

# RAILROADS IN HISTORICAL CONTEXT:

construction, costs and consequences  
October 11-12-13, 2013  
FOZ TUA  
Tua Valley, Alto Douro, Portugal

A conference organized in conjunction with the  
FOZ TUA - MEMORY OF THE TUA RAILWAYS AND VALLEY  
interdisciplinary project  
[www.foztua.com](http://www.foztua.com)

FOZ TUA



MIT Portugal





Tua river in Foz Tua, just before the confluence with Douro River, as seen from right margin (Alijó side), when Tua line opened. Tunnel of Prezas, the first tunnel when leaving Foz Tua station in direction to Mirandela, can be seen together with the metallic viaduct.

Photo by Emidio Biel, 1887. Biel was one of the most important portuguese photographers, end 19th century. He was based in Porto, but made a lot of works in Douro - but only one collection is kown from Tua Valley. At this stage, no road neither the bridge for motor traffic - they were built in the 40's of XX century.

Throughout the first half of the 20th century the railway line of Tua / Bragança (begun in 1883, completed the first step (Mirandela) in 1887 and the second leg (Bragança) in 1906) was the “great highway” for the transport of people and goods in and out of the region of the upper Douro River, home to the viticulture made world famous in Port wine. This feat of mountain engineering, and the first railroad built by Portuguese engineers and contractors, allowed a previously remote region easy access to the city of Porto and hence to the main of Portugal (beyond Marão, the mountains that lay between the region and the litoral area), and on to the wider world. One hundred years later this heritage and memory deserves to be retrieved, recorded, analyzed and

disseminated. Those who would promote both economic growth and regional development have a lot to learn from the lessons of the past and must build upon it.

This project intends to challenge the academic community to study one century-long history of railways and development in a peripheral region (Trás os Montes) of a peripheral country. To publicize the memory and the “stories” of the line and to discuss its role in the region and enhance its common heritage. An integrated, interdisciplinary, “apolitical” project about the history and memory of the line may join the communities related to Tua valley. Tua line and its regional role have not been studied, but they deserve further attention. The region has known a remarkable development during the

second half of twentieth century. It’s also an opportunity to focus on its recent history.

We propose to bring together scholars of various aspects of railroad history to share their research on the experiences of other railroad projects, in terms of their decision-making processes, the management of labor, technical difficulties to overcome, or the economic and social impact of completed lines.

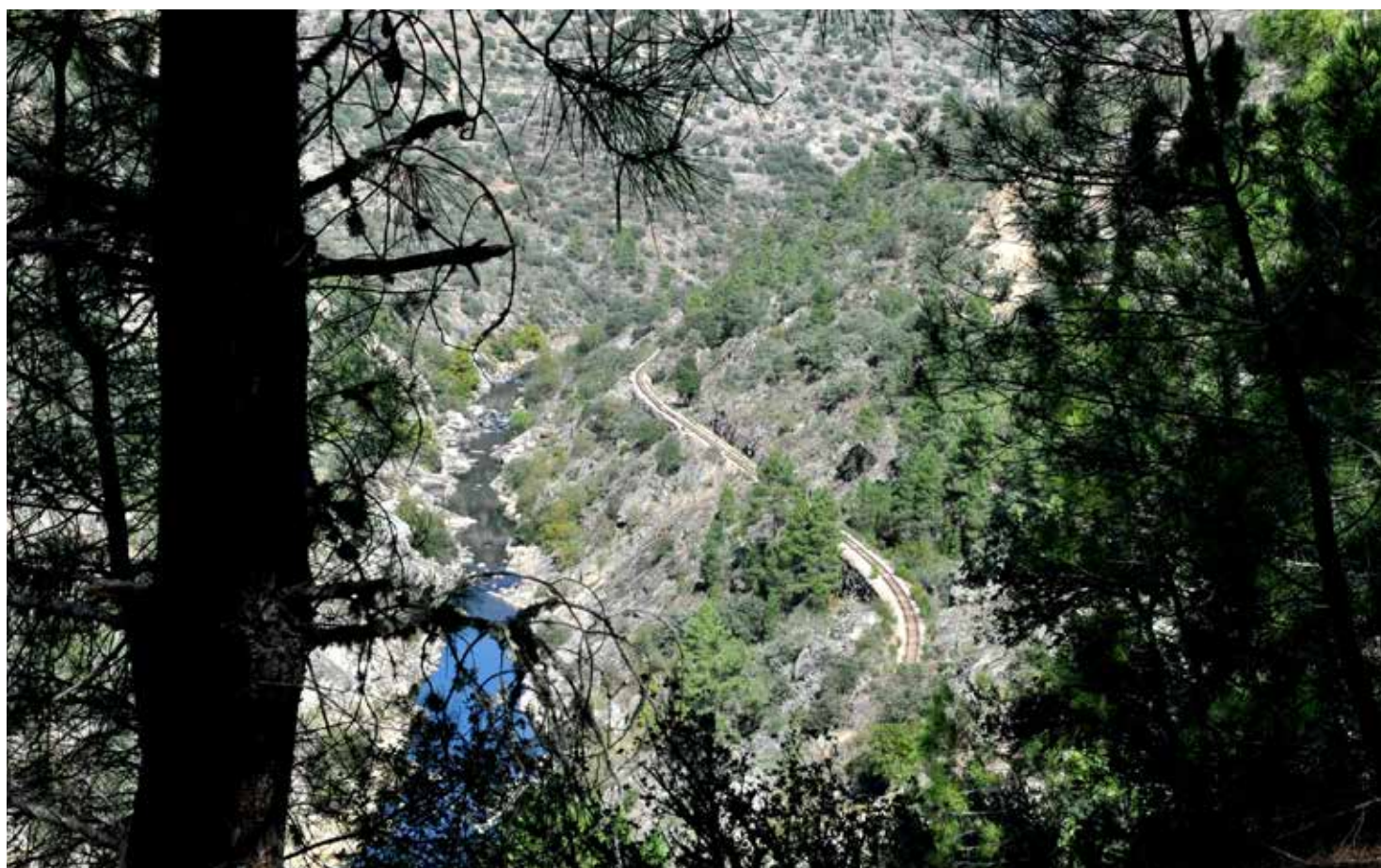
This “weekend” conference will continue to have a “research workshop” format and it will be the third one of a group of three meetings to take place in the Tua region itself, with opportunity both for the discussion of our scholarly researches in a comparative perspective, as well as



to become familiar with the unique local context and regional flavor of the Tua Valley.

We invite you to participate and to submit a paper proposal on any of the following aspects of your research:

- sitting of railroad lines and the decision to build
- technical proficiency and the diffusion of best practice
- technological spillovers
- management of labor, human capital acquisition and employment impacts
- regional economic development and the expansion of trade
- the social context of technological and economic change
- railways and railtrack technologies, construction technologies (end 19<sup>th</sup> century)
- the financing of new construction projects
- cultural value and significance
- conservation aspects, modernization and re-use
- valorization and tourism



Tua river and the railroad, around Km 13, between S. Lourenço and Brunheda.

## ABOUT THE MEETING

These research conferences are limited, invitation only, meetings of a selected group of international and Portuguese scholars interested to study Tua line history, technology and impact. Around ten to twenty foreign and ten to twenty Portuguese scholars will attend, and joint research ideas are expected to be developed. Proceedings of each annual conference will be printed. 2011 volume is already available and 2012 volume will be available for distribution during the 2013 Conference.

The conference organization will pay travel and living expenses for selected participants accepted for the meetings. Meetings are scheduled to happen during “vindimas” season (collection of grapes and wine production) in the Tua and Douro valleys, where Port wine (as well as Douro wine) vineyards are located, in a fabulous natural environment classified as a Human Heritage Site by UNESCO. The meetings will be hosted in a local site, close to Foz Tua station.





Work session during 2012 meeting, in the main room of the old house of Quinta do Tua (image from 2011 meeting in the window).



One participant during a session of 2012 conference.  
Window: Ellen Spero (from MIT, USA) speaking during 2011 meeting.

## SCHEDULE

Work sessions are scheduled for 11, 12 and 13 October 2013, around Foz Tua, in the High Douro region. Some opportunities to visit Tua Valley (and Tua railways along the Tua river and valley) will be included.

Participants are expected to arrive to Porto by the 9 of October, and to travel to Foz Tua at the end of the day. Travel between Porto and Foz Tua, and return, will be arranged by the organization, via the Douro rail line (itself a XIX century line). Participants will be back to Porto on Sunday, 13 October, afternoon, again by rail.



Group of participants in 2012 meeting. Window: 2011 meeting. Both images in the main entrance for the house of Quinta do Tua, where sessions were held.

## SITE OF THE MEETING

Working sessions will happen in the old house of an important local Tua and Douro “quinta”, just close to Foz Tua station.

This is a very old “quinta”. It has been the house of the Cockburn and the Smith families, traditional English families operating in the Porto wine business, both in production and distribution. It is locally known as the “Quinta dos Ingleses” (the farm of the English families). Previously, it was one of Dona Antonia (1811- 1896) houses, perhaps the most important character from

Douro region in the Porto wine history. It is now owned by Symington Group ([www.symington.com](http://www.symington.com)), which made the house available for this meeting. We are very much grateful for their kind hospitality.

A fabulous view of the Douro River and Tua River, as well as the river margins with their old and new terraces, can be enjoyed from the balcony of the house. And Tua railtrack crosses just in front of the house. The new Tua dam is being built just less than one kilometer from this house.





From Quinta do Tua to Foz Tua station, along Tua railroad, in the prototype of the new railrider developed by a group of PhD students of MIT Portugal Program.



Site of the conference: the house of Quinta dos Ingleses, in Foz Tua. A train is seen approaching Foz Tua station, in the bridge over the confluence of Tua and Douro rivers, Douro railroad.



## FOZTUA Project

FOZTUA Project is a joint interdisciplinary project between MIT (USA) and University of Minho (Portugal), sponsored by EDP, in order to study, preserve and disseminate the memory of Tua valley and Tua railroad. A new local nucleus about the memory will be built. Part of FOZTUA project runs with MIT Portugal program ([www.mitportugal.org](http://www.mitportugal.org)).

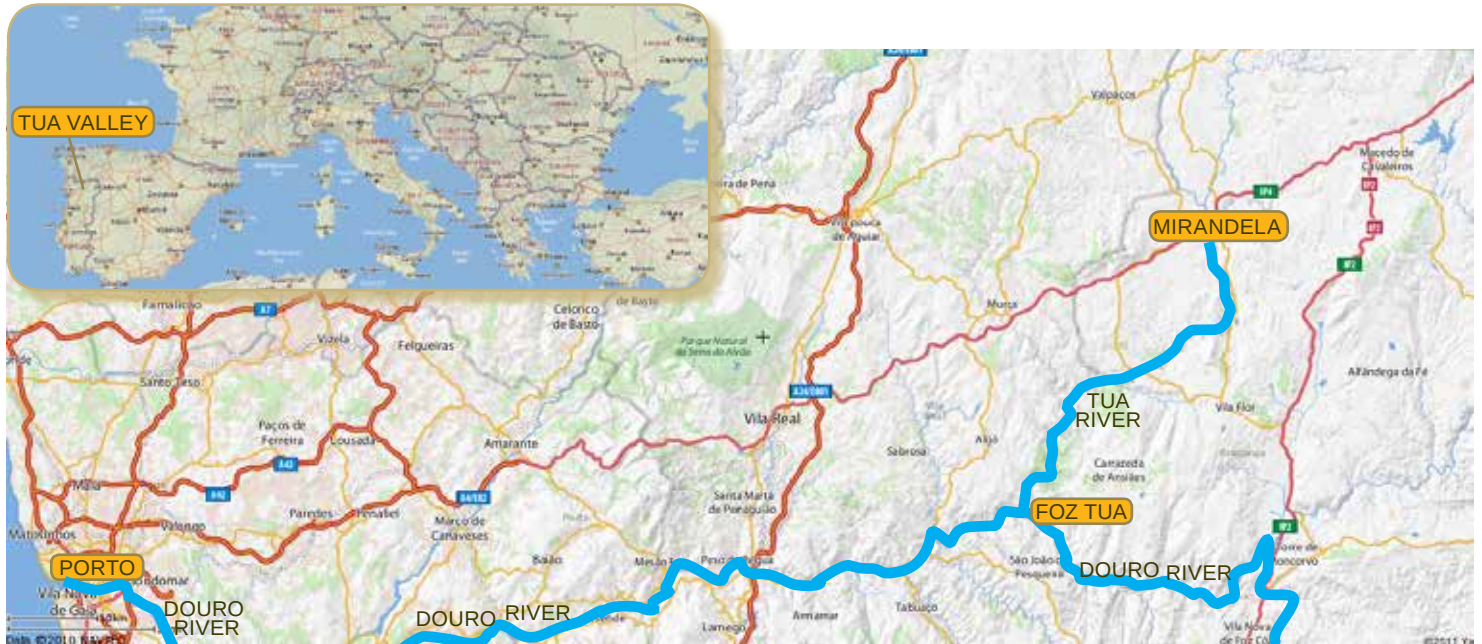
EDP, the largest Portuguese utility company ([www.edp.pt](http://www.edp.pt)), is building a new dam in Tua river, close to Foz Tua station, where Tua river meets Douro river. The new dam will submerge a section of Tua railtrack (around 11 kms), close to Foz Tua station. Tua line operations are closed from 2008, due to safety issues.

Foz Tua station is a junction between the main Douro and Tua rail lines, located at center and heart of Porto wine region (Alto Douro – High Douro region). Douro line runs from Porto to close the eastern border with Spain, along Douro valley. Tua line runs from Foz Tua station to Mirandela city, along Tua valley. It used to run until Bragança, close to the northern border with Spain.

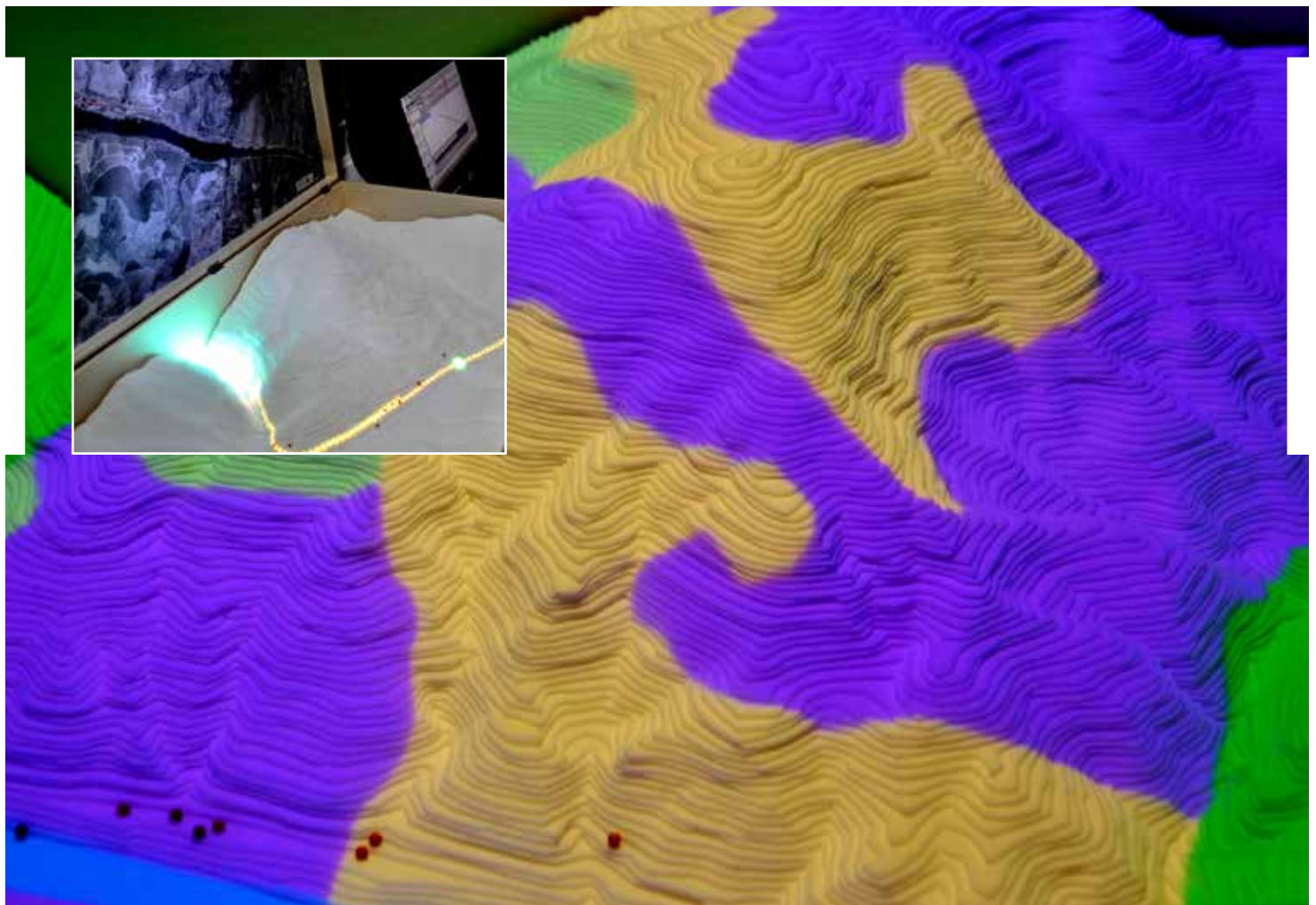


Foz Tua bridges: the railroad bridge (first plan, the first to be built), the bridge to enter Tunnel of Prezas (last plan, built 1887) and the bridge for cars (middle plan, built in 1940).





Map. from Porto city to Foz Tua station. Mirandela city is also visible in the map. Tua Line, from Foz Tua until Mirandela - Tua Valley. (from Yahoo Maps)



Maquette of Foz Tua (by School of Architecture, University of Minho) as mapped by the projection system developed by CCCGeo and shown during 2012 meeting.





Along Tua line, direction from Brunheda to S. Lourenço (2012 meeting, sunday morning)



Dining in Alijó, 2012 meeting



Arriving to S. Lourenço, after walking along the line, from Brunheda (2012 meeting)



## SCHOLARS THAT HAVE PRESENTED PAPERS IN 2011 AND 2012 MEETINGS:

ALBANO VISEU (CITCEM, Porto)	JOSÉ M. LOPES CORDEIRO (University of Minho, Portugal)
ÁLVARO FERREIRA DA SILVA (Nova School of Business and Economics, Portugal)	LUÍS ESPINHA DA SILVEIRA (U. Nova, Lisbon, Portugal)
ANA ALCÂNTARA, (U. Nova, Lisbon, Portugal)	LUIS SANTOS (Universidad Complutense, Spain)
ANTÓNIO VIEIRA (University of Minho, Portugal)	MANUEL HEITOR (IST, Lisbon, Portugal)
ANNE MCCANTS, (MIT, USA)	M. LOURDES MARTINS (University of Minho, Portugal)
BRUNO NAVARRO (U. Nova, Lisbon, Portugal)	M <sup>a</sup> MANUEL OLIVEIRA (University of Minho, Portugal)
CONCEIÇÃO SALGADO (U. Lusíada Porto, Portugal)	M. OTILIA LAGE, (CITCEM, University of Porto, Portugal)
DOMINGO CUELLAR (Museo del ferrocarril, Madrid, Spain)	M. ROE SMITH (MIT, USA)
DOMINIC FONTANA (Portsmouth University, UK)	M <sup>a</sup> FERNANDA ALEGRIA (University of Lisbon, Portugal)
EDUARDO BEIRA (University of Minho, Portugal and MIT Portugal Program; IN+ Center, Lisbon)	MARTA FELIS-ROTA (Universidad Autonoma de Madrid, Spain)
ELLAN SPERO (MIT, USA)	MICHEL COTTE (University of Nantes, France)
EURICO LOUREIRO (University of Minho, Portugal)	NUNO MIGUEL LIMA (U. Nova, Lisbon, Portugal)
GRAÇA GONÇALVES (University of Minho, Portugal)	PAULO LOURENÇO (University of Minho, Portugal)
GUENTER DINHOLB (ÖBB-Infrastruktur AG, Austria)	RICHARD HEALEY (Portsmouth University, UK)
HUGO PEREIRA (University of Porto, Portugal)	ROBERT A. MARGO (Boston University, USA)
IAN KERR (University of Manitoba, Canada)	ROBERT SCHWARTZ (Mount Holyoke College, USA)
J. COSTA LEITE (University of Aveiro, Portugal)	STEFAN BRAUCKMANN (University of Hamburg, Germany)
J. S. ESTEVES (University of Minho, Portugal)	STEFANO MAGGI (University of Siena, Italy)
JEREMY ATTACK (Vanderbilt University, USA)	TERESA NOVAIS (aNC architects and U. Lusíada, Portugal)

Full papers, slides and more information about the 2011 and 2012 meetings are available in [www.foztua.com](http://www.foztua.com)

## ORGANIZING COMMITTEE:

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