# STUDIES / ESTUDIOS

# Towards a portrayal of the archaeology of architecture in Portugal: 15 years of custodial practice in the city of Coimbra (2001-2016)

# Para un retrato de la arqueología de la arquitectura en Portugal: 15 años de prácticas tutelares en la ciudad de Coimbra (2001-2016)

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#### ABSTRACT

This article examines the evolutionary trajectory of the archaeology of architecture in Portugal spanning a 15-year period, from mid-2001 to 2016. During this time, Portugal underwent a legislative change impacting the custody of the country's architectural heritage. The emergent legal framework mandated archaeological assessments in endeavours posing risks to architectural heritage. In other words, the archaeology of architecture was supposedly required for rehabilitation works on cultural heritage buildings. However, the non-concrete nature of the legislation, combined with the limited expertise in the archaeology of architecture principles and purposes, impaired the applicability of this discipline. Using mid-2001 to 2016 Coimbra as a case study, 297 documented rehabilitation initiatives concerning architectural heritage were evaluated for their contribution to safeguarding Portuguese architectural heritage. Furthermore, this research elucidates the ramifications of legislative a mendments and administrative adjustments on the trajectory of the archaeology of architecture within Portugal.

Keywords: architectural heritage; architectural rehabilitation; custodians.

#### RESUMEN

El presente artículo examina la evolución de la arqueología de la arquitectura en Portugal durante 15 años, desde mediados de 2001 a 2016. Durante ese tiempo, Portugal experimentó una reorganización legislativa que afectó a la tutela del patrimonio arquitectónico. La nueva legislación estableció la necesidad de realizar investigaciones arqueológicas durante las intervenciones que pudiesen afectar al patrimonio arquitectónico, por lo que la arqueología de la arquitectura debería haber pasado entonces a ser una herramienta obligatoria para la tutela de los edificios considerados patrimonio cultural en sus obras de rehabilitación. Sin embargo, el carácter inconcreto de las normas legislativas, junto a la limitada comprensión de los principios y propósitos de la arqueología de la arquitectura, condicionaron la aplicabilidad de esta disciplina. Tomando Coímbra como caso de estudio, se han consultado 297 procesos relacionados con obras de rehabilitación del patrimonio arquitectónico entre mediados de 2001 y 2016, para evaluar así su contribución a la salvaguardia del patrimonio arquitectónico portugués. Esta investigación aclara además las ramificaciones de las enmiendas legislativas y los ajustes administrativos en la trayectoria de la arqueología de la arquitectura debería no bras de rehabilitación del patrimonio arquitectónico portugués. Esta

Palabras clave: patrimonio arquitectónico; rehabilitación arquitectónica; tutela.

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### 1. INTRODUCTION

At the time of writing this article, Portugal finds itself amidst a legislative restructuring, precipitating the dissolution of the existing cultural heritage custody, the Direção-Geral do Património Cultural (DGPC), operational since 2012. Archaeology in the context of architectural heritage, including the archaeology of architecture, hitherto supervised by the DGPC, will be placed under a new entity, Património de Portugal. The moment is thereby propitious for assessing the archaeology of architecture carried out in recent years. In pursuit of this objective, a timeframe spanning 15 years was delineated, namely between mid-2001, when the current law of protection and valorisation of cultural heritage was established (*Law* 107/2001), and 2016, when data compilation for this article began.<sup>1</sup>

Although informally conducted, the archaeology of architecture gained traction in Portugal prior to the enactment of Law 107/2001. This recognition can be traced back to seminal endeavours, such as those of Luís Fontes at the church of São Torcato de Guimarães in 1987 and Maria Ramalho at the Convent of São Francisco de Santarém in 1992 (Ginja 2023). Until 1999, when it was regulated that "prospecting, recording actions (...), surveys and archaeological excavations" were archaeological works (Decree-Law 270/99, p. 4412)<sup>2</sup> any references to architectural heritage were exempt from Portuguese archaeology regulations. Thanks to Law 107/2001 (pp. 2814-5825), the Portuguese state began to consider archaeological works as excavations, prospecting or "other investigations" with the purpose of "the discovery (...) of archaeological heritage", both in the ground and in "structures, buildings, architectural ensembles". For the first time, the new legislation recognised architecture as archaeological evidence and unequivocally underscored the need for archaeological investigations.

To elucidate the repercussions of Law 107/2001, the activities of both the Instituto de Gestão do Património Arquitetónico e Arqueológico (IGESPAR) and DGPC as well as the influence of the new regulatory framework Decree-Law 164/2014 on archaeological work, Coimbra, an emblematic case study of urban milieu, was chosen. As the product of a strong constructive dynamism, deriving from its centuries-old political and social relevance, Coimbra hosts a vast architectural heritage. Coimbra's wide diachrony of monumental and vernacular architectural heritage is also representative of the values and problems common to many other Portuguese historic centres. To evaluate the archaeology of architecture practices, 297 processes and 482 official appraisals were consulted from the official custodial archives, including all documented architectural rehabilitation processes undertaken in Coimbra's historic centre during the selected period (Fig. 1).<sup>3</sup> Supplementary data pertinent to rehabilitation endeavours, the archaeology, and the archaeology of architecture were collected from scholarly literature as well as virtual platforms, such as the Portal do Arqueólogo and Sistema de Informação para o Património Arquitetónico (SIPA), the only official Portuguese databases for these matters, managed hitherto by the DGPC.

Because of *Law* 107/2001 (p. 5814), which requires informing cultural heritage administration bodies of "works and projects (...) that may involve risk of destruction or deterioration of cultural property", much recent Portuguese archaeology of architecture has occurred through rehabilitation of buildings classified as cultural heritage. In accordance with this legal framework and as part of the construction licensing procedure, the onus of making the project known to the custodians of cultural assets falls upon the municipality (Paiva *et al.* 2006). Consequently, the latter may determine "the protection measures (...) that emerge as necessary" to safeguard the built heritage (*Law* 107/2001, p. 5814).

Evaluating the impact of the rehabilitation project on both the ground and building, the custodial authorities

<sup>1</sup> Work developed as part of the author's doctoral project entitled *Para uma arqueologia crítica da arquitetura (Towards a critical archaeology of architecture*), thanks to a scholarship granted by the Fundação para a Ciência e Tecnologia and presented at the University of Coimbra (May 2023). The interval between mid-2001 and 2016 corresponds to three successive custodians: the joint custody of the Instituto Português do Património Arquitetónico (IPPAR) and Instituto Português de Arqueologia (IPA), created in 1997 and dissolved in 2006; the custody of the Instituto de Gestão do Património Arquitetónico e Arqueológico (IGESPAR), operating between 2006 and 2012; and the custody of the Direção-Geral do Património Cultural (DGPC), created in 2012 and dissolved in 2023.

<sup>2</sup> All quotes have been translated by the author.

<sup>3</sup> Coimbra's historic centre was roughly defined by the areas of Alta Universitária, Alta, Baixa and Rua da Sofia, with a total of 132 squares and streets, including part of the areas inscribed in 2013 on the UNESCO World Heritage List. The division was established by the author within the scope of his doctoral project entitled *Para uma arqueologia crítica da arquitetura (Towards a critical archaeology of architecture*).

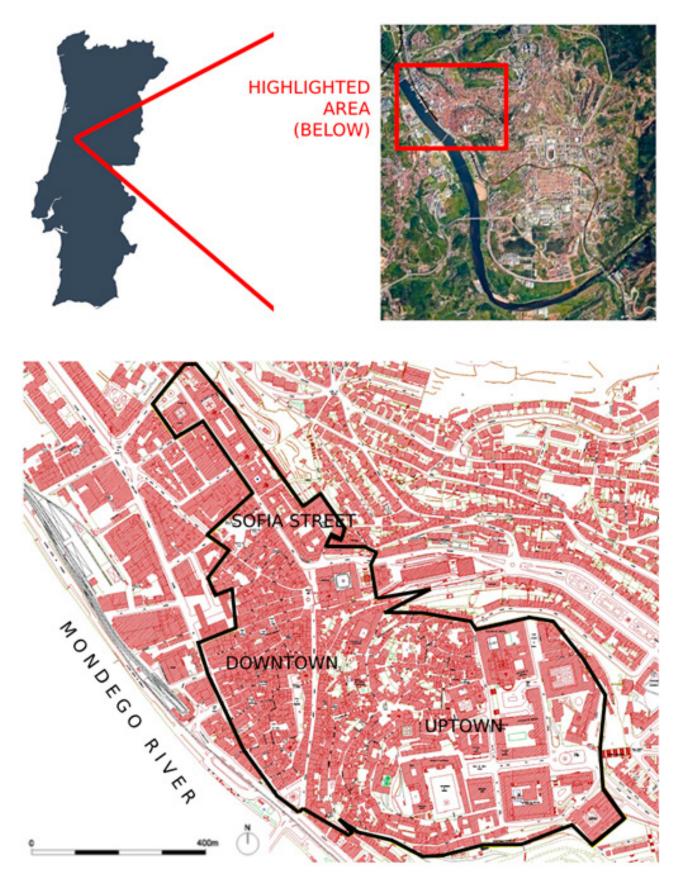


Figure 1. Excerpt from the city map of Coimbra with delimitation of the area considered the historic centre (in yellow), on the right, over a map of Portugal, on the left.

retain the prerogative to stipulate conditions for licensing, including archaeological works. Once the project is licensed, its execution begins. To comply with the archaeological conditions imposed by the custodians, the archaeology team, generally a private subcontractor, enters the field. In this capacity, archaeologists assume yet another facet of the multifaceted rehabilitation project, conducting their activities under the supervision of the custodial authorities. Depending on the conditions imposed, archaeology work may involve surveys or monitoring of actions affecting buildings and ground. If the protected building is impacted, the work may be subject to the stratigraphic analysis of construction structures and the archaeology of architecture comes then into action.

# **1.1.** The archaeology of architecture and urban rehabilitation

The archaeology of architecture has been associated with urban rehabilitation since its conception. Once architecture was considered an archaeological document in the late 1970s,<sup>4</sup> the archaeology of historic buildings presupposed a set of theoretical and practical paradigms. These paradigms are particularly favourable to urban rehabilitation since rehabilitation projects take into account not only the formal and functional aspects of the buildings but also the different phases of their construction. Furthermore, knowledge of the different construction phases, as parts of a continuous architectural sequence, transformed the archaeology of architecture. As advocated by Francovich (1979), the architectural sequence is a well-equipped tool to provide new understandings of a building's current situation, which is essential for correctly planning its future rehabilitation.

In the 1970s and 1980s, the abundance of construction works in the historic centres of the main Italian cities led to an increase in archaeological interventions in urban contexts, especially in the north (D'Ulizia 2005). During this growth, Italian archaeologists began to recognise the imperative of meticulously documenting and interpreting architectural contexts affected by urban rehabilitation initiatives. This recognition was articulated and developed in several key publications (e.g. Mannoni 1974; Francovich 1979; Parenti 1988; Brogiolo 1988; Doglioni 1988). Following this, the second half of the 1980s was marked by initiatives that aimed to legitimise archaeology as a discipline suited to the analysis of historical architecture. United around this purpose, Riccardo Francovich, Roberto Parenti, Gian Pietro Brogiolo, Francesco Doglioni, and Tiziano Mannoni, among others, chose to combine the experience they had individually acquired in the previous decade. The result was a summer school for archaeologists and architects held in the ancient Sienese monastery of Certosa di Pontignano in 1987 (Milanese and Molinari 1988; Brogiolo 2002). Under the name *Archeologia e restauro dei monumenti*, the seminar aimed to project itself precisely as an initiative for architectural restoration and urban rehabilitation in historic centres.<sup>5</sup>

Although characterised as "a recent acquisition" at the outset of the 1990s (Parenti, 1992), the archaeology of architecture developed significantly throughout that decade, particularly in emphasising stratigraphy as a methodological framework for interpreting building remains susceptible to the alteration from rehabilitation projects (Caballero 1995). After several experiences with custodially promoted rehabilitation projects, this epistemological framework was also adopted by Portuguese heritage custody from 2001 onwards, through implementing *Law* 107/2001.

# 2. CUSTODY OF PORTUGUESE ARCHI-TECTURAL HERITAGE AND THE ARCHAE-OLOGY OF ARCHITECTURE IN THE NEW MILLENNIUM

In consonance with the growing trajectory of national archaeology,<sup>6</sup> the 21st century began in Portugal with the promulgation of *Law* 107/2001 on the safeguarding of cultural heritage. Following the 1972 UNESCO convention concerning the protection of world cultural and natural heritage, ratified by Portugal in 1979, architectural heritage remained connected with the categories of monument, ensemble or site. Nevertheless, the state undertook the responsibility of evaluating the "risk of destruction or deterioration of cultural assets" and implementing the relevant "protective measures". Considering archaeological work both on the ground

<sup>4</sup> For example, Cabona *et al.* (1978) clearly stated the feasibility of reading the "wall stratigraphy", used as an analogy of the "excavation method", to determine the "various construction phases in relative sequence".

<sup>5</sup> Giving rise to *Archeologia e restauro dei monumenti*, published in 1988, the first manual dedicated to what was then still called "archeologia dell'edilizia storica" (García-Gómez 2019).

<sup>6</sup> The number of authorised archaeological works increased from 356 in 1997 up to 748 in 2000. In 2010, 1,616 archaeological works were authorised (Bugalhão 2008-2009).

and in "structures, constructions, architectural groups", the new legislation safeguarded the need for archaeological investigations to be undertaken in architecture. The architecture was so undoubtedly recognised as an archaeological site (*Law* 107/2001, pp. 5814-5825). *Law* 107/2001 appears thus to have surpassed the charter of principles for conservation and restoration of built heritage, drawn up in Kraków the previous year. While defining architectural heritage as a dialectic between different historical moments and demanding respect for all construction phases of building heritage, Kraków still confined archaeology to the universe of ground excavation.

Despite the ambitions of Law 107/2001 and the increase in work experienced by the sector, Portuguese urban archaeology underwent a period of administrative crisis in the mid-2000s. Commercialised and devoid of effective supervision, archaeological activity operated in a confusing atmosphere, where the law, recently created and partly repealed by subsequent decrees, had difficulty in asserting itself (Bugalhão 2008-2009). In the field of urban rehabilitation, the scenario deteriorated further for historic centres. Delimited by municipal territorial management decrees or aggregations of intermittently protected zones, historic centres fell under the purview of the Instituto Português do Património Arquitetónico (IPPAR), while the supervision of archaeological works was entrusted to the increasingly weakened Instituto Português de Arqueologia (IPA).

Linked to urban rehabilitation projects, the archaeology of architecture made its first advances in Portugal within the IPPAR. Leveraging the initial experiences in the Convent of São Francisco de Santarém and the monastery of São Martinho de Tibães, the IPPAR had already organised the first speciality conference in the country in 1999. Património arquitetónico, análise arqueológica da arquitetura e métodos de registo was the first official public presentation on the method in Portugal, introducing Spanish experience to the young Portuguese archaeology of architecture and featuring, among other experts, Luis Caballero and Agustín Azkarate (Ramalho 2004). Through different protocols between the IPPAR and the Archaeology Unit of the University of Minho, some groundbreaking archaeology of architecture studies took place during this period. These studies were mostly on religious buildings within the scope of rehabilitation projects. Some examples of the buildings under study include the monastery of Santo André de Rendufe (2001-2006), the old church of São Mamede de Felgueiras (2004-2005), or the church of São Gião

da Nazaré (2002), this one in collaboration with Luis Caballero (Fontes *et al.* 2004; Fontes 2006; Fontes *et al.* 2010; Caballero *et al.* 2003).

Closely following the institutional strategies in this field, contracted archaeologists and archaeology companies also began to promote stratigraphic analyses of architectural heritage within urban rehabilitation interventions during this period. For instance, in 2005, in the historic centre of Lagos, the firm Neoépica initiated a comprehensive stratigraphic analysis of a city block adjacent to Rua General Alberto da Silveira (Santos 2011). In Coimbra, stratigraphic interpretation of the architecture was also promoted at this time, as shown by the building of the former Coimbra Editora on Rua Ferreira Borges, in 2003.<sup>7</sup>

However, Portuguese archaeology of architecture still faced many difficulties asserting itself due to a lack of scientific recognition, qualified technicians, and a specific legal framework. This condition led to important losses for the knowledge and safeguarding of national built heritage, especially given the exponential growth of rehabilitation projects at that moment (Fontes et al. 2004). Despite the initiatives promoted by IPPAR, adherence to the new discipline remained scarce even at an institutional level. In the historic centre of Coimbra, 39% of the 89 appraisals issued by the custodians to carry out projects affecting buildings between 2001 and 2005 exempted the promoter from any aboveground archaeological works (Ginja 2023). While Portugal relied on custodians to encourage experience and training, in practice, appraisals imposing archaeology of architecture conditions remained a minority until the mid-2000s. Some Portuguese archaeologists, such as Maria de Magalhães Ramalho (2002), fought to apply the archaeology of architecture to preserve the authenticity of historic buildings undergoing rehabilitation. However, the institutionalisation and standardisation of this practice in the early years of the 21st century occurred slowly and circumstantially in Portugal.

In 2006, the Instituto de Gestão do Património Arquitetónico e Arqueológico (IGESPAR) was established, merging both the former IPPAR and IPA. However, in the following year, a series of regulatory decrees significantly affected the functions of this newly established institute, stripping it of its supervisory role in

<sup>7</sup> DRCC (2001) 06.03/44 File, *Edifício Coimbra Editora, rua Ferreira Borges, n.º 71-73*, Coimbra, DRCC archive, Final Report approved September 11, 2003.

safeguarding "architectural and archaeological heritage". These responsibilities were transferred to the Direções Regionais de Cultura, directly supervised by the Ministry of Culture (Regulatory decree 34/2007, p. 1917). Nevertheless, the decrees did not establish which departments were responsible for architectural heritage. Organically vague, the new IGESPAR lost administrative autonomy. The intended reform for custody of heritage failed, resulting in what has been considered "the most disastrous act in the entire history of heritage" (Pereira 2011). Even so, in the years that followed the creation of IGESPAR, Portuguese archaeology of architecture continued to expand. Between 2001 and 2005, only 61% of the 89 appraisals issued by the custodians required applying archaeology of architecture works to rehabilitation projects in the historic centre of Coimbra but between 2006 and 2012, this figure increased to 84% (Ginja 2023).

Recognising their own shortcomings, IGESPAR was reformed again after only six years, when the DGPC was founded (2012) and assumed the jurisdiction of the Direções Regionais de Cultura. However, the regulations governing the new DGPC were confined to "archaeological work on the ground or in the aquatic environment" and did not encompass other categories of work, notably those about the archaeology of architecture (Ordinance 223/2012, p. 3880). Two years later, the newly created DGPC was supported by a fresh regulatory framework for archaeological endeavours, legislated in 2014 in response to the significant increase in archaeological works. Although it gave continuity to most of the parameters already regulated, reflecting the growing presence of archaeology in urban rehabilitation interventions, the new regulation included the recording of "architectural stratigraphy" (Decree-Law 164/2014, p. 5635). The normative character of archaeological stratigraphy diversified in application, from sedimentological phenomena occurring at the ground level to construction processes. By the mid-2010s, the archaeology of architecture had achieved institutional recognition.

# **3. ANALYSIS OF RESULTS**

## 3.1. While licensing architectural projects

Since the establishment of *Law* 107/2001, projects for construction works on built heritage presented for licensing must include "a report on the (...) historical evaluation of the intervention" (*Law* 107/2001, p. 5815). In compliance with this regulation, a 2009 decree

mandated the submission of a preliminary report for "approval or authorisation for construction works", with the "evaluation of works or interventions proposed to be carried out on cultural assets" (*Decree-Law* 140/2009, p. 3655). However in practice, no legislative resolution established the criteria that the report must meet. Certain municipalities, as in Coimbra, have defined typified records according to parameters considered to better describe the heritage relevance of the property affected, although these documents still remain merely suggestive (*Regulation* 381/2017, p. 15156; see Appendix, Ficha de Avaliação de Impacte Patrimonial e Arqueológico).

For licensing the rehabilitation works since 2001 the municipalities have validated the project and the preliminary report. Despite the administrative proximity that these municipalities maintain with their territory, they have little or no decisive power over safeguarding built heritage under their jurisdiction. In fact, it is up to "the competent bodies for the administration of cultural heritage", until now the DGPC and not the municipalities, to establish the necessary measures to safeguard cultural heritage (Law 107/2001, p. 5814). Therefore, even if a municipality deemed the implementation of preventive measures relevant, a rehabilitation project could receive a license without any safeguarding appraisal by the custodial authority. In 2005, for instance, the municipality of Coimbra, lacking a signed protocol with the custodial authorities, chose to notify them about a rehabilitation project slated for the historic centre. Although the building was located less than 100 metres from the medieval church of Santiago and the baroque one of São Bartolomeu, the custodial authorities did not issue any conditions because the building was not in a protected zone.<sup>8</sup>

The municipality, however, does not necessarily have to resign its responsibilities over heritage protection. In the northern cities of Braga and Guimarães, for example, municipalities have adopted a more active role. In Braga, the municipality maintains a very close relationship with the custodians and technicians from the Archaeology Unit of the University of Minho, fully trained in the archaeology of architecture. The archaeological interventions in architectural heritage precede the rehabilitation projects. "The process always starts at the City Council", explains Luís Fontes, former project

<sup>8</sup> DRCC (63) 06.03/01 File, *Edificio sito na Travessa das Canivetas, n.º 8, Coimbra*, DRCC archive, letter dated May 18, 2005. The Direção Regional de Cultura do Centro, DRCC, constituted the regional extension of the DGPC responsible for assessing construction projects in Coimbra.

director at the aforementioned Archaeology Unit. "As soon as the promoter wants to develop a project, he has a first meeting at the City Council, where all the conditions are explained", including "a [previous] archaeology of architecture study to identify elements that could condition the development of the project".9 In Guimarães, the historic centre was inscribed on the World Heritage List as a direct result of the rehabilitation of hundreds of buildings, carried out by both public and private entities. The municipality "seeks (...), whenever there is an opportunity to do so, to informally talk with the promoters (...), so that the necessary procedures to safeguard the heritage building are followed", says Ricardo Rodrigues, coordinator of the city's Historic Centre Division.<sup>10</sup> As a result, the archaeology of architecture is often performed before the rehabilitation project is designed. It "happens in Guimarães, as a result of long years of collaboration with municipal archaeology, that most architects (...) know that those types of records can serve as a basis for the execution of the preliminary project", explains Paula Ramalho, archaeologist in the municipality of Guimarães.11

Once validated by the municipality, the project is forwarded to the custodial entity, which receives support from its regional extensions, the Direções Regionais de Cultura. An assessment process is then initiated, which, by investigating the expected impact of the construction work, leads to issuing a favourable, non-favourable, or conditioned favourable appraisal. Therefore, it is up to each regional delegation to demand that projects impacting cultural heritage are subject to appropriate safeguarding measures. However, Law 107/2001 (p. 5821) does not extend beyond the facilitation of protected zones or the requisitioning of "conservation through scientific recording". The custodian is responsible for "making sure that the works (...) involving (...) the demolition or alteration of buildings" are "in accordance with the legislation" (Law 107/2001, pp. 5821-5822), but the law does not specify the parameters for compliance.

In light of current archaeological work regulations, buildings established as cultural heritage should be protected by "preventive and minimisation actions", whenever they "are in imminent danger of partial or total destruction", including "archaeological monitoring, registration actions (...) and architectural stratigraphy" (*Decree-Law* 164/2014, p. 5635). But when facing projects that are expected to impact architectural heritage, the regional extension of the DGPC responsible for the territory of Coimbra, the DRCC, has adopted quite different positions.

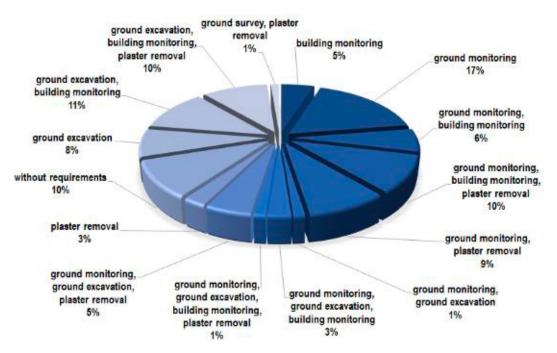


Figure 2. Graph of archaeological requirements issued by the custodians for construction works with substantial impact on buildings in the historic centre of Coimbra between 2001 and 2005 (IPPAR and IPA).

<sup>9</sup> Luís Fontes, in an interview given via videoconference on November 22, 2021.

<sup>10</sup> Ricardo Rodrigues, in an interview given via videoconference on December 7, 2022.

<sup>11</sup> Paula Ramalho, in an interview given via videoconference, on December 9, 2022.

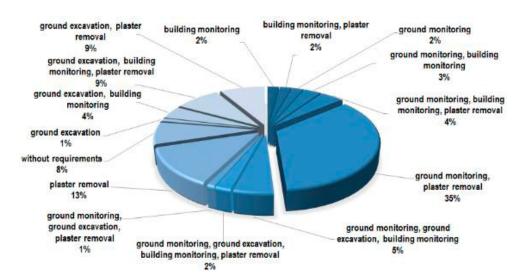


Figure 3. Graph of archaeological requirements issued by the custodians for construction works with substantial impact on buildings in the historic centre of Coimbra between 2006 and 2011 (IGESPAR).

Of the 84 official appraisals issued for licensing since *Law* 107/2001 until 2005, 80 corresponded to projects that envisaged substantial effects on architectural heritage, such as demolition or removal of extensive areas of plaster. However, while 64% of this licensing had at least one condition imposed for archaeology of architecture work, 26% only required ground archaeology work. In 10% of cases, the projects received a favourable appraisal without any type of archaeological work (Fig. 2).

Of the 136 official appraisals issued between 2006 and 2011, 94 corresponded to works with a substantial impact on architectural heritage. During this period, 89% of the appraisals resulted in licensing with archaeology of architecture work conditions. Under the IGESPAR, as a condition imposed by the custodians, the archaeology of architecture increased by 25% compared to the previous period. Even so, 11% of the appraisals did not require any archaeology of architecture work and 8% did not impose any type of conditions (Fig. 3).

Between 2012 and 2016, 94 official appraisals were issued, of which 65 corresponded to works with substantial effects on the architectural heritage. In 77% of these appraisals, licensing was granted on the condition that archaeology of architecture work was carried out. Then under the custody of the DGPC, the application

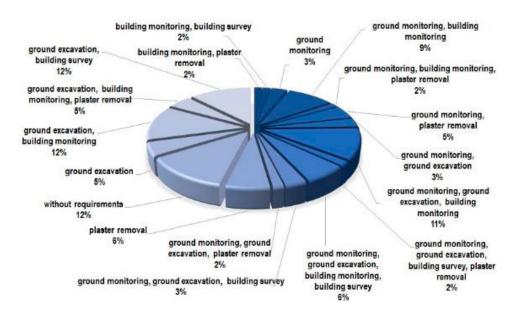


Figure 4. Graph of archaeological requirements issued by the custodians for construction works with substantial impact on buildings in the historic centre of Coimbra between 2012 and 2016 (DGPC).

of archaeology of architecture decreased by 12%. Also, 23% of official appraisals did not impose archaeology of architecture work and 12% of appraisals did not impose archaeological conditions whatsoever. However, it is worth highlighting that 23% of appraisals placed the rehabilitation project under at least one archaeology of architecture work condition (Fig. 4). This condition explicitly appears for the first time, as such, under the supervision of the DGPC.

According to the processes archived in the DRCC, it is clear the interpretative ambiguity with which the custodians approached the archaeology of architecture. Even in cases where demolitions were planned, the conditions imposed were often limited to a mere description of the building, exempting the archaeology field team from conducting the necessary stratigraphic analysis. The conditions issued differed greatly in their scope, with an apparent correlation between the conditions required and the academic training of the issuing technicians.

In the period under analysis, 52% of the custodial technicians issuing archaeological conditions restricted to the ground for licensing works were not specialists in archaeology. Even so, 48% of the official appraisals were issued by archaeologists or teams of technicians including archaeologists (Fig. 5). Of the appraisals that authorised the execution of projects without archaeological conditions, 94% came from specialists in areas other than archaeology, such as architecture or engineering (Fig. 6). On the other hand, 92% of the appraisals imposing archaeology of architecture work condition(s) came from teams comprising at least one archaeologist (Fig. 7). The requirement for conducting archaeology of architecture work came mainly from technicians trained in archaeology. On the other hand, exemption from this type of condition most often originated from technicians with other specialities. In effect, the archaeology of architecture, as a condition required by the custodians, apparently depended on the specialisation of the technicians involved.

In fact, the academic training of custodial technicians responsible for issuing conditions apparently accounts for the different perspectives on the same projects, even when evaluated within the same custodial institution. A project aimed at rehabilitating a building situated on Rua Fernandes Tomás in Coimbra, noted for its significant architectural implications, underwent an assessment in 2004 by a custodial architect, whose appraisal only stipulated archaeological monitoring of excavation

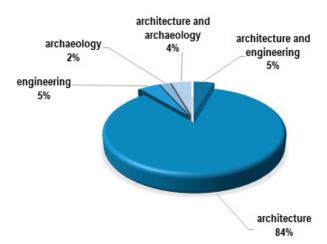


Figure 5. Graph of academic training of supervisory technician(s) responsible for conditioning construction works affecting buildings in the historic centre of Coimbra to archaeological works only at ground level between 2001 and 2016.

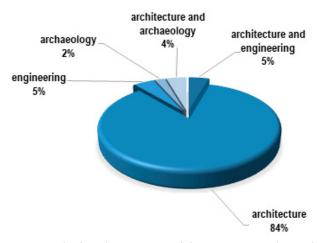


Figure 6. Graph of academic training of the supervision technician(s) responsible for providing appraisals on construction works affecting buildings in the historic centre of Coimbra without any type of archaeological conditions between 2001 and 2016.

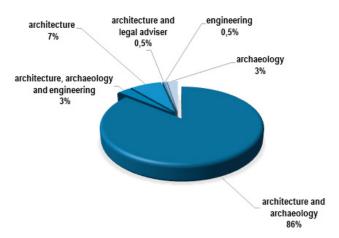


Figure 7. Graph of academic training of supervisory technician(s) responsible for providing appraisals on construction works affecting buildings in the historic centre of Coimbra to at least one type of archaeological work at the building level between 2001 and 2016.

trenches. However, to authorise archaeological operations in 2006, the revised conditions were overseen by a custodial archaeologist, who also incorporated the monitoring of plaster removal.<sup>12</sup> In 2010, a project impacting both the ground and architectural structures along Rua Visconde da Luz in Coimbra prompted a custodial team of archaeologists and architects to advocate for monitoring all activities affecting the ground, as well as the removal of plaster. When in 2015, changes to the project increased the effects on the building, a custodial architect who re-evaluated the conditions only required archaeological work at ground level.<sup>13</sup>

Even so, *Law* 107/2001 appears to provide the necessary regulation to impose the archaeology of architecture as a condition for works on architectural heritage. For example, a project with substantial impacts on a building located on Rua Nova in Coimbra was appraised by three different architects at three different times, and ultimately subject to three distinct conditions. Before the law, in 1999, it received approval from the custodians with no archaeological conditions. Just three months before *Law* 107/2001 was adopted, a second assessment resulted in the requirement for an "adequate archaeological study". In 2004, a third assessment also required archaeological monitoring of the building demolitions.<sup>14</sup>

At a national level, *Law* 107/2001 coincides with a sharp increase in archaeological interventions in architecture. Projects on urban rehabilitation almost doubled and archaeological interventions in buildings increased drastically from 2001 to 2002, going from a residual 0.5% to 23.9% (Fig. 8). Until 2008, the volume of urban rehabilitation projects witnessed a steady increase, nearly quadrupling in comparison to the figures observed in 2001 (Fig. 9). However, between 2001 and 2008, even after IGESPAR was created, the number of archaeological interventions in urban areas or protected buildings decreased sharply from 198 to 26. Nevertheless, the level of activity in the archaeology of architecture never reverted to its pre-existing residual levels, persisting within a range between 7.1% and

23.1% (Fig. 10). By the time *Decree-Law* 164/2014 was enacted, *Law* 107/2001 (pp. 5821-5822) had already laid the groundwork in 2001, so that the "modification of constructions" would be subject to the archaeology of architecture. In this sense, the new regulation, which required "architectural stratigraphy" whenever archaeological remains were "in imminent danger" (*Decree-Law* 164/2014, p. 5635), just reinforced what had long been understood by the different custodial technicians.

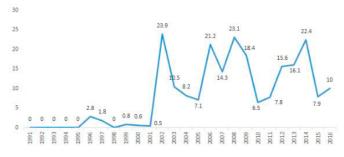


Figure 8. Graph of archaeological interventions on buildings between 1991 and 2016 (relative to all interventions).



Figure 9. Graph of rehabilitation works completed between 1991 and 2016 (in absolute value). The author, using data from the Instituto Nacional de Estatística.



Figure 10. Graph of archaeological interventions on buildings between 1991 and 2016 in urban areas and protected buildings (in absolute value).

After the enactment of the two statutes, *Law* 107/2001 and *Decree-Law* 164/2014, a lack of consensus persisted among various custodial entities regarding the implementation of the archaeology of architecture. Following the downward trend in the number of urban rehabilitation projects, the archaeology of architecture conducted in Portugal decreased between 2014 and 2016 from 22.4% down to 10% of the total rehabilitation inter-

<sup>12</sup> DRCC (2004) 06.03/79 File, *Edifício sito na Rua Fer*nandes Tomás, n.º 85-89 e Joaquim António de Aguiar, n.º 7, Coimbra, DRCC archive, letters dated December 16, 2004 and June 18, 2006.

<sup>13</sup> DRCC (1978) 06.03/07 File, *Edifício sito na Rua Visconde da Luz n.º 69, Coimbra*, DRCC archive, letters dated June 18, 2010 and September 10, 2015.

<sup>14</sup> DRCC (1999) 06.03/54 File, *Edifício sito na Rua Nova n.º* 4-12; 14-16, *Coimbra*, DRCC archive, letters dated November 30, 1999, June 12, 2001 and January 20, 2004.

ventions (Fig. 8). But while some custodial technicians understood the archaeology of architecture as a legal requirement, others continued to have a different understanding of the law.

A project for rehabilitating the college of São Jerónimo in Coimbra, a UNESCO World Heritage site, was appraised in 2017 by a DRCC technician and conditioned on conducting "prior archaeological diagnostic surveys on all walls affected". However, the deputy director of the DGPC, who validates regional appraisals, decided, "in accordance with the current legislation", to approve the appraisal, "except for (...) the removal of plasters and demolition works".15 Another official appraisal from 2018, regarding a rehabilitation project for a building situated on Rua da Sofia, another area registered with UNESCO, required archaeological monitoring of "all impacted walls". When evaluated by the deputy director of the DGPC, the appraisal was once more approved, "except for the archaeological monitoring of the plaster removal in accordance with current legislation".<sup>16</sup>

Through interpretative subjectivity, the same legal decrees made the archaeology of architecture a condition, while paradoxically ensuring that the conditions included all types of archaeological works, except the archaeology of architecture. When the condition includes the archaeology of architecture, architectural heritage rehabilitation projects rely on an instrument for evaluating the pre-existence of archaeological remains. Thus, the poor understanding of the archaeology of architecture, along with the ambiguous interpretation of *Law* 107/2001, sometimes resulted in the execution of rehabilitation projects without leveraging this instrument.

#### 3.2. After licensing construction projects

Once granted a license, the rehabilitation project proceeds to the implementation phase. Taking into account the conditions issued, the archaeology team implements a work plan, previously authorised by the custodians. From an architectural point of view, the archaeological intervention may involve a generic characterisation of the building, monitoring actions affecting the building, or opening archaeological surveys on the walls.

The provision of critical data necessary for the project's execution relies on implementing the work plan devised by the archaeology team, particularly around identifying archaeological remnants. The purpose of providing data for the project seems to be rooted in the history and nature of the archaeology of architecture itself, which was originally associated with urban rehabilitation. In Portugal, a direct correlation appears between the number of urban rehabilitation interventions and the development of archaeology of architecture. From the initial use of this archaeological method at the end of the 1980s until 2001, urban rehabilitation remained relatively stable at around 2,500 annual projects, although decreasing in absolute number. During the same period, the application of archaeology of architecture, although still relatively marginal, stabilised at approximately 0.6% of all archaeological works conducted within the country. From 2001 onwards, however, urban rehabilitation soared from 2,168 to 8,155 annual projects registered in 2008. Following an irregular trajectory, the number of archaeology of architecture interventions also soared from 0.5% to 23.1% of all archaeological interventions in the country (Fig. 8 and 9).<sup>17</sup> Paradigmatically, the year in which both urban rehabilitation and the practice of archaeology of architecture took off in Portugal was 2001, when Law 107/2001 was promulgated. Although not related to the increase in urban rehabilitation interventions, this fact is surely related to the rise of archaeology of architecture work.

Initially, *Law* 107/2001 may have boosted the archaeology of architecture. However, archaeology of architecture work remained well below half of the 2001 figures in subsequent years, while urban rehabilitation more than quadrupled, including authorisations for archaeological studies in urban areas and protected buildings (Fig. 8 to 11). Despite this irregular trajectory, authorisations for archaeology of architecture work experienced substantial reductions from 2006 and 2012 onwards, in the periods following the creation of IGESPAR and DGPC. Between 2006 and 2008, archaeology of architecture interventions decreased from 4.6% to 1.7% and, between 2012 and 2015, from 19.7% to 15% (Fig. 12).

<sup>15</sup> DRCC (95) 06.03/50 File, *Colégio de São Jerónimo e das Artes, Coimbra*, DRCC archive, vol. 3, information nº 1752/DRCC/2017 dated July 26, 2017 and information n.º S-2017/444639 (C.S: 165698) dated November 21, 2017.

<sup>16</sup> DRCC (89) 06.03/17 File, *Casa de Repouso de Coimbra, Rua da Sofia n.º 150/158, Coimbra*, DRCC archive, information n.º 911 – DRCC/2008 (C.S: 174457) dated June 14, 2018 and information n.º S-2018/461963 (C.S: 1272262) dated July 3, 2018.

<sup>17</sup> According to data from the Portal do Arqueólogo and the Instituto Nacional de Estatísticas (INE), in https://arqueologia. patrimoniocultural.pt [consulted February 1, 2022]; INE, 2013, p. 121; INE, 2014, pp. 32–33; INE, 2015, pp. 26–27; INE, 2016, pp. 28–29; INE, 2017, pp. 31–32 [consulted January 2, 2021].



Figure 11. Graph of archaeological interventions authorised by the custodians between 1991 and 2016 (in absolute value).

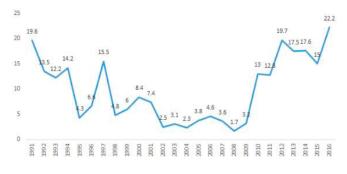


Figure 12. Graph of the archaeology of architecture interventions authorised by the custodians between 1991 and 2016 (relative to all authorisations in urban areas and protected buildings).

Although archaeological interventions are authorised, rehabilitation works uncompliant with the archaeological conditions imposed by the custodians bare few or no consequences since legislation fails to define any compensation measures. During the 2010 rehabilitation of a building located on Rua Visconde da Luz in Coimbra, where custodians had mandated archaeological monitoring of ground and plaster-altering actions, the project demolished the interior in the total absence of archaeologists. Upon reassessment in 2012, the custodians themselves conceded that, due to the complete disappearance of all archaeological remnants resulting from the previous work, there remained no basis for further conditioning.<sup>18</sup> In other instances, particularly when archaeological remnants were present, the custodians nonetheless insisted on implementing compensatory measures. Having received a non-favourable appraisal from the custodians, the rehabilitation project of a building situated on Rua Ferreira Borges in Coimbra commenced clandestinely. Embargoed by the municipality, the rehabilitation works resumed in 2007, following a new appraisal from the custodians. This appraisal recognised that "there had not been a prior archaeological study" and demanded "the complete removal of the plaster", followed by stratigraphic reading, "based on the methodology of archaeological interventions to levels above the ground".<sup>19</sup>

When effectively leveraged during the project execution phase, the archaeology of architecture often detects previously unknown archaeological remains of relevant heritage significance. In these cases, the legislation provides that the "pursuance of any works" is conditioned to "changes to the approved project capable of guaranteeing the conservation (...) of the archaeological structures discovered" (Law 107/2001, p. 5821). This regulatory contingency has thus far resulted in the possibility of reviewing a project even during the execution phase, or in extreme cases, the project may be terminated. During the rehabilitation of the so-called Laboratorio Chimico, at Marquês de Pombal Square in Coimbra, the coffee shop within the initial project was never completed. This decision was made by the promoter and custodians due to "archaeological structures" uncovered during the archaeological monitoring of the work, as was the recovery of other remains, like windows "discovered by vertical archaeology".20

For the preservation and integration of archaeological remains, project restructuring requires a conciliation between promoter and custodians, which is not always easy to achieve. During the rehabilitation of a building located on Rua Velha in Coimbra, the archaeological intervention uncovered a central arch, whose relevance was recognised both by the archaeology team on site and the custodians. The incorporation of the arch was sanctioned by the custodians but clashed with the intentions of both the promoter and architect, who argued that it lacked "significant historical/artistic interest". Subsequently, the architect suggested dismantling the structure to the custodians, who insisted that "all structures were to be preserved and integrated into the architectural project." This impasse resulted in additional expenses and delays for the rehabilitation project.<sup>21</sup>

Once the archaeological work is concluded, the archaeology team assumes responsibility for compil-

<sup>18</sup> DRCC (2006) 06.03/44 File, *Prédio na R. Visconde da Luz n.*° 74-76 *e R. Velha n*°. 24-26, *Coimbra*, DRCC archive, letters dated July 18, 2010 and June 21, 2012.

<sup>DRCC (2000) 06.03/46 File,</sup> *Prédio sito na Rua Ferreira Borges n.° 91-97, Coimbra*, DRCC File, letter dated August 3, 2006.
DRCC (2001) 06.03/16 File, *Laboratorio Chimico, Largo Marquês de Pombal, Coimbra*, DRCC archive, letter dated February
2, 2005.

<sup>21</sup> DRCC (2004) 06.03/20 File, *Edifício sito na Rua Velha n.*° 7-9 *e na travessa Velha n.*° 11-19, *Coimbra*, DRCC archive, letters dated July 21, 2006 and September 29, 2006.

ing the gathered data into a comprehensive report. They must adhere to the prescribed format, timelines, and content requirements stipulated by law, which includes the "detailed description and interpretation of the nature, chronology and typology of the stratigraphic and structural contexts identified" (Decree-Law 164/2014, p. 5639). To date, the archaeological reports submitted for approval by the DGPC must extend beyond a mere stratigraphic characterisation of the building under intervention. They are required to encompass elements essential for scientific and heritage preservation, including: detailed plans and elevations, graphic and photographic documentation, inventory listings, and comprehensive descriptions of proposed and implemented actions for mitigating the impact of rehabilitation efforts on archaeological heritage. In the field of the archaeology of architecture, however, the current legislation does not define specific parameters for compliance with these reports.

Taking the historic centre of Coimbra as a sample, this lack of clarity is revealed in the reports under the archaeology of architecture conditions between 2001 and 2016. Of the 143 reports consulted,<sup>22</sup> only 6% contained stratigraphic analysis of the building, a basic methodological condition for work to be considered archaeology of architecture. Of all the project reports with imposed archae-

22 Of the 251 official appraisals conditioning rehabilitation projects to archaeology of architecture, only 179 led to authorisation for archaeological works, resulting in 158 previous, preliminary, or final archaeological reports (15 of which were unavailable for consultation). ological monitoring of actions affecting the building or wall surveys, 14% solely described the types of construction and construction materials, while only 15% were accompanied by graphic records for deducing dimensions. Exempt from stratigraphic analysis and graphic records, these descriptions of construction types cannot contribute to understanding the historical evolution of the analysed building, an elementary premise in archaeology of architecture. In 14%, construction phasing proposals were advanced, although without any stratigraphic reading that would allow for corroboration. Only 22% risked a chronological characterisation and only 8% committed to proposals for structural or spatial functionality. With archaeology of architecture work as a specific condition, 6% of the intervention reports lacked any archaeological interpretations of the architecture (Fig. 13).

### 4. FINAL REMARKS

Present in Portugal since the late 1980s, the archaeology of architecture, a legal recommendation established by *Law* 107/2001, is primarily applied within the framework of rehabilitation interventions concerning architectural heritage. In this sense, the discipline closely coexists with the typical idiosyncrasies of architectural projects in urban rehabilitation, particularly challenging in historic centres, as well as the custodians' consequential interpretations of the archaeological nature of architectural heritage. However, *Law* 107/2001 establishes

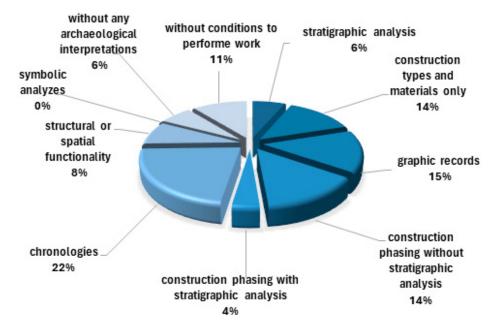


Figure 13. Graph of results expressed in reports of archaeological interventions carried out in construction works affecting buildings in the historic centre of Coimbra between 2001 and 2016.

that the cultural heritage custodians, to date the DGPC, define the necessary measures to safeguard architectural heritage. Due to a lack of clarity in this law, the conditions imposed by custodians regarding the archaeology of architecture are open to subjectivity, personalisation, and reversibility. Improving the archaeology of architecture in Portugal must therefore come from a reformulation of the law. New legislation should specify the terms under which the discipline must be applied within urban rehabilitation, making it mandatory for any rehabilitation projects affecting historic buildings. It should also clarify its forms of action, including the mandatory requirement for stratigraphic readings in all rehabilitation projects affecting protected buildings.

By Law 107/2001 standards, the custodians and municipality have worked within the scope of licensing architectural rehabilitation projects, isolated from each other. Municipalities, however, can play a greater role in defending the architectural heritage of the territory under their administration. A preliminary report is mandatory by Decree-Law 140/2009, which requires an assessment of municipalities' heritage assets for licensing works on architectural heritage within their domains. Hence, municipalities could receive heritage assessments pertaining to buildings slated for alteration preceding the commencement of construction activities. Adapting the existing decree, archaeology of architecture studies could take place as part of the preliminary report. This practice would inform the municipality, and therefore the architectural project, about the heritage occurrences in the building under rehabilitation and the expected impacts of the project.

The conditioning of rehabilitation works to archaeology of architecture studies seems to have depended on the training of the custodial technician responsible for evaluating the projects. At the same time, the evaluation of archaeological studies of architecture conducted by the field archaeological team has potentially given precedence to the materiality of intervened buildings, favouring their description over their stratigraphic interpretation. Both circumstances reveal a poor and subjective understanding of the purposes of the archaeology of architecture when applied in accordance with Law 107/2001, and its capacity to archaeologically interpret architectural heritage. The description of materials or construction types, the assessment of the functionality of architectural spaces and structures, and the consideration of construction phases or chronologies are vital. But these elements should be accompanied by the necessary stratigraphic readings undertaken from the principles advocated by the archaeology of architecture. Insufficient funding towards this discipline in Portugal, particularly for training young archaeologists, contributes to this disconnect, though to what extent remains to be assessed. Of the seven Portuguese universities that offer academic degrees in archaeology, only one, the University Nova de Lisboa, provides a curricular discipline specifically dedicated to teaching the archaeology of architecture.<sup>23</sup> Without a substantial investment in teaching the specialised techniques and theoretical frameworks unique to archaeology of architecture, it is ethically questionable to expect archaeologists to conduct fieldwork effectively or custodial entities to accurately prescribe appraisals for protecting cultural assets.

Compliance with the imposed conditions to safeguard architectural heritage was almost always referred by the custodians to the execution phase of the project, during which the architectural project was already delineated. As a result, any archaeological pre-existence revealed during the work implies costs and delays, unforeseen by the promoter. The extent to which these inconveniences have harmed the practice and reputation of the archaeology of architecture also remains to be assessed. Remitted to the project execution phase, the archaeology of architecture in Portugal, moreover, finds itself limited to the scope of actions affecting the building, often to areas involving demolitions or plaster removal, rather than those that could be more scientifically pertinent. If these circumstances continue, the Portuguese archaeology of architecture within urban rehabilitation projects will continually fail to achieve results that are scientifically relevant for the historical interpretation of architectural heritage or useful for properly programming rehabilitation projects. By restricting archaeology of architecture's scope, these circumstances ultimately limit its scientific and social acceptance.

#### DECLARATION OF COMPETING INTEREST

The author of this article declares that they have no financial, professional or personal conflicts of interest that could have inappropriately influenced this work.

<sup>23</sup> The universities of Coimbra and Évora currently teach the methodology of the archaeology of architecture within the scope of other mandatory curricular units, subject however to the discretion of the faculty members responsible every year for their respective curricula. Questioned about the same topic, the universities of Minho, Porto, Lisboa, and Algarve chose not to reply (Ginja 2023).

#### AUTHORSHIP CONTRIBUTION STATEMENT

António Ginja: conceptualization, methodology, validation, formal analysis, investigation, resources, writing – original draft, writing – review & editing, visualization, project administration

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