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HIGHER EDUCATION IN PREHISTORY AND ARCHAEOLOGY: A MATTER OF MARKET?

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> *The International Union of Prehistoric and Protohistoric Sciences (UISPP) is an international association of scholars, proclaiming that the universality of science is the basis of all its activities. Its aims are the collaboration of scholars from all countries in activities that contribute to the advancement of pre- and protohistoric sciences. The UISPP declares its total commitment to academic freedom. The study of humankind concerns all existing societies. Therefore, the U.I.S.P.P. rejects all forms of discrimination based on race, philosophic conviction, ethnic or geographic origin, nationality, gender, language, or anything else; discrimination which, by its intolerance and by definition, is the very opposite of all scientific cooperation. It also rejects any attempt to rewrite the past and any form of negationism.* (UISPP statutes, Preamble)

ABSTRACT

The growing divide between sciences and humanities has led, in the last decades, to their global weakening, leading to a pragmatic empire of technological solutions deprived from meaning and global reasoning. In parallel, the source of many current disruptive processes is the incapacity of understanding the implications of the global merger of economies and societies, but also the trend towards segregating new identities and cultural networks. We consider that education and training are key elements in the process of building shared landscapes, i.e., shared convergent perceptions of the territories, and that education in prehistory and archaeology should be structured within this framework. Reflecting on general concerns and perspectives of Humanities education at large, and on specific constraints in Europe and Portugal, we argue that the specific relevance of archaeology within a programme for humanities concerns its expertise in assessing adaptation mechanisms, economy-environment balances, techniques and technology, as well as its interdisciplinary approach, going beyond humanities and involving social and natural sciences. The text concludes by presenting the structure and strategy of the Master programme in Prehistoric Archaeology and Rock Art, as part of a wider programme of archaeology and cultural heritage education at the Polytechnic Institute of Tomar.

KEYWORDS: Education; Prehistory; Archaeology; Humanities; Tomar.

RESUMO

A crescente divisão entre ciências e humanidades conduziu, nas últimas décadas, ao seu enfraquecimento global, levando a um império pragmático de soluções tecnológicas, privadas de significado e raciocínio global. Paralelamente, a fonte de muitos processos

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disruptivos atuais é a incapacidade de entender as implicações da fusão global de economias e sociedades, mas também a tendência de segregar novas identidades e redes culturais. Consideramos que a educação e o treinamento são elementos-chave no processo de construção de paisagens compartilhadas, ou seja, perceções convergentes compartilhadas dos territórios, e que a educação em pré-história e arqueologia deve ser estruturada nesse contexto. Refletindo sobre as preocupações e perspetivas gerais da educação em Humanidades em geral, e sobre restrições específicas na Europa e em Portugal, argumentamos que a relevância específica da arqueologia num programa global de ciências humanas diz respeito à sua experiência na avaliação de mecanismos de adaptação, equilíbrios economia-ambiente, técnicas e tecnologia, bem como à sua abordagem interdisciplinar, que vai além das humanidades e envolve as ciências sociais e naturais. O texto conclui apresentando a estrutura e a estratégia do programa de Mestrado em Arqueologia Pré-Histórica e Arte Rupestre, como parte de um programa mais amplo de educação em arqueologia e patrimônio cultural no Instituto Politécnico de Tomar.

PALAVRAS-CHAVE: Educação; Pré-História; Arqueologia; Humanidades; Tomar.

FRAMING THE EDUCATION IN PREHISTORY AND ARCHAEOLOGY WITHIN A WIDER CONTEXT

The thread separating academic construction and socialization of knowledge from anti-science relativisms is often a thin one, particularly when the academia faces threats to its conditions of autonomy and society is driven but other pressing agendas. It is the duty of humanities scholars, we believe, to permanently project the long-term considerations and dilemmas into such immediate agendas, since these will only overcome their troubles if they move beyond immediate anxieties and design mediate visions and strategies. We also believe that all choices of the academic world which lose such understanding, particularly those that become guided by short-term constraints and dissolve their strategies into these, will end to become redundant, and collapse. Certainly, any strategic approach to the education in prehistory and archaeology needs to take into account contextual constraints, but it should not turn its own strategy into such conjunctural constraints. Rewriting the past is, for instance under the call for the preservation of “memories”, one of the major dangers today.

The discussion on the education in specific fields of knowledge and professional practice requires starting by understanding two different dimensions: what is the education for (i.e., to face which needs) and to whom is it addressed (i.e., which students, scholars and society). These dimensions are, themselves, encapsulated within a wider one: which are the

global Educational context and trends, in this specific moment? The design of education programmes for prehistoric and archaeological research and professions is no different from any other field.

One dramatic consequence of the growing divide between sciences and humanities has been their global weakening, leading to a pragmatic empire of technological solutions deprived from meaning and global reasoning (BÖHME & STEHR 1986; OOSTERBEEK 2011a). Several in-use notions illustrate this dangerous divide, such as “solutions” (ignoring contradictions and dilemmas), “technology” (ignoring purpose), “memory” (ignoring history), “democracy” (ignoring awareness and alienation), “theory” (ignoring praxis) or “education” (ignoring content – OOSTERBEEK 1999).

The consequences of this trend are to be found in all spheres of activity, and certainly in major recognized global challenges for which non-integrated solutions are recurrently experimented with limited or no results, concerning climate change (oscillating between denial of change and overestimation of anthropic impact), migrations (without linking these to the nature of existing borders), identities (reducing cultural ethnocentric conflicts to multilateral dialogue, without facing the challenges of building a united humankind for the first time ever), understandings of the past (in absence of an effort to build a comprehensive global human past, instead of a collection of local and regional fragmented histories), or others.

At a global level, the main consequence has been the lack of an understanding of cultural complexity, often seeking the same solutions, rooted in social engineering and technology, for different types of inequality, exclusion and conflict, from sustainability to university management or archaeological practices. Part of this misunderstanding has a major impact in the education and training strategies, largely still oriented towards a 20th century profile of new jobs being created in relation to new economic activities and for a decolonization urging agenda. While these remain relevant, account has to be made of the re-design of social processes in the North-South former divide (with a much more complex set of intra-regional divides and the emergence of primarily cultural divides and disruptions – HELLIER 2012), of the current nature of the economic process (which is no longer generating significant numbers of jobs related the mechanisms of economic growth) and of the cognitive implications of the digital era (diminishing use of muscles and namely of the

brain to achieve different goals). Not moving beyond the 20th century divides leads, in archaeology, into compromising scientific research in various regions due to political self-censoring, into generating research strategies triggered by techniques and not interrogations over the past, and into alienating the participation of non-professionals in the co-construction of a common heritage.

The conceptual framework within the UNESCO 2015 Convention on the Protection and Promotion of the Diversity of Cultural Expressions (UNESCO 2015), focusing on four pillars, is an example of this. It focuses on the support to sustainable systems of governance, on achieving balance flow of cultural goods and mobility of artists, on integrating culture in development frameworks, and on promoting human rights and fundamental freedoms. Creativity and its dissemination are paramount, also linked to technology. Artists and gender are considered, and creative industries and culture are focused in relation to economy. But there is insufficient consideration of the relevance of cultural knowldge in perceiving these issues differently!

Another example is the 2016 World Social Science Report, when addressing inequality by stressing its impact on sustainability and considering seven dimensions of the former (economic, social, cultural, political, spatial, environmental and knowledge-based), also mentioning education, discriminations (of gender, ethnicity or religion), disparities of resources (among regions and urban or rural areas) and different access and contributions to different sources and types of knowledge (ISSC et al, 2016). Despite all these, there is limited consideration of the cultural dimension of inequality in education (following BOURDIEU & PASSERON, 1977), when compared to the social dimension of it, for instance. Similar twisted approaches occur when archaeology in society is primarily assessed by the number of professionals or the budgetary volume of contract allocations.

However, the source of many current disruptive processes is the incapacity of understanding the implications of the global merger of economies and societies, but also the trend towards segregating new identities and cultural networks, itself requiring to create a reflexive humankind for the first time, in order to prevent large scale micro-conflicts (OOSTERBEEK, 2016) and to reorganize the territorial sociocultural matrices that provide coherence, cohesion and awareness to human groups (OOSTERBEEK, 2017a), understanding that these are, primarily, communication networks. This means that the

governance of such networks, i.e., the governance of territories, has communication as its backbone. It is largely for this reason that we advocate a cultural integrated landscape management, as opposed to a merely technical, social engineering and technology driven, model of integration of territories: “cultural” because it must not only take into account cultural diversity, but to find in it a major strength and not a problem to overcome; “landscape”, because the integration relates to the cultural perceptions of the territories values, and not just to the territories themselves (which, by nature, are already integrated in a systemic way).

EDUCATION AND THE DESIGN OF NEW, GLOBAL, CULTURAL LANDSCAPES

Education and training are key elements in the process of building shared landscapes, i.e., shared convergent perceptions of the territories. Words do not only condition the extension of the ideas to consider, they primarily structure the hierarchy of the possible ideas and, moreover, the vision that will guide actions (DERRIDA 1967). For example, the acronym “STEM” (Science, Technology, Engineering, Mathematics), too readily popularized worldwide, expresses the technological approach to solutions and the avoidance of humanities and facing dilemmas or contradictions. Even when, occasionally, this acronym is transmuted into “STEAM” (SOUSA & PILECKI 2013), the A standing for Arts (or creativity), the humanities dimension is carefully left out, in a possibly unconscious but nevertheless effective way to foster a unique monolithically understanding of sustainability (one that values economic growth and environmental protection, but fails to understand human anguishes and divides).

This is also why within the operational framework of cultural integrated landscape (OOSTERBEEK, 2014a), the dimensions of sociocultural matrix organization and institutional articulation are comprised between a set of education and training activities and an overall permanent communication programme. The reason why focus on landscape management is of primeval importance for the humanities is because this is a dimension of life that engages all humans alike, with a strong tangible dimension and convening a transdisciplinary framework of reference rooted in *praxis.* While actual management projects

are guided by cultural integrated landscape management theoretical assumptions, those projects feed-back into the theory, leading to adjust it.

At the same time, the positive consequences of a cultural integrated landscape management (CILM) of specific territories allows for comparison and to disseminate by example new methodologies. The specificity of CILM, as a humanities driven methodology lies in the fact it also uses sociology, law, economics and natural sciences for dealing with problems, but is rooted in a wider multidisciplinary approach involving archaeology (and the didactics of tangibility and hand-made technologies and techniques related reasoning), anthropology (and the understanding of cultural process, mechanism of convergence or fission), history (as a rational construction of common past and not a mere collection of dividing memories), geography (positioning actors in relation to spaces, distances, processes and actions), literature (building narratives and insights), psychology (of individuals and groups in their cultural contexts) and other approaches framed in the archipelago of philosophy, through communication, education and training (CASTELLS 2010; SCHEUNEMANN & OOSTERBEEK 2012; CROWLEY 2016).

One major challenge for CILM, which requires a strong tangible dimension that exercises the motricity of individuals and their brains, is to cope with the ongoing digitalization of all procedures (OOSTERBEEK 2014a). As mentioned by Celso FIORILLO (2015, p. 123), "(…) technologies of communication provide the material basis for global integration and favour the growingly faster exchange of information between individuals, corporations and institutions. Despite the contradictions and inequalities that emerge in this context, the information society characterizes a new way of production of social relations, based on flexibility and promotion of creative capacities. This field of research has the same complexity of environmental concerns, since both require the understanding of multiple economic, historical and cultural variables, for a better approach to the global/local interrelations".

But, beyond the research on such complexity, the question remains on how to foster tangible learning and reasoning experiences (which are crucial to develop critical reasoning and non-alienated citizens, themselves the basis of dynamic and non-despotic societies), when the experience of any child is that a much lesser effort may lead to the satisfaction of perceived needs using digital resources, in a context of cognitive changes (VASILE 2012)?

Two interlinked processes challenge the cognitive mechanisms in contemporary society, both related to the new digital era. First, digitalization is transforming the requirements of gestures related to knowledge sequences and their achieved results (CARR 2011); less movements are required to obtain results, and similar movements (e.g., to press a key) lead to very different results (e.g. pressing a key in an ATM machine, in a parking lot or in a drinks dispenser machine). This diminishing of gestures tends to reduce the stimulus of the brain, disrupting causal nexus and complex reasoning sequences. Since training remains at the basis of education, concrete intelligence preceding and enabling, later, the full development of abstract knowledge through education (PIAGET 1954), one first question is: will humans alienated from their tangible concrete engagement in causal sequences be capable of fully developing abstract advance knowledge? For instance: once training to focus concentration in one single task (e.g. holding a pencil to write down a text or to make basic arithmetic calculations) is abandoned (due to the use at very early ages of computers that automatically correct spelling and make very fast calculations), will poetic or algebraic mindsets still be accessible to most?

A second challenge relates to changes in the economy and the replacement of humans by machines and, also, of working written instructions by oral digital ones. This new trend in the digital economy, which is destroying most jobs, from car assemblers to software design engineers, renders useless the universal education. Decreasing levels of literacy and the the re-emergence of “post-truth” are expressions of this trend. Since universal education is no longer required to maximise economic profits, will it remain or will it be questioned and abandoned? And, if not, will sustainability be possible (STIGLITZ 2012)?

Current global debates experience major disruptions due to a growing tension between the global needed integration of the social sphere (alongside economy) and the institutions designed to protect non-global networks of production, trade and management (including national governments and professional corporations). The later build from the reification of cultures, as discrete entities, preventing their transformation through a double mechanism of past cultural diversity extinction (since reification requires simplification) and denial of new cultural diversity recognition (since this tends to emerge from global trends). When too often the academic community, including archaeologists, accept to slide down from an History approach into a Heritage-Memory driven agenda, it is this type reification that operates.

On occasions, unexpected agents of such process may be naïve well-intended approaches, e.g. uncritical consideration of intangible heritage. While the digital dimension remains an opportunity to disconnect, the context is shaped by the crisis of sociocultural matrices and education policies have been captured by the concept of "education market", thus having been reduced to commodities (SCHWARTZMAN 2013). Economies are integrated at a global scale, societies are linked at a global scale, contextual challenges are global and identities and cultures are structured in relation to global neighbours. Education serves the purpose of socialization within sociocultural dynamics that are, now, international and global. Since humankind evolves through integrative processes in which technologies are crucial, one main choice will be to put the accent in the participation in debates (or political perspectives, which require enlightenment, awareness, reinforced wider communication mechanisms rooted in critical education and extensive training) or in process of production of technologies fostering economic growth and environmental sustainability *per se* (achievable through expelling humans from economic decision mechanisms and aiming at some sort of eugenic sustainable development, as STEM strategies tend to do). And, thus, should education be primarily guided through debating values or through experimenting technologies and revisiting their histories?

Unless an ethical choice intervenes (LEONHARD 2016), it would be an illusion to believe that participation, awareness and critical reasoning are requirements, in the short term, for strict economic growth and environmental preservation. But bridging technologies, arts and humanities, and fostering diversity of gesture, will allow for the using of digital resources to favour face-to-face interaction, meeting the seven changes mentioned above, promoting flexibility and critical reasoning, encouraging transformation through enhancing heritage and educating for values and cultures of peace through diminishing social and environmental gaps. As a tool, the digital revolution, from archives to robotics, will challenge humans on how to deal with it. In the age when computers are learning emotions, the preservation of a strategy oriented towards critical reasoning through education and open communication will become a condition to make sure that in the future human bodies, and not robots, will be the best "humans", the one better capable of conceiving new landscapes and thus to manage territories in a more balanced and sustainable way.

ARCHAEOLOGICAL PERCEPTIONS AND PRACTICES IN PORTUGAL: AN IMMEDIATE CONTEXT FOR CURRICULA DEVELOPMENT

Archaeology in Portugal finds its roots back in the 16th century, having experienced a relevant flourishing in the end of the 19th century, followed by a decay during most of the 20th century and experiencing a new advancement from the 1990's (FABIÃO, 1999; RAPOSO, 1999; SILVA, 2002). The Portuguese legislation in force, which with regard to structuring diplomas has mostly been approved after 1995, reflects the debate around three dominant axes of conflict: between private interests and the public interest (the dimension of collective interest outside this not being considered) ; between national and international interests; between the valuation of material goods (including archaeological) and immaterial goods.

In general, the conventions find partial extensions in the regulatory legislation, always in the logic of only effectively protecting classified goods and state property (and even these only in some cases). At the same time, the ratification of the conventions does not seem to have been accompanied by the incorporation, by the central structures of the State, of the necessarily negotiating nature of patrimonial management, which will explain, for example, that among the unregulated dimensions of the various conventions is patrimonial education, despite it being clearly considered in the Archaeological Heritage Convention (LOPES & CORREIA, 2004).

Thus, Portuguese law essentially protects private interests, except in relation to the State (hence the different conflicts that have ended either with the prevalence of private interests or with direct or indirect nationalization). It incorporated a progressively more supra-national dimension from the moment it began to reduce the effective support for the study and preservation of archaeological goods (in a sector that was privatized, since 1997, in a regime close to the wild capitalism that shocked individuals like Robert Owen, with hand-labour paid by the day and with very little production of new knowledge). It progressively underestimated the material heritage, without, however, effectively reinforcing the means of study, rescue and valorisation of immaterial cultural goods, except in cases that intersect with the fine and performing arts, that is, with contemporary artistic creation.

We do not believe, therefore, that in the last fifty years there has been a real paradigm shift in the management of archaeological heritage, in its supra-national valorisation; what happened, indeed, was the opening of a growing gap between an international and European discourse generated by economic dynamics and a vision of state tutelage that remains essentially nationalist, even corporative, with scarce means (which is why it targets an ever smaller number of assets that are owned by the State, neglecting everything else).

One of the central questions that arises, not only in Portugal but in all European Union states, is the need to dedicate national funds in favour of assets whose value will be increasingly considered supra-national. This debate will tend to separate the nationalist discourses and those essentially linked to the tourist-economic profitability of cultural assets attributed to static identities, from others, with an European or International scope, essentially linked to the dynamics of recomposing identities (and not to their reification).

A second dimension that can be foreseen is the valorisation of collective non-state patrimonial rights (the Convention on Intangible Heritage helps in this sense) and diffuse rights. The growth of this dimension will accompany the expected breakdown of nationalist monolithic approaches, weakening the current central supervisory bodies in favour of regionalized structures (although it is very doubtful that there will be material resources and capital to take the responsibilities of central administration).

A third and more decisive dimension will arise from social reflection on the fruits of more than two decades of “European” legislation. Today, the conflicts that accompany preventive archaeology are no longer exhausted in matters of tutelage and safeguarding cultural assets, and have started to incorporate problems not foreseen by the Archaeological Works Regulation or by the Basic Law for Cultural Heritage.

What is the purpose of accumulating tons of artefacts collected in contract archaeology works, which are not studied and, therefore, are a mere environmental liability? How to defend the collective rights over the archaeological heritage, without structures of shared management of the territory and without financial means to continue with a strategy of nationalization (or abandonment) of the spaces of conflict? How can state, regional, municipal and even individual claims be made compatible with the protection of archaeological goods? How to maintain legislation based on the application to archaeology

of the polluting-payer principle in a society that does not feel the urgency of safeguarding archaeological goods (in view of other needs) and in the absence of any heritage education strategy? Certainly, how to adjust the requirements of higher education (now that the creation of several degree courses in archaeology has arisen) in face of a scarce market (FABIÃO, 2006), which already lives with abundant cases of over-exploitation of professionals?

These questions could continue to unfold, and it is certain that they have in common starting from the dynamics of society and its actors (including the State, but not only this, as the current legislation).

PREHISTORIC ARCHAEOLOGY AND ROCK ART AT THE POLYTECHNIC INSTITUTE OF TOMAR (PORTUGAL)

The definition of education strategies for prehistory and archaeology education, beyond a short-term unsustainable market approach, must be considered under this multi-layered context, dominated by epistemological divides, cognitive decay, conflicting understandings of the social role of archaeology, new legal frameworks and shifting paradigms.

Humanities tend to be understood as “interpretation of the world” and “curiosities” (ARNOLD, 2006), … and curiosities may be discarded in times of shortage. The undergoing changes generated new social need and require new responses. While social sciences must focus on convergence and equity when dealing with social issues (since they find their social role in the process of globalisation of society…and this explains the social acceptance of social sciences), humanities must find their usefulness for the enhancement of diversity within a multi-centres world. This means they must go beyond the academia and intervene through practical applications from and for globalization, beyond nations and segregation, portraying moral diversity and converging towards ethics common grounds by intervening in landscape management (OOSTERBEEK, 2007). In fact, landscape management becomes, in a century that will be marked by a fast re-design of territories and territorial competition, a crucial stage for humanities knowledge to be applied in order to monitor and manage various disruption tensions (OOSTERBEEK & SCHEUNEMANN et al., 2011).

Within this, humanities education clustered around territories understanding and conceptual strengthening, will become more relevant not only to prevent ruptures (violence, forced mobility, war) but mainly to enable governance of increasingly culturally diverse regions: globalisation of societies (merging with global economy and environment) will reinforce cultural diversity and potentiate cultural divides, xenophobia and conflicts. Notions of space, time and causality ate to be built in society through daily praxis, having the territory as the stage of such praxis. Knowing that all our knowledge is human and focused on humans, philosophy, history, philology, anthropology… they all relate to causality, space, time, communication, continuity through change, convergence within diversity.

It is in this sense that humanities are not a section of social sciences and that they are needed as cement for all knowledge and behaviour. They are about understanding how different and even opposed avenues may converge towards single common results, and this is precisely the issue currently in stake in the planet: how can different interests, when considered from the point of view of economy or society, converge? Understanding humans as a link involving society (humans organisations), environment (humans context) and economics (human behaviour) enables to understand humanities as a set of expertise for integrated landscape management for sustainable development. A new role for the Humanities is, then, to build critical conceptual capacities, promoting new integrated landscape management plans that value these issues, but also to give coherence to the tripod of sustainability, to bridge the gap with other sciences to rephrase the dichotomy between economics and culture and to promote the didactics of dilemmas and of convergence within diversity.

The specific relevance of archaeology in such a programme for humanities is twofold. On one hand its expertise in assessing adaptation mechanisms, economy-environment balances, techniques and technology (MIRANDA, MESENGUER et al., 1986). On the other hand, it offers an interdisciplinary approach that goes beyond humanities, involving social and natural sciences when addressing those topics. In fact, archaeology provides in-depth understanding of the relation between resources and needs, between techniques and energy, or between knowledge and territory. This is how it looks into the past, e.g. when discussing the emergence of space dominance by early hunters, the role space and time notions in the conquest of symmetry, or when assessing the Mediterranean transitions into farming relating resources, climate and human social dynamics.

Archaeological research offers to contemporary society, hence, an integrated insight into past landscapes and their human dynamics, contributing to disseminate awareness of adaptation mechanisms and of the need to value all levels of information.

The Polytechnic Institute of Tomar offers two Master level courses: one on Prehistoric Archaeology and Rock Art (MAPHAR) and another one in Archaeological Techniques (MTA). While the first is primarily research oriented, the second also considers a professionally oriented profile, even if research remains relevant. Both programmes are articulated with Erasmus Plus (formerly Erasmus Mundus) master programmes: Quaternary and Prehistory (IMQP, for MAPHAR) and Dynamics of Cultural Landscapes, Heritage, Memory and Conflicts (DYCLAM, for MTA), the later having a more professional-technical focus, bridging with Cultural Landscapes Management.

The programme MAPHAR is structured into five areas of training: Prehistory (including Prehistoric Art), Palaeoanthropology, Quaternary Geology (including Palaeoecology), Methods and Techniques (recording, analytical and data processing methods, including GIS) and Museography and Didactics (Cultural Heritage Management). Students obtain a fundamental understanding in the five areas, being requested to deepen at least two of those, by chosing from a wide range of optional courses. They will also participate in field work in main prehistoric sites, attend laboratory training, learn to prepare essays and papers and complete a Master thesis (evidencing the capacity to formulate a relevant research question, characterise its context and the state of the art, chose appropriate methods, undertake necessarily analysis and draw conclusions on the recorded and analysed data). If students wish to complete the European IMQP, apart from the National diploma, they will complete at least a third of the credits in a second university of the consortium: Universitá degli Studi di Ferrara, Muséum national d'Histoire Naturelle or Universitat Rovira I Virgili, Tarragona.

MAPHAR students are selected according to a grid that replicates the criteria of the international selection, within the scope of the Erasmus Plus Masters. International mobility is defined according to the students' final specialization interests, aiming to complement their training in class in certain subjects, and the eventual co-tutelage of final research.

The Master, due to its European dimension, is permanently subject to a double evaluation process. In addition to the quality assessment carried out within the scope of the IPT, Master's students evaluate all lectures weekly, as well as aspects related to global resources, workload and others. This assessment is communicated annually in detail to the European agency that coordinates the Erasmus Mundus program and to external academic evaluators.

Concerning relations with other entities, MAPHAR builds on two fundamental dimensions. One of a scientific nature, essentially managed though the Geosciences Centre of the Coimbra University, of which the IPT is one of the four associated higher education institutions (this scientific dimension involving partnerships with institutions from more than 60 countries, including Portugal, Spain, Brazil, Greece, Angola, Senegal, Namibia, Colombia, United Kingdom or China). The other dimension concerns heritage and is essentially managed through the Museum of Prehistoric Art of Mação, where is based the IPT study Center in which the courses take place. Both are essential for the development of projects that, with the support of the Foundation for Science and Technology, the European Commission or other entities, apply the master's training and the initiation of students to research. On the other hand, the course has a very strong relationship with the business community and the public sector, implemented through projects and in welcoming students in internships. This relationship, which is international due to the range of student recruitment, is fundamental to the employability of graduates. More than 90% of all students who have completed the Masters are working or have been admitted to doctoral courses.

The Master's Degree, which has several other double-degree agreements (in Brazil with the Federal University of Santa Maria, but also involving collaborations of professors from several other universities), aims to train new generations of researchers who understand the supra-regional nature of problems in prehistory, who are capable of integrating the sciences and humanities knowledge and methodologies, who master the most advanced techniques applied to research in prehistory and archaeology and who, finally, know how to inscribe research as a core component of knowledge formation in society, implementing new approaches to the management of archaeological heritage that articulate it with the global management of territories.

IPT's two archaeology master's degrees (MAPHAR and MTA) respond to different needs, from the perspective of the dynamics of today's society, but have a fundamental

identity that lies in the notions that all higher education must be eminently constructive and not merely reproductive of knowledge, that archaeology is especially useful in society as a way of interrogating the real and that values the evolution of techniques, contextualizing them in environmental transformations and relating them to cultural dynamics, over time.

In this way, both masters refuse the illusion that the immediate agendas must determine the formation for research and professional work in archaeology and prehistory, which is not contradictory with the intervention in contemporary society (for example in the context of patrimonial conflicts) as long as this assume the reconsideration of cyclical themes in a medium and long term logic.

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