

## CV – Dr Emmanouil Tranos

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### Current Position

- 2019- Reader in Quantitative Human Geography, University of Bristol
- 2013-2019 **Senior Lecturer in Human Geography**, School of Geography, Environment and Earth Science, University of Birmingham (promoted to Senior Lecturer in 2018).
- 2018- Fellow at the **Alan Turing Institute**
- 2017- **City-REDI**, Birmingham Business School: Associated member

### Monograph

- Tranos, E.** (2013). *The Geography of the Internet: Cities, Regions and Internet Infrastructure in Europe*. Cheltenham, UK: Edward Elgar (New Horizons in Regional Science Series).

### Publications in refereed journals

- Tranos, E.** & Stich, C. (2019). Individual internet usage and the availability of online content of local interest: a multilevel approach. *CEUS*, in press.
- Tranos, E.** & Mack, E. (2018). Big data: A new opportunity for transport geography? *Journal of Transport Geography*.
- Arribas-Bel, D., & **Tranos, E.** (2018). Big Urban Data: Challenges and Opportunities for Geographical Analysis. *Geographical Analysis*, 50, 123-124.
- Arribas-Bel, D. & **Tranos, E.** (2018) Characterizing the Spatial Structure(s) of Cities “on the fly”: the Space-Time LISA Calendar. *Geographical Analysis*, 50, 162-181.
- Budnitz, H., Chapman, L. & **Tranos, E.** (2017) Better by Bus?: Insights into public transport travel behaviour during Storm Doris in Reading, UK. *Weather*, 73, 54-60.
- Steenbruggen, J., **Tranos, E.** & Rietveld, P. (2016) Traffic incidents in motorways: An empirical proposal for incident detection using data from mobile phone operators. *Journal of Transport Geography*, 54, 81-90.
- Tranos, E.**, & Mack, E. (2016). Broadband provision and knowledge intensive firms: a causal relationship? *Regional Studies*, 50, 1113-1126.
- Tranos, E.**, & Nijkamp, P. (2015). Mobile Phone Usage in Complex Urban Systems: a space-time, aggregated human activity study. *Journal of Geographical Systems*, 17, 157-185.
- Tranos, E.**, Gheasi, M., & Nijkamp, P. (2015). International migration: a global complex network. *Environment & Planning B*, 42, 4-22.
- Tranos, E.**, & Nijkamp, P. (2015). Editorial: Special issue on mobile phone data and geographic modelling. *Telecommunication Policy*, 39, 333-334.
- Steenbruggen, J., **Tranos, E.**, & Nijkamp, P. (2015). Data from mobile phone operators: a tool for smarter cities? *Telecommunications Policy*, 39, 335-346.
- Jacobs-Crisioni, C., Rietveld, P., Koomen, E., & **Tranos, E.** (2014). Evaluating the impact of land-use density and mix on spatiotemporal urban activity patterns: an exploratory study using mobile phone data. *Environment and Planning A*, 46, 2769-2785.

- Tranos, E., Kourtiti, K., & Nijkamp, P.** (2014). Digital urban network connectivity: Global and Chinese internet patterns. *Papers in Regional Science*, 93, 409-428.
- Tranos, E., & Davoudi, S.** (2014). The regional impact of climate change on winter tourism in Europe. *Tourism Planning & Development*, 11, 163-178.
- Tranos, E., & Nijkamp, P.** (2013). The death of distance revisited: cyber-place, physical and relational proximities. *Journal of Regional Science*, 53, 855-873.
- Tranos, E., Reggiani, A., & Nijkamp, P.** (2013). Accessibility of cities in the digital economy. *Cities*, 30, 59-67.
- Tranos, E., & Gertner, D.** (2012). Smart Networked Cities? *Innovation: The European Journal of Social Science Research*, 25, 175-190.
- Tranos, E.** (2012). The causal effect of the Internet infrastructure on the economic development of the European city-regions. *Spatial Economic Analysis*, 7, 319-337.
- Tranos, E.** (2011). The topology and the emerging urban geographies of the Internet backbone and aviation networks in Europe: a comparative study *Environment and Planning A*, 43, 378-392.
- Tranos, E., & Gillespie, A.** (2011). The urban geography of Internet backbone networks in Europe: roles and relations. *Journal of Urban Technology*, 18, 35– 49.
- Tranos, E., & Gillespie, A.** (2009). The spatial distribution of Internet backbone networks in Europe: a metropolitan knowledge economy perspective. *European Urban and Regional Studies*, 16, 423-437.
- Petrakos, G., & **Tranos, E.** (2008). Egnatia Odos and regional development. A theoretical and experimental study. *Review of Economic Science*, 14, (in Greek).

#### **Publications in edited volumes and other publications**

- Tranos, E., Steenbruggen, J. & Nijkamp, P.** (2019) Mobile phone operators, their (big) data and urban analysis. In Mulhal, R., Andres, L. & Bryson, J. (eds.) *Regeneration Economies*. In press.
- Tranos, E.** (2018). Internet Backbones. In B. Warf (Eds.), *The SAGE Encyclopedia of the Internet*. In press.
- Tranos, E.** (2016). The Internet and its geography, growth and (digital) social capital. In R. Shearmur, D. Doloreux & C. Carrincazeaux (Eds.), *Handbook on the Geography of Innovation* (356-369). Northampton, MA: Edward Elgar.
- Tranos, E.** (2015). Book review: An introduction to R for spatial analysis and mapping by C. Brunsdon & L. Comber. *Environment and Planning B*, 43, 435-436.
- Tranos, E.** (2014). Networks in the innovation process. In M. M. Fischer & P. Nijkamp (Eds.), *Handbook of Regional Science* (pp. 489-504). Berlin - Heidelberg: Springer.
- Tranos, E., & Nijkamp, P.** (2014). Digital infrastructure and physical proximity. In A. Torre & F. Wallet (Eds.), *Regional development and proximity relations* (pp. 267-290). Northampton, MA: Edward Elgar.
- Tranos, E., & Nijkamp, P.** (2014). Urban and regional analysis and the digital revolution: challenges and opportunities. In B. Derruder, S. Conventz, A. Thierstein & F. Witlox (Eds.), *Hub cities in the knowledge economy* (pp. 145-162): Ashgate.
- Tranos, E.** (2013). Book review: Complexity, Cognition and the City by J. Portugali. *Environment and Planning B*, 40, 183-184.
- Lückenköter, J., Langeland, O., Langset, B., **Tranos, E.**, Davoudi, S., & Lindner, C. (2013). Economic effects of climate change on Europe's regions. In P. Schmidt-Thomé & S. Greiving (Eds.), *European climate vulnerabilities and adaptation: A spatial planning perspective* (pp. 95-112). West Sussex: Wiley&Blackwell.

**Tranos, E.** (2011). e-Regional Science: why should regional science focus on the digital revolution? *Regional Insights*, 2, 5.

### **Work in progress**

Stich, C., **Tranos, E.**, Musolesi, M. & Lehman, S. Spatial contexts and their role for behavioural dynamics. *Environment and Planning B*. Revise and Resubmit.

**Tranos, E.** Social network sites and knowledge transfer: a geographical perspective. *Under review*.

Budnitz H., **Tranos, E.** & Chapman, L. Exploring the Influence of Weather on the Choice Not to Travel. *Under review*.

**Tranos, E.** & Ioannides, Y. Ubiquitous digital technologies and spatial structure. *Under review*.

**Tranos, E.** & Stich, C. Individual internet usage and the availability of online content of local interest: a multilevel approach. *Under review*.

**Tranos, E.** & Budnitz, H. Online social media: a knowledge resource for SMEs? First draft presented at the 5<sup>th</sup> Global Economic Geography Conference, 2018.

**Tranos, E.**, Kitsos, T. & Ortega-Argiles, R. Digital economy in the UK regions: the effect of the early adopters. First draft presented in ERSA 2018.

Stich, C., **Tranos, E.**, Nathan M. & Gong, Z. Shoreditch: a bottom-up analysis of a cluster using archived web data. First draft will be presented in AAG 2019.

### **Research grants**

2018 **ESRC – IAA**, Clustering of economic activities in space: understanding their evolution using web archived data, PI (£13k).

2018 **BRIDGE**, University of Birmingham – University of Illinois, UK regions and digital interdependencies, PI (£15k).

2017-18 **ESRC – CDRC Innovation fund**, Online behaviour in the UK: an individual and contextual analysis, PI (£60k).

2017 **University of Birmingham**, GEES pump priming fund, Doing internet archaeology to reveal the evolution of the digital economy in the UK: looking at the past to learn about the future, PI (£3k).

2017-20 **JPI Urban Europe ERA-NET**, Smart Shrinkage Solutions – Fostering Resilient Cities in Inner Peripheries of Europe, Co-I (€1,9M, £108k UoB part).

2016 **NERC**, Added Value Activities in Innovation, Co-I (£150k).

2015 **University of Birmingham** seed corn fund to build links with JRC on Big Data and Transport Analysis (£1k).

2012 **Dutch Ministry** of Infrastructure and the Environment (DMIE), Mobile phone data and motorways: traffic and incidents analysis (VU Amsterdam part: €15k).

2010 **ESPON** Telecommunication and IT-Rollout Update, CURDS, Newcastle University (£15k).

**ESF-COST** Conference: Future Internet and Society: A Complex Systems Perspective, Acquafredda di Maratea 2-7 October 2010 (travel grant).

**Cornell University**, Summer Institute on Managing Transitions to Sustainable Communities and Regions, June 14-18, Ithaca, US (travel grant).

2008-09 **PhD Grant**, GPS, Newcastle University (£12k).

2007-09 **Marie Curie**, participation to the 2<sup>nd</sup>, 3<sup>rd</sup> and 4<sup>th</sup> PREPARE ERSA Summer Institutes: The Modelling of (Spatial) Interaction, 2007 Bratislava; Spatial Econometrics and Spatial CGE Modelling, 2008 Pecs; Regional Growth Models, 2009 Volos (travel grants).

2007 **NSF** and **ESRC**, participation to the 3<sup>rd</sup> conference for e-Social Science, Doctoral Colloquium, Michigan University, Ann Arbor, US (travel grant).

2005-08 **Greek State Scholarship** for post graduate studies in the area of “European Union, Regional

Policy and Spatial Development” (£40k *after national exams*).

### **Teaching**

- 2016 Fellow of the Higher Education Academy.
- 2016 Successful completion of Postgraduate Certificate in Academic Practice.
- 2014- Network Geographies (Module leader, 3<sup>rd</sup> year module).
- 2013- Economic Geography: Cities and Regions (2<sup>nd</sup> year module).  
Postgraduate and undergraduate dissertation supervision.  
First Year Tutorials.  
Field Course to the Lake District, Geography UG, (1<sup>st</sup> year module)  
Field Course to Malta, Planning UG, (2<sup>nd</sup> year module).
- 2012 Lecturer – Organizing and teaching a one-day intensive course on Modelling Spatial Systems: Networks and Spatial Econometrics, VU Amsterdam.
- 2011-12 Guest Lecturer – European Integration and Network Development (undergraduate), Urban and Regional Economics (postgraduate), Master Thesis supervision, VU Amsterdam.
- 2010 Adjunct Lecturer – Key Methods for Geographers (quantitative part – undergraduate), Newcastle University.
- 2006-08 Teaching Assistant – Key methods for Geographers (quantitative part – undergraduate), Economic and Social Change (Field course to Greece – UG), Introduction to Quantitative Methods, Analysis of Populations in Place and Time (PG), Newcastle University.

### **PhD Supervision**

- 2018- George Willis DREAM CDT, NPIF.
- 2017- Darryl Braganza Menezes, Institute of Applied Health Research
- 2016- Hannah Budnitz, ESRC DREAM CDT.
- 2015- Bahtiar Rifai, Government of Indonesia / World Bank.
- 2014- Christoph Stich, ESRC Advanced Quantitative Methods.
- 2010-13 Daily supervisor for four PhD students, who have successfully defended their Theses. Dept. of Spatial Economics, VU Amsterdam.

### **Editorship**

- 2017-21 Regional editor for *Regional Science Policy and Practise*.
- 2018 Editorial board of *Spatial Economic Analysis and Urban Planning*.
- 2018 Guest editor for a special issue in *Journal of Transport Geography* (Big Data: a new opportunity for Transport Geography?).
- 2018 Guest editor for a special issue in *Geographical Analysis* (Applications of Big Data).
- 2015 Guest editor for a special issue in *Telecommunications Policy* (Mobile Phone Data and Geographic Analysis).

### **Leadership and Management**

- DREAM Centre for Doctoral Training, [Birmingham Director](#).
- RGS Quantitative Methods Research Group: Conference Officer
- NECTAR Co-Chair: [ICT](#).
- RSAI - British and Irish Section, Committee Member (elected).
- RSAI Councillor-at-large [2015-2017](#) (elected).
- International Tutor (GEES, University of Birmingham).

## Esteem Indicators

- Nominated for Regional Studies Best Book Award 2014.
- 1<sup>st</sup> runner-up in the RSAI Dissertation Award 2011.
- 1<sup>st</sup> runner-up in the OPEN DAYS 2010 European-wide poster competition, European Commission and the Regional Studies Association.

## Memberships

AAG; RSAI – British and Irish Section; NECTAR.

## Invited Talks

- Tranos, E. (2019) *Networks, Network Science, Scaling and Cities*, Lecture and for the Aalto University Summer School on Transportation 2019.
- Tranos, E. (2019) *Modelling clusters from the ground up: a web data approach*, the CDRC Data Partner Forum, LIDA, University of Leeds.
- Tranos, E. (2019) *Modelling clusters from the ground up: a web data approach*, The 9<sup>th</sup> Asian Conference in Regional Science, Shanghai University. **Keynote speaker.**
- Tranos, E. (2019) *Cities, Networks and Digital Archives*, FREEPORT: Terminal MCR Festival, Abandon Normal Devices, University of Salford.
- Tranos, E. (2019) *Digital Archives and Cities: our Online Past and the Digital Economy*, The British Library, *Digital Conversations* public event.
- Tranos, E. (2018) *Digital Archives and Cities: our Online Past and the Digital Economy*, The British Library, internal seminar.
- Tranos, E. (2018) *Digital Archives and Cities: our Online Past and the Digital Economy*, 5th Planning and Regional Development Conference, Greece. **Keynote speaker.**
- Tranos, E. (2018) *Online social media: a knowledge resource for SMEs*, The Digital Society: Exploring the Social and Economic Effects of Digital Hyperconnectivity. InstEAD, Department of Economics, University of Sheffield.
- Tranos, E. (2017) Invited participant for the ESRC and CONACYT Smart Cities scoping workshop, Mexico City.
- Tranos, E. (2017) *Ubiquitous Digital Technologies and Spatial Structure*, Gesellschaft für Regionalforschung and the Austrian Institute for Economic Research, Vienna. **Keynote speaker.**
- Tranos, E. (2017) Invited lead discussant for the 'Connectivity and the Future of European Integration' Conference, Social Sciences Division Incubator Project, University of Oxford.
- Tranos, E. (2017) *Networks, Network Science, Scaling and Cities*, Lecture and workshop for the 6th Annual Alliance Graduate Summer School, Columbia University, Columbia Global Centre, Paris.
- Tranos, E. (2016) *The economic geography of the Internet 2.0*, Big Data and Society, University Complutense of Madrid. **Keynote speaker.**
- Tranos, E. (2016) *The economic geography of the Internet 2.0: digital social capital and cities*, Smart Cities: Myth or reality, University of Barcelona. **Keynote speaker.**
- Tranos, E. (2015) Lead discussant for an OECD workshop on 'The Economic and Social Benefits of Internet Openness', Paris, OECD.
- Tranos, E. (2015) Mobile phone use data as a tool for urban and transport analysis: lessons from Amsterdam, A Pint of Science, Birmingham.
- Tranos, E., Kourtiti, K. & Nijkamp, P. (2013) *Digital Urban Network Connectivity: Global and Chinese Internet Patterns*, Tinbergen Institute International Workshop, VU Amsterdam.

- Tranos, E. & Nijkamp, P. (2011) *Digital communications and the role of distance*, Tinbergen Institute International Workshop, VU Amsterdam.
- Tranos, E. (2011) *Digital data and urban and regional analysis*. Department for Planning and Regional Development, Thessaly University, Greece.
- Tranos, E. (2011) *Cyber-place and proximities: a test on quantitative patterns*. National Centre for Geocomputation, National University of Ireland, Maynooth.
- Tranos, E., & Hall, J. (2010) *Climate change and cities: A systemic analysis of climate change impacts on the urban function and urban economy*, Cambridge Centre for Climate Change Mitigation Research, Department of Land Economy, University of Cambridge.
- Tranos, E. & Gillespie, A. (2010) *Networks, Nodes and Gateways: the geography of Europe's Internet backbone*, 16th APDR Congress, University of Madeira. **Keynote speaker.**
- Tranos, E. (2010) *The causal effect of the Internet infrastructure on the economic development of the European city-regions*, Tinbergen Institute International Workshop, VU Amsterdam.
- Tranos, E. (2008) *The geography of the Internet backbone in Europe*, Spatial Development Research Unit. Aristotle University of Thessaloniki.

### **Conference organisation**

- 2019 A special session in **ERSA** 2019 entitled 'Engaging with the Digital World: the effects for society, places and individuals' (together with Tasos Kitsos and Raquel Ortega-Argiles).
- 2019 **ERSA** 2019, Scientific Committee.
- 2018 A special session in **ERSA** 2018 entitled 'Doing Regional Science with Big Data' (Together with Daniel Arribas-Bel and Francisco Rowe).
- 2018 **ERSA** 2018, Scientific Committee.
- 2018 **Mobile Tartu** 2018, Scientific Committee.
- 2018 A special session in **Mobile Tartu** 2018 entitled 'Mobile phones, travel and transportation' (together with Luc Wismans)
- 2016 A special session series and a panel in **NARSC** on 'Big Data in Regional Science and Transport' and 'Regional Science: Prospects and Challenges of Data Sharing' (together with Laurie Schintler, Karst Geurs and Elizabeth Mack).
- 2016 A special session in **AAG** entitled: 'Big Data for Urban and Regional Analysis' (together with David C. Folch and Daniel Arribas-Bel).
- 2016 **Mobile Tartu** 2016, Scientific Committee.
- 2016 **JRC-NECTAR** workshop on 'Big data: a new opportunity for urban transport and mobility policies' (together with Nicolás Ibanez and Elizabeth Mack).
- 2015 Planning and Regional Development 2015 Conference, University of Thessaly, Greece. Scientific Committee.
- 2015 **NECTAR** 2015 Conference, Scientific Committee.
- 2015 A special session in **NECTAR** entitled 'Big data and mobility: a digital framework of human communications for smarter cities' (together with Rein Ahas, Elizabeth Mack and Luc Wismans).
- 2015 A special session in **AAG** entitled: 'Big Data for Urban and Regional Analysis' (together with David C. Folch and Daniel Arribas-Bel).
- 2015 A University of Birmingham seminar series on Big Data funded by the **Institute of Advanced Studies** (together with Daniel Arribas-Bel, 2014-2015).
- 2014 A University of Birmingham workshop on Big Data funded by the **Institute of Advanced Studies** (together with Daniel Arribas-Bel and Agnieszka Leszczynski, 2014).
- 2013 A special session in **NECTAR** entitled 'Networks in the Digital Era' (together with Karst Geurs and Laurie Schintler). Member of the Conference Scientific Committee.

- 2013 Two special sessions in **AAG** entitled 'Geography and Mobile Phone Data: from theory to empirics' and 'Geography and Mobile Phone Data: is there a privacy caveat?' (together with Rein Ahas).
- 2012 A Satellite Event in **ECCS** entitled 'Complexity in Spatial Dynamics' (together with Peter Nijkamp, Michael Batty and Stewart Fotheringham).
- 2012 A special session in **RSA** entitled 'Cities, regions and the digital economy: new challenges and opportunities' (together with Peter Nijkamp).
- 2012 A special session in **AAG** entitled 'Mobile phone data and geographic modelling' (together with Peter Nijkamp).
- 2011 Complex-City **International Workshop**, VU Amsterdam, funded by the Royal Netherlands Academy of Arts and Sciences (together with Peter Nijkamp).

### Peer Review

**Research Grants:** ERC Consolidator Grant, Member of the ESRC Peer Review College, Leverhulme Trust, Israel Science Foundation; Carnegie Trust.

**Journal Articles:** CEUS, CITIES, Environment and Planning A and B, European Transport, European Urban and Regional Studies, Innovation, International Journal of Geographical Information Science, International Regional Science Review, Journal of Location Based Services, Journal of Transport Geography, Journal of Urban Technology, Land Use Policy, Landscape and Urban Planning, Letters in Spatial and Resource Sciences, NETCOM, Networks and Spatial Economics, Papers in Regional Science, Progress in Human Geography, Regional Studies, Socio-Economic Planning Sciences, Telecommunications Policy, The Professional Geographer, Transactions in GIS, Transportation Research Part F: Psychology and Behaviour, Urban Geography, Urban Studies, Journal of Regional Science, Telematics and Informatics.

### Academic qualifications

- 2006-09 **PhD**, *The geography of the Internet infrastructure in Europe*. CURDS, Newcastle University, supervisor: Prof. Andy Gillespie.
- 2005-06 **MA** in Regional Development, CURDS, Newcastle University, 71/100 (*distinction*).
- 1999-04 **Higher Degree** in Planning and Regional Development, Department of Planning and Regional Development, University of Thessaly, Duration of Studies: 5 years (**MSci equivalent**), Mark: 8.32/10 (*very good*).

### Past work experience

- 2010-13 **Postdoctoral Researcher** – Dept. of Spatial Economics, VU Amsterdam, Complexity in Spatial Dynamics (COSMIC) Project. Pls: Prof. Peter Nijkamp, Prof. Mike Batty and Prof. Stewart Fotheringham.
- 2010 **Research Associate** – ESPON Climate, GURU, Newcastle University (Prof. Simin Davoudi).  
**Research Associate** – ESPON Telecommunication and IT-Rollout Update, CURDS, Newcastle University (Prof. Andy Gillespie).  
**Commissioned contribution** to the book: Perspectives of change in the Femern Belt Region: the fixed link as a development tool (Prof. Christian W. Matthiessen).
- 2009-10 **Research Associate** – ARCADIA project, Urban Systems Modelling, Newcastle University (Prof. Jim Hall).
- 2009 **Consultant**, GHK Consulting,

- Measuring wider framework conditions for innovation.
- 2008-09 **Consultant**, IPPR, Cartography for various projects.
- 2006-09 **Research Assistant**, CURDS, Newcastle University. Various Research Projects.
- 2003-05 **Consultant**, EGNATIA ODOS S.A., Spatial Impact Observatory (case study of the implementation of the ESDP according to NordRegio).
- 2002-03 **Research Assistant**, DPRD, University of Thessaly  
Alonnisos Local Development Plan (Prof. George Petrakos).
- 2001, 05 **Consultant**, Giannakou and Co. Urban & Regional Development.