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RESEARCH CENTRE FOR TERRITORY TRANSPORTS AND ENVIRONMENT

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RECENT PUBLICATIONS

Amorim M, Antunes F, Ferreira S, & Couto A (2019) An integrated approach for strategic and tactical decisions for the emergency medical service: Exploring optimization and metamodel-based simulation for vehicle location. *Computers & Industrial Engineering* 137: 106057 (11 p.).

Antunes D, Vaze V & Antunes AP (2019) A robust pairing model for airline crew scheduling. *Transportation Science* 53(6): 1751-1771.

Antunes F, Amorim M, Pereira FC, & Ribeiro B (2019) Active learning metamodeling for policy analysis: Application to an emergency medical service simulator. *Simulation Modelling Practice and Theory* 97: 101947 (11 p.).

Cavadas J & Antunes AP (2019) An optimization model for integrated transit-parking policy planning. *Transportation* 46: 1867-1891.

Cavadas J, Azevedo CL, Farah H, & Ferreira A (2020) Road safety of passing maneuvers: A bivariate extreme value theory approach under non-stationary conditions. *Accident Analysis and Prevention* 134: 105315 (14 p.).

Conceição L, Correia GHA, & Tavares JP (2020) The Reversible Lane Network Design Problem (RL-NDP) for Smart Cities with Automated Traffic. *Sustainability* 12(3): 1226 (22 p.).

Freiria S, Tavares AO, & Julião RP (2019) The benefits of a link-based assessment of health services accessibility: Unveiling gaps in Central Region of Portugal. *Land Use Policy* 87: 104034 (9 p.).

Gama C., Pio C, Monteiro A, Russo M, Fernandes AP, Borrego C, Baldasano JM, & Tchepel O (2020) Comparison of Methodologies for Assessing Desert Dust Contribution to Regional PM10 and PM2.5 Levels: A One-Year Study Over Portugal. *Atmosphere* 11(2): 134 (22 p.).



EDITORIAL

Dear Reader,

This time, the March/April issue of our newsletter comes out with a significant delay in June. The covid pandemic seems to slow down. Most European countries are gradually reopening and life is coming back timidly to the centre of our towns and cities. From a public health point of view, and after almost three long months of strict confinement, the worst have passed for now, at least in this part of the world.

During these months, many things seemed to have changed while, paradoxically, most of our efforts were geared towards keeping our activities and institutions going on, at least as much as possible and within our means. From one day to the next, teaching moved to teleteaching, research meetings or family gatherings (it doesn't matter), to videoconferences (often times in the same platforms), shopping to teleshopping, and so on and so forth. Telecommunications and the digital world with all sorts of ready solutions to offer, quite often just plan B solutions by the way, became suddenly omnipresent and are certainly one of the few winners of this transnational pandemic crises, which rapidly degenerated into an unprecedented economic crisis. From the local to the global scale, existing social and spatial inequalities grew sharply in front of our eyes, totally out of control, in particular under populist national regimes.

At the moment, no one really knows how and to what extent this pandemic is going to change our societies and our cities and regions. Surely the smart city movement, and all the economic and technological interests behind it, associated to global ICT corporations, are already making the most out of this crisis, as emphasised by Klaus Kunzmann, in a challenging paper that will soon be published in the disP-Planning Review.

In the planning field the covid crises fueled the already wide ranging and prolific research literature tackling the societal processes of change, transition and transformation, and their consequences on the urban environments. For many years, planners and researchers have been fascinated with change and we, at CITTA, are no exception. Different research groups have been devoting their efforts to explore further the complexity of this topic, particularly in relation to urban and climate policies. Not by chance, one of our current largest research projects is called, symbolically, "SPLACH - Planning for Change".

We are so absorbed in monitoring and theorizing transition and transformation processes in our cities, that we almost forgot what it doesn't change in our cities. And the role and importance of the *unchanged* or of the things that change rather slowly. And I'm not just referring to physical aspects, like the built environment or the physical infrastructures. I'm also talking about the local cultures and ways of life. It's on the unchanged that qualities like identity, sense of belonging, resilience or ecological balance are deeply rooted. And these qualities are essential to build strong communities, based on solidarity and inclusiveness. Perhaps we have been overlooking the role of the unchanged over the past years. I hope this is not interpreted as a conservative position because, on the contrary, I feel this is what it is really needed to move forward avoiding populisms and false recipes to deal with the pandemic crises or the climate crises. Markets love change and speed. Perhaps what we really need is, on the contrary, a new sort of urbanism. As some would say, a new slow urbanism.

It is true that it is not because we stop doing things that the very time stops. It keeps flowing as usual but the way time is perceived may be very different as this pandemic seems to show us very vividly.

Paulo Pinho

Ibraeva A, Correia GHA, Silva C, & Antunes AP (2020) Transit-oriented development: A review of research achievements and challenges. *Transportation Research Part A: Policy and Practice* 132: 110-130.

Khalili FB, Antunes AP, & Mohaymany AS (2020) Evaluating interregional freight accessibility conditions through the combination of centrality and reliability measures. *Journal of Transport Geography* 83: 102665 (13 p).

Ribeiro NA, Jacquillat A, & Antunes AP (2019) A large-scale neighborhood search approach to airport slot allocation. *Transportation Science* 53(6): 1772-1797.

Ribeiro, NA, Jacquillat A, Antunes AP, & Odoni A (2019) Improving slot allocation at Level 3 airports. *Transportation Research Part A: Policy and Practice* 127: 32-54.

Santos GGD & Correia GHA (2019) Finding the relevance of staff-based vehicle relocations in one-way carsharing systems through the use of a simulation-based optimization tool. *Journal of Intelligent Transportation Systems* 23(6): 583-604.

Zeferino JA (2020) Optimizing the location of aerial resources to combat wildfires: a case study of Portugal. *Natural Hazards* 100(3): 1195-1213.



Recent times for CITTA's Transport Analysis and Planning (TAP) group were so intense - not to say hectic - that it is practically impossible to describe them in a single page, and some occurrences that would otherwise be mentioned in this text had to be left behind.

Amongst our accomplishments in the last six months, I highlight our involvement in the organization of two 1-day workshops and one 3-day symposium (SOAR), as well as the efforts we made in the preparation of eight applications to the last call for FCT projects, covering virtually all the main research areas we have been pursuing in the group. I also highlight the publication of 14 ISI articles with participation of members of the group, to reach a total of 23 since the beginning of 2019, most of which appearing in very top Transport journals.

The workshops we have (co-)organized were the main dissemination events of two MIT Portugal exploratory research projects: ISY-AIR and WSmartRoute. The former occurred in Coimbra (Feb. 20, 2020) under the theme "Air Quality in the Urban Environment", while the theme for the latter, held in Lisbon (Feb. 19, 2020), was "Smart Waste Collection: Results and Challenges". Both have attracted around 60 participants, among which a large number of highly-qualified managers and technical staff from public entities and companies. Besides being an eloquent display of the remarkable work performed in both projects, these events helped us to establish or reinforce contacts that were instrumental already in the preparation of some of the applications mentioned above.

The SOAR symposium took place in Oporto (Jan. 23-25, 2020), being launched by a set of delegates to the recently completed COST Action TU1408 - Air Transport and Regional Development (ATARD). It was the first of a series aimed to discuss, in a friendly and relaxed atmosphere, cutting-edge scientific aviation developments ongoing in Europe and other COST countries, including those being achieved through a COMPETE project - Airport Slot Allocation Processes: Advances in Current Guidelines and Practices (ASAP). CITTA and INESC TEC, partners in this project, were the local organizers. We have initially planned for 25 participants but, eventually, 40 researchers from 14 countries attended this most successful symposium.

Another area of our recent activity relates to the publication of a three-volume Handbook on Air Transport and Regional Development, covering methodological approaches, case studies, and policy issues. This vast handbook, to be published soon by Routledge (Taylor & Francis), is the most prominent outcome of the ATARD COST Action. For those of us at CITTA who were strongly involved in the preparation and implementation of the action, this outcome certainly surpasses our best initial expectations.

With respect to the future, the TAP group has several challenges to overcome. One of the most important ones is to get the Universities of Coimbra and Porto into the World's top-50 of the Shanghai Ranking of Transportation Science and Technology (and into the European top-10). This is not an easy task, but neither is it impossible - it is just a matter of continuing to work hard on PhD supervisions and research projects (including the ongoing ones, ASAP and Driving2Driverless), and to keep publishing, in leading journals, high-quality articles on topics of major current interest. And have a little help from our friends of other CITTA groups...

António Pais Antunes