2nd International Workshop on Computational History and Data-Driven Humanities
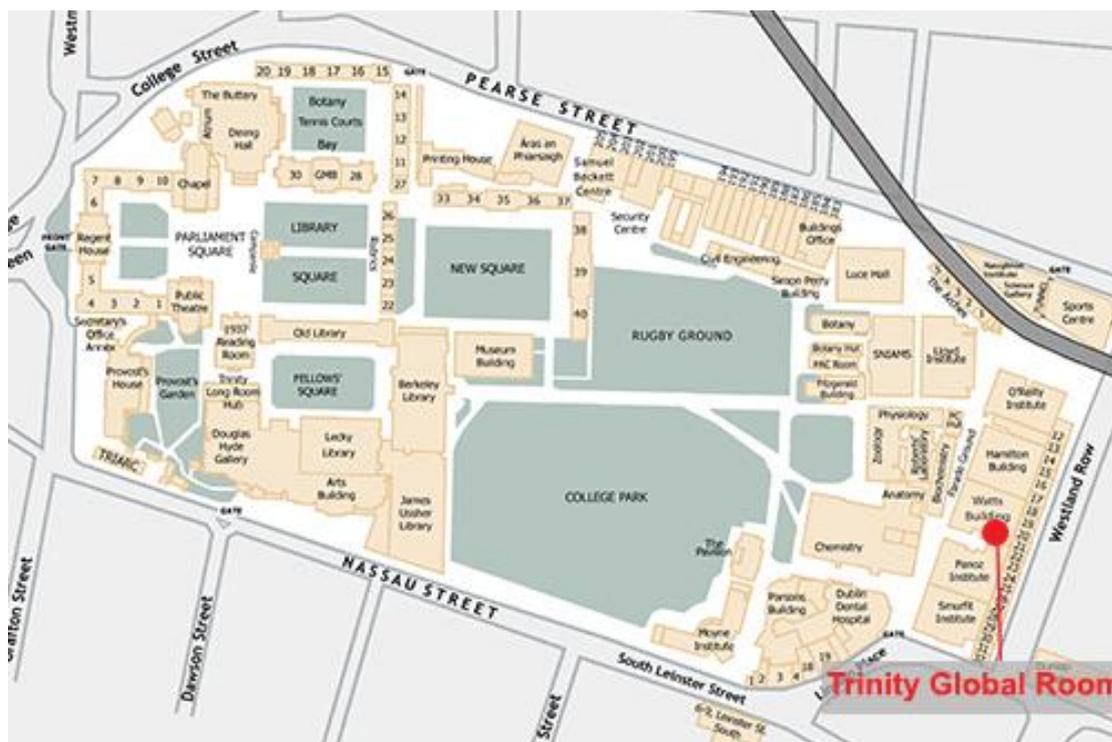
Wednesday May 25th 9.30 am – 5.15pm

As historical knowledge becomes increasingly available in forms that computers can process, this data becomes amenable to large-scale computational analysis and interpretation. What are the impacts for humanities, social sciences, computer science and complex systems? Perhaps mathematical analysis of the dynamic, evolutionary patterns observed in the data helps us to better understand the past and can even produce empirically-grounded predictions about the future.

Location

Trinity Global Room, Trinity College Dublin

The venue is on the first floor of the Watts Building, it can be accessed either through the entrance to the Hamilton building (enter building up stairs, turn right, walk 30 metres, room is on right hand side), or through the large entrance to the Watts building (enter lobby, up stairs, turn right, room is on left hand side). Signposts will be in place for guidance.

Timetable

9.30 Registration & coffee

10am Introduction & welcome
Professor Declan O'Sullivan, head of Intelligent Systems in the school of computer science and statistics, and a member of the ADAPT Centre and Aligned Project in Trinity College Dublin will introduce the workshop and welcome the participants.

10.15 Keynote - Ritual and social evolution: Understanding social complexity through data
Professor Harvey Whitehouse, will deliver the keynote address on the use of data to understand social complexity. Professor Whitehouse is at the forefront of applying data driven approaches to evaluating theories in the social sciences. He is chair of Social Anthropology, Director of the Institute of Cognitive and Evolutionary Anthropology, and a Professorial Fellow of Magdalen College at the University of Oxford. He is one of the founders of the field of cognitive science of religion. He is especially well known for his theory of "modes of religiosity", which proposes that the frequency and emotionality of rituals determines the scale and structure of religious organizations.

Seshat (http://seshatdatabank.info) is a global history databank designed to help us understand how human societies and cultural systems have evolved. Among other things, Seshat will enable us to explore the relationships between ritual, warfare and social complexity over the past ten thousand years. Based on complex systems analysis of the Seshat database our ambitious aims include: to establish laws of human history and sociocultural evolution (based on precise and testable hypotheses); more accurately predict patterns of state breakdown, civil war, and other forms of political instability; investigate the role of environmental pressures in the growth or decline of armed groups; clarify the relationship between the resourcing needs of armed groups and their structure, spread, and survival; analyze the weakening or strengthening effects of exerting military pressure on groups as well as the role of extra-regional support; establish what conditions lead to more cohesive, stable, and peaceful societies (as distinct from trying to impose 'democracy' everywhere); establish how groups generate collective goods necessary for state building; estimate the costs and other consequences of war.

11.15am Coffee Break

11.30am Peer reviewed research papers – Session 1
Presentations of research papers which were accepted by the technical program committee after peer review.

- Giovanni Colavizza. *Epidemics in Venice: on the Small or Large Nature of the pre-Modern World*
- Serge Ter Braake, Antske Fokkens, Niels Ockeloen and Chantal van Son. *Digital History: Towards New Methodologies*
- Jennifer Edmond. *Will Historians Ever Have Big Data? Theoretical and Infrastructural Perspectives*
- Simon Donig, Maria Christoforaki and Siegfried Handschuh. *Neoclassica - a new Multilingual Domain-ontology. Representing Material Culture from the Era of Classicism in the Semantic Web*

12.45pm Lunch
A light lunch and tea and coffee will be provided

1.30pm Invited Talk – Testing social theories with data. Seshat: the story so far
Professor Peter Turchin, will describe the Seshat data collection effort and demonstrate some of the early results. *Dr. Kevin Feeney* will present the data-curation infrastructure that has been put in place to support the Seshat project.

2.10pm Peer Reviewed research papers – Session 2
Presentations of the remaining research papers which were accepted by the technical program committee after peer review.

- Siobhan Grayson, Karen Wade, Gerardine Meaney and Derek Greene. *The Sense and Sensibility of Different Sliding Windows in Constructing Co-occurrence Networks from Literature*
- Erik Tjong Kim Sang. *Part-of-speech tagging of Seventeenth-Century Dutch*
- Janneke van der Zwaan, Maarten van Meersbergen, Antske Fokkens, Serge Ter Braake, Inger Leemans, Erika Kuijpers, Piek Vossen and Isa Maks. *Storyteller: Visualizing Perspectives in Digital Humanities Projects*

3.10pm Coffee

3.40pm Research Directions – invited lightning talks
Presentations by related research projects, including European Horizon 2020 projects and lightning presentations of research questions by individual researchers.

5pm – Concluding Remarks
Dr Christophe Debruyne, chair of the workshop organising committee will present some concluding remarks to close the workshop.

5.15pm – Social Event
We will reserve an area in a nearby pub and organise snacks and invite all workshop attendees.

7.30pm – Speakers Dinner
We will provide a speakers' dinner for all of those who presented at the workshop and invited guests.

Registration
The keynote speech by Professor Whitehouse will be open to the public and does not require registration. The workshop is free to attend but those who wish to attend the rest of the programme **must** register through the workshop's Eventbrite listing in advance.

https://www.eventbrite.com/e/2nd-international-workshop-on-computational-history-and-data-driven-humanities-tickets-22574873053

Accommodation
We recommend the following 3 hotels, all within 200 metres of the conference venue.

http://www.davenporthotel.ie/
http://www.montclarehotel.ie/
http://www.trinitycityhotel.com

Please note that hotels in Dublin tend to have a high occupancy rate at this time of year so it is unwise to leave bookings to the last minute. Also, for those who wish to stay on in Dublin for the weekend, there is very little hotel accommodation available for the nights of Friday the 27th and Saturday the 28th of May due to Bruce Springsteen playing 2 concerts in Croke Park. We suggest Airbnb as an alternative for the weekend if no hotel rooms are available.

Advice for Authors of Accepted Papers
All papers must be formatted according to the the Springer LNCS formatting instructions http://www.springer.com/computer/lncs for inclusion in the proceedings which will be published by Springer in the proceedings of IFIP Advances in Information and Communication Technology and made available through IFIP Digital Library.