



## Post-doctoral profile

### Research framework

**Work-Package:** "Environmental change and societies in the past"

**Heads:**

- Catherine KUZUCUOĞLU - LGP : *Laboratoire de Géographie Physique* [Laboratory of Physical Geography] (UMR 8591)
- Zoi TSIRTSONI - ArScAn : *Archéologies et Sciences de l'Antiquité* [Archeology and Sciences of Antiquity] (UMR 7041)

### Position description

**"Environmental dynamics and visibility of archeological sites from the 7th to the 2nd millennium BC in the southern Balkans (northern Greece and southern Bulgaria)"**

**Research proposal:**

The regions situated on either side of the border that currently separates Greece and Bulgaria have yielded very important archeological evidence in recent years, which has considerably expanded or modified our knowledge of the protohistoric settlement of South-East Europe. Some of these discoveries were somewhat or even completely unexpected because concealed by subsequent anthropogenic occupations or sedimentary deposits. This is true, for example, of the early and middle Neolithic levels (7th-6th mill. BC) brought to light by core sampling at the base of the Dikili Tash tell settlement on the Drama plain. The discovery of these levels put an end to a long series of scenarios endeavoring to account for the lack of any trace of occupation in the region prior to 5500 BC, despite its proximity to the Aegean Sea and Anatolia, both undisputed entry points for the neolithization of Europe. The success of this operation, which is a compelling example of how geomorphological investigation methods can be used to address archeological issues, prompts us to consider similar operations in other parts of the region with similar topographical characteristics (continental plains with a high aggradation rate, an active hydrographic network and dense settlement in the form of tells). Research carried out in the lower Strymon/Struma valley on the apparent depopulation of the southern Balkans in the 4th millennium BC also shows that the gaps in our historical knowledge are due in part to poor visibility of the remains by archeologists owing to problems of conservation or taphonomy.



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The proposed research position is designed to enable the successful applicant to **explore the potential for similar discoveries outside the areas already tested** and refine the protocols for future systematic and/or targeted geoarcheological investigations. The priority is to be given to two areas: a) the Thracian plain in the territory that is now Bulgaria; b) one or more of the small valleys that cross the Rhodope Mountains on the border with Greece. **These choices are based on the position of the terrains in relation to specific archeological issues** (neolithization, the transition from the Neolithic to the Bronze Age, and the transition from the Late Bronze to the Recent Bronze Age), which are also linked to the debates about the regional consequences of a number of rapid climate change (RCC) events (at, respectively, 8.2, 6.2 and 4.2 ka BP). The proposed research therefore lies within one of the main areas of investigation of our Work Package and of LabEx Dynamite in general, namely the **relationships between human activities and their records, on one hand, and the geographic setting of an area in the grip of change, on the other**. The results will not only contribute to our knowledge of the particularly rich and sensitive region of the Balkan Peninsula, they will also explore (1) the possible relationships between the preservation of archeological sites and the current and past geographic contexts in the region, and (2) the possible role of climate events and environmental dynamics on settlements and cultures in the past, after factoring in the dimension of the scope of study (local, regional or global).

## Planned collaborations

The supervisors of the proposed research have been working in the region for several years and have **solid ties with the scientific communities in both countries**. Their networks have been consolidated through a number of collaborative projects, including the long-term *Dikili Tash* program conducted jointly by France and Greece (<http://www.dikili-tash.fr/>) and the ANR (French National Research Agency) program "*Balkans 4000 : A la recherche du millénaire perdu*" (2007-2011, coordinated by Z. TSIRTSONI; geomorphological component coordinated by L. LESPEZ). This latter program, in which some 30 Greek and Bulgarian archeologists studied the transition from the Neolithic/Chalcolithic to the Bronze Age, was also the first to examine the problems of the visibility of archeological sites and its impact on the understanding of settlement processes during protohistoric periods. The surge of interest it generated is a key asset for the success of the present project, which is expected to lay the groundwork for future collaborations (a subsequent ANR or European project).

A number of archeological programs currently in progress could provide a valuable foundation for the post-doctoral project. They include the programs on the sites of *Sokol* (Univ. St. Climent Ohridski, Sofia) and *Yunatsite* (Bulgarian National Institute of Archeology and the Pazardzhik Regional Museum) in Thrace, the *Bresto* site in the upper Nestos/Mesta valley (New Bulgarian Univ.-Sofia, Blagoevgrad museum and Univ. of Heidelberg), the *Promachon-Topolnitsa* site in the Strymon/Struma valley (Bulgarian Institute of Archeology, Greek Ministry of Culture and Greek CNRS), and of course the *Dikili Tash* site (French School at Athens and Athens Archeological Society), which will enter a new cycle in 2018.

The project will be supervised as part of a **collaboration between the UMR 7041-ArScAn and the UMR 8591-LGP**. **The collaboration will be based on regular joint meetings with the post-doctoral fellow and the joint participation of the supervisors in the field trips, along with other members of both laboratories if necessary**. For their work in France, the post-doctoral fellow will be able to use both laboratories' facilities. Their main place of work will be in Nanterre (at the *Maison Archéologie*



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*et Ethnologie*), where they will have an office and a fully-equipped computer at the ArScAn premises, but a workstation will also be made available during their stays at the LGP. For their bibliographical research and the formalization of the data gathered, the post-doctoral fellow will be guided by Z. TSIRTSONI assisted by the other archeologists from the UMR 7041 ArScAn Aegean protohistory team working in the region (P. DARQUE, D. MALAMIDOU, T. THÉODOROPOULOU and S. PRÉVOST-DERMARKAR). They will be able to use the very extensive library at the *Maison Archéologie et Ethnologie* and the specialized library held by the Aegean protohistory team. The post-doctoral fellow will also be able to use the material and human resources of the UMR 8591-LGP. They will have access to (1) field equipment (LabEx geophysical prospecting equipment, soil auger, corer) and (2) the platform for analyzing sediments and biological micro-remains, depending on their skills and in collaboration with the staff. They may draw on collaborations with the *PaléoMex* program (2010-2020, INEE) led by L. Lespez, and on supervision of their work, which may be provided by A. Gauthier (palynology) and Cl. VIRMOUX (geophysical prospecting).

## Required skills and abilities

The person hired will be tasked with **evaluating the taphonomic context of the region's archeological sites, based on field research, and testing the paleoenvironmental potential of sediment archives** in order to establish the most promising areas for future geoarcheological research (to be carried out in other projects) and, in consultation with the project supervisors and the local partners, propose the best strategy for conducting this research. The post-doctoral fellow will therefore need to be thoroughly conversant with the **standard geomorphological investigation methods** (field prospection, section studies, auger sampling, core sampling if necessary) **suited for archeological issues and the search for anthropogenic sediments** of the type found at protohistoric sites in the Aegean and Balkan regions (accumulations of structured depositions, remains of destruction layers caused by fire, concentrations of botanical macro-remains, pottery shards, etc.). They must have the necessary background training to correctly interpret the main paleoenvironmental clues in the field (geomorphology and pedology) and, if possible, in the laboratory (sedimentology and bioindicators), and be capable of carrying out the necessary sampling on their own (dating of these samples may be financed by the archeological operations in progress or by supplementary funding).

Prior to and throughout their field research, the post-doctoral fellow will have to **methodically scour the literature** on the subject and on the areas of investigation, with the help of their supervisors, in order to thoroughly prepare their tasks and make optimum use of the time spent on site. Once launched, they will have to keep a meticulous record of the data collected, using the protocol and vocabulary already used for earlier research in the region.

Lastly, the post-doctoral fellow must be capable of **critically analyzing the results of their work** in order to draw broader conclusions, notably with regard to the local and regional impact of known rapid climate change events for the periods concerned.

The candidate must hold a PhD (to possess the essential level of autonomy and scientific maturity), preferably in geography-geomorphology as applied to archaeological issues. Thorough familiarity with the field of study would be an advantage.



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Additional information	
Contract start date	01/09/2018 or 01/12/2018 (as desired)
Length of contract	1 year
Post-doctoral fellow's supervisors (member(s) of the WP making the request)	Zoï TSIRTSONI (UMR 7041 ArScAn) Laurent LESPEZ (UMR 8591 LGP)
Host laboratory	<b>Laboratory name: UMR 7041 (ArScAn)</b> <b>Address:</b> Maison Archéologie et Ethnologie R. Ginouvès 21 allée de l'Université 92023 NANTERRE Cedex
Net monthly remuneration	Approx. €2,324
Contact	contact@labex-dynamite.com  zoi.tsirtsoni@mae.u-paris10.fr  laurent.lespez@lgp.cnrs.fr

## Recommendations for the candidates:

### Recruitment procedure and schedule:

The application must be submitted electronically by application form (<http://www.form-labex-dynamite.com/postdoc/en/>). It must demonstrate that the candidate fulfils the requirements indicated in the post-doctoral profile (specified tasks and skills). The application will include:

- a description of the research project (5 pages maximum) specifying the research-related issues, the methodology to be used, a feasibility report and project schedule ;
- a covering letter;
- a curriculum vitae;
- a list of publications with internet links (if available);
- the doctoral thesis (PDF version);
- the doctoral thesis defence report (not required for candidates having defended their thesis in a foreign country and for candidates having defended their thesis too recently. The latter will include a **letter confirming the forthcoming oral defence of the candidate's research thesis prior to 12 June 2018**);



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- a copy of the doctoral degree (or certificate).<sup>1</sup>

**The deadline for the submission of applications is Sunday, April 22 2018 (inclusive).**

*For your information: when the deadline has passed, the LabEx Dynamite will contact the director of the host unit and will add one letter of invitation to the application.*

The successful candidate following the assessment of the applications and interviews (which will take place during the week of 11 June 2018) will be informed of the results from 18 June 2018.

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<sup>1</sup> The thesis must have been defended fewer than five years ago.