

# The non-involvement of curators, the excessive control of restorers, and Chronospédia: The top three worst things for horological heritage in France in the 2020s

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*This short note aims at drawing the attention to the main problems with the management of horological heritage in France in the early 2020s. Many clocks are in fact in peril and conflicting trends are preventing clocks and the horological know-how to be properly studied and documented, sometimes leading to an irremediable loss.*

I have been interested and concerned by the preservation of horological heritage for more than 20 years. I am in particular trying to develop the scientific and historical knowledge of tower and astronomical clocks, but also of complex clocks and mechanisms in general. For that purpose, I have examined many clocks, and I have studied several others on the basis of written or photographic descriptions, in the hope of preparing publications and other works. My examinations took place in church towers and also in other public buildings, and in a number of museums.

When I started my investigations, more than 20 years ago, things were going quite smoothly. It was easy to get access to clocks, and a lot of research could be carried out. Museum curators were ready to help. The

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\*As an independent researcher in the history of science and technology (in addition of having a professional research activity), I have examined in the course of the last twenty years about a thousand turret clocks, I have published several studies on such clocks and I am the coauthor of the chapter on 19th and 20th century astronomical clocks in the book "A general history of horology" (Oxford University Press, 2022). I am also leading research work in 3D development. These activities have among other things led me to create a 3D model of the former clock of the Paris Notre-Dame cathedral, animations of this model, a mobile application for this clock, and a 3D print of it at the scale 1/3. The model itself is freely available at <https://github.com/roegeld/notredame>.

only exceptions were some curators from the French National Heritage Administration (DRAC), but this was not much of a problem, as I also didn't need much help from them.

Little by little, things changed. Some of the curators started to refrain from helping, probably in part because my work was not sufficiently "art historical" for them. It gradually became clear that curators were not really able to understand the work I was doing. Unfortunately, most museum curators in France are merely art historians, and do not have sufficient experience about the needs of technical objects. There are stereotypes associated with technical objects. Describing the subtleties of bronze sculptures or the life and work of artists is considered "nobler" than writing about the kinematics of machines. And those working on mathematics or physics are often considered unfit to write at all. There is therefore some kind of "glass ceiling" between those working on technical objects, and the curators in charge of the objects. An art historian is seldom sufficiently experienced to know what kind of mathematical analysis could be useful with a clock or some other technical tool. Curators also seem to believe that only restorers know about the technical aspects of clocks, in part because researchers are not very visible. This all causes a certain lack of understanding of technical research on behalf of curators and this in turn threatens research.

My research was also expanding and I was trying to be more and more comprehensive. It was in particular important for me to record the lives of the objects within the museums, and also everything related to their restoration. Why should a researcher limit him/herself with the description of a work, or the history of the work prior to its entrance in a collection, as if the history stopped at that point?

In any case, I became more and more interested in details of the restorations, in the works of the restorers, in their reports, in costs, etc. This desire became more and more annoying for some curators who felt that I was trespassing on their territory. Curators seem to consider that researchers on technical objects are unable to understand the principles of conservation, and also do not need to know the "internal" details of conservation. This became critical when I tried to know more and more about a number of items in Strasbourg museums, and also during the late 2010s and early 2020s when I tried to know more and more about the restoration work on the Strasbourg astronomical clock, and also on the Strasbourg cathedral. The French National Heritage Administration appeared to show little understanding for my needs and my work as a researcher came to be misunderstood.

In the 2010s and early 2020s, a few clock restorers became more promi-

ment, working on a number of important timepieces, and they came to be listened more than researchers, and even came to wipe out the needs of researchers. Some of these restorers managed to ensure that no scholars of technical horology are involved in the restoration projects, and this is what happened for instance with the astronomical clock in Besançon's cathedral, or the astronomical clocks of Passemant at Versailles and the Louvre. There are several other such examples and more are probably on the way. Very often, restorers are content to be involved and will not make any attempt to involve scholars. This seems to be what happened with the Lyon astronomical clock, which is being restored in 2024, without the involvement of researchers in technical horology, although both the restorer and the National Heritage Administration know about the wish of such researchers to be involved. The ignorance of curators goes in pair with the non-involvement into research by restorers. Eventually, researchers appear as superfluous, both for curators and for restorers, because curators wrongly believe that research on technical objects can only be accomplished by restorers, and that there are no technical researchers beyond those who are restorers.

This has now culminated in the rise of the Chronospédia project,<sup>1</sup> which is not an independent project, but a product of its time. This project would probably not exist if curators had been more involved in horological heritage, if people knew better about the priorities of horological heritage, and if there were not such an illiteracy in matters of 3D notions. The Chronospédia project is a serious threat to horological heritage, although it claims that it will save horological know-how. Instead, it will certainly obfuscate the vision of curators, the French National Heritage Administration will probably forget entirely about the perils to which tower clocks are subjected, it will cause researchers to be sidestepped, researchers will have a more difficult access to clocks and museum artifacts, and eventually Chronospédia will cause horological research to be atrophied, because genuine and important research will be replaced by shallow shiny 3D models that will not be free and of little interest to researchers. This is not a far-fetched scenario, but it is what is already starting to happen, and curators are bearing a heavy responsibility for it.

To sum up, I have now come to draw a list of what I consider the most dangerous and harmful things for horological heritage in France in the 2020s.

- ① A major problem is the fact that most curators of the French National Heritage Administration (DRAC) are not getting involved in

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<sup>1</sup><https://chronospedia.com>

the technical survey of clocks, and make little efforts to work with researchers. This is the case in many parts of France, and in particular around Strasbourg, Besançon and Lyon. In fact, many curators do not even seem to know that researchers do exist, and they seem to think that technical research on clocks is and can only be accomplished by restorers. This is amplified by the fact that curators in major horology museums do not have a sufficient technical background and often have not produced a single technical work. These curators must therefore rely on restorers for their opinion.

- ② Another major problem is the fact that some clock restorers are having an excessive control of horological heritage, and tend to wipe out researchers. This is what happens in Besançon, both for the astronomical clock and the horology museum, in Versailles, at the Louvre, and in a number of other places. In fact, it is well known that restorers do not get along with researchers, which are often viewed as intruders. Restorers consider themselves as the only legitimate persons to speak and write about clocks. Yet, they publish almost nothing and have only a limited academic background.
- ③ A natural consequence of the first two problems is the rise of opportunist projects such as Chronospédia. Such projects do exist only because some curators do not have a sufficient technical knowledge, and because of the desire of restorers to regain control of the field, and in particular to control research. The Chronospédia project is now threatening the conservation of horological heritage, it is lowering the standard of scientific research, it does not fulfil its claims, it does not give an open-access to its 3D models, no academic sources are given for the (little) information it provides, and many other documents that it should provide, such as restoration reports, or technical descriptions of clocks, are not made accessible. And Chronospédia is seriously threatening research, in that it is trying to control curators, hence researchers. Yet, some people are lauding this project, when it is actually of practically no scientific use.

Understanding these problems implies being experienced with the study of horological heritage, and in particular its priorities, and also being trained in mathematics and computer science, which seldom is the case for curators and horologists. I do therefore feel that the future of horological heritage is doomed, as I can't see any viable solution to alleviate this perspective.