, Paris: La Découverte.

Lewis, S.L. and Maslin, M.A. 2015 'Defining the Anthropocene', *Nature* **519**(7542), 171-80. https://doi.org/10.1038/nature14258

Lucas, G. and Olivier, L. 2022 *Conversations about Time*, London & New York: Routledge. https://doi.org/10.4324/9781003183600

Stager, C. 2011 *Deep Future: The Next 100,000 Years of Life on Earth*, New York: Saint Martins.

Steffen, W., Grinevald, J., Crutzen P.J. and McNeill, J.R. 2011 'The Anthropocene. Conceptual and historical perspectives', *Philosophical Transactions of the Royal Society A* **369**(1938), 842-67. https://doi.org/10.1098/rsta.2010.0327



Rathje, W. 1974 'The garbage project, Archaeology 27, 236-41.

Ruddiman, W. 2003 'The anthropogenic greenhouse era began thousands of years ago', *Climatic Change* **61**, 261-93. https://doi.org/10.1023/B:CLIM.0000004577.17928.fa

Zalasiewicz, J., Waters, C.N., Williams, M., Barnosky, A.D., Cearreta, A., Crutzen, P., Ellis, E., Ellis, M.A., Fairchild, I.J., Grinewald, J., Haff, P.K., Hajdas, I., Leinfelder, R., McNeill, J., Odada, E.O., Poirier, C., Richter, D., Steffen, W., Summerhayes, C., Syvitski, J.P.M. and Oreskes, N. 2015 'When did the Anthropocene begin? A midtwentieth century boundary level is stratigraphically optimum', *Quaternary International* **383**, 196-203. https://doi.org/10.1016/j.guaint.2014.11.045