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Dutch Social Reformers in Transnational Space, 1840–1914: Reflections on the CLARIAH Research Pilot 2TBI

Keywords

social reform activists, international congresses, linked data, online biographical data, visualization of transnational links

Abstract

Linked data is rapidly entering the practice of historical research. The project underlying this contribution (2TBI) set out to link a research database of persons who were internationally active in the 19th and early 20th century, with the person entity repository of currently online available biographical resources in the Netherlands. The result is a group of 115 Dutch social reformers, whom we can now easily trace in various datasets. The research objective of this paper is to show to what extent and in which ways these social reformers were active at the local level, on a national scale, and at international congresses, in order to explore the transnational embeddedness of the reform issues that they were involved with. This ties in with current historiographical debates about the origins of the welfare state, which look beyond the legislative achievements at the national level.

1. Introduction: research pilot

This contribution reports on the experiences and findings of a research pilot, entitled 2TBI (Towards an International Biographical Infrastructure), carried out in 2017-18 in the framework of a funding scheme of CLARIAH, targeted at short-term digital humanities projects.\(^2\) In a

\(^2\) 2TBI was carried out by teams at Maastricht University, Ghent University, Huygens ING and Lab1100. Although I have authored this paper, much preliminary work has been carried out by Judith Wolff, Hans Blomme, Lodewijk Petram and Thomas D’haeninck. I am grateful to Christophe Verbruggen – the TIC project leader – from Ghent University for his continuous support of the project. Corresponding author: Nico Randeraad, Maastricht University, Faculty of Arts and Social Sciences, Department of History, P.O. Box 616, 6200 MD Maastricht (NL), email: n.randeraad@maastrichtuniversity.nl.

\(^1\) For a description of the funding scheme and the research pilot, see https://www.clariah.nl/projecten/research-pilots/2tbi/2tbi, accessed 26 October 2018.
nutshell, 2TBI provides biographical data about Dutch social reformers, male and female, including politicians, officials, lawyers, clergymen, medical doctors, businessmen, academics, and teachers, covering the period 1840-1914. The dataset foregrounds the international activities of these reformers, and is tailored to meet the needs of transnationally oriented research.

CLARIAH stands for Common Lab Research Infrastructure for the Arts and Humanities, and is a distributed research infrastructure for the humanities and social sciences based in Amsterdam, the Netherlands. The main purpose of the research pilot was to help shaping and testing Anansi, the central data hub of the CLARIAH infrastructure, which is built on Timbuctoo software developed by the Huygens Institute for the History of the Netherlands. Huygens ING conducts and supports research into Dutch literature, history and the history of knowledge, using innovative digital methods. Anansi aims at facilitating the interdisciplinary use of Arts and Humanities datasets. It harvests the (linked) data collections from CLARIAH’s current three focus domains – socio-economic history, linguistics and media studies – and the CLARIAH research pilots, and makes these available through a web interface for easy search and exploration, and through a GraphQL endpoint and API for more complex querying. The web interface gives access to the data through collections of persons (who), locations (where) and concepts (what), which facilitates finding similarities, interconnections and enrichment possibilities in the available data.

Anansi uses the ResourceSync protocol for harvesting data. At the start of the 2TBI project, this protocol was only rudimentarily implemented in Anansi. 2TBI was important in gaining experience with the protocol and resulted in further fine-tuning of the protocol. At the end of the pilot, the set-up of the ResourceSync connection between the Nodegoat tool, used by the researchers, and Anansi was running successfully. New entries and updates by researchers are now immediately online available to users of the CLARIAH infrastructure. In the near future, it will also become possible to upload tabular files directly to Anansi and convert these to linked data.

2TBI set out to link the basic person entity repository of existing biographical resources of Huygens ING (such as the Dutch Biografisch Portaal, the most comprehensive overview of Dutch biographies) and our own TIC database, powered by Nodegoat and developed by researchers from Maastricht and Ghent University in collaboration with Labuoo. For want of high-quality RDF-databases, the process of linking was to some extent a manual exercise, but this can easily be scaled up once new datasets become available. The 2TBI persons’ data were

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2. See [http://www.openarchives.org/rs/1.1/resourcesync#PurposeScope](http://www.openarchives.org/rs/1.1/resourcesync#PurposeScope), accessed 26 October 2018, for a description of the purpose of ResourceSync.
5. The 2TBI persons’ data was semi-automatically linked to three biographical LOD resources: VIAF, Biografisch Portaal (Biography portal of the Netherlands) and Wikidata. Other relevant biographical resources, such as the data made available by the *Parlementair Documentatie Centrum* and the Compendium of office holders and civil servants 1428-1861 (Huygens ING), are not yet available as LOD resource and could therefore not be linked directly. However, the use of URIs allows for easy linkage once they also become available in the LOD cloud.
linked to the rdf version of the Biography portal of the Netherlands that is available in the CLARIAH infrastructure (https://anansi.clariah.nl/). Huygens ING created this version, which currently includes names, birth and death dates, and external identifiers (e.g. VIAF and Wikidata URIs). This version is being regularly updated and is planned to replace the original xml-version of the Biography portal in the near future. This version currently does not re-use any data of the rdf version created in the BiographyNet project (available on http://www.biographynet.nl/), as the BiographyNet version started out with a literal transformation of the original xml data, including its irregularities in names and dates. Huygens ING, however, first curated all names and date fields before transforming the data into rdf. The data enrichments generated within the BiographyNet project, which will likely be integrated with the Huygens version in due time, were not deemed immediately relevant to 2TBI.

Our aim was to create a research-question-based, linked open data environment for historical biographical research, which means that the data have been collected and linked in view of research oriented towards assessing transnational connections. The information about the persons in question includes full names, birth and death dates, professions and other affiliations, publications, and participation in international congresses. The project ties in with the increasing interest in mining biographical datasets to help answering new historical questions, in our case with a clear transnational dimension. The TIC database consists of over 23,000, mainly European and American social reformers who were active at an international level between the mid-19th century and the First World War. So far, the main criterion for including a person in the database is her or his participation in an international congress about social reform in the period 1840-1914. The main primary sources, therefore, are the published proceedings of the congresses. We have also started to add authors and receivers of letters in this domain. These international congresses of the ‘short’ 19th century, we argue on the basis of existing insight, were laboratories for the development and diffusion of reformist ideas, and hence represent an outstanding platform for further research into transnational exchange.

Although the pilot’s main aim was to advance digital humanities, and to create synergies between humanities scholars, librarians and digital specialists, this endeavor would have remained somewhat half-hearted without evaluating the usefulness of the linked data for (new) historical research. This paper presents the main findings, and lays out various directions for further research on the basis of the pilot.

2. Data analysis: social reform as a transnational endeavor

1 Niels Ockeloen et al., “BiographyNet: Managing Provenance at Multiple Levels and from Different Perspectives,” in Proceedings of the Workshop on Linked Science (LiSC) at ISWC. (Sydney, 2013), 59-71.
3 A large part of the congress proceedings has been (re-)OCR-ed is about to be made available online, including metadata, by the library of the University of Ghent.
The research objective is to show to what extent and in which ways Dutch social reformers (male and female) were active at the local level, on a national scale, and beyond the state border (at international congresses), in order to explore the transnational embeddedness of the reform issues in question. This will enable us to bypass the national bias in the historiography of the welfare state. The paper is largely based on a group of 115 people active in Netherlands (of whom 99% were Dutch), who visited one or more international congresses on social reform outside the Netherlands (ca. 250 congresses in total). We estimate that our sample of reformers and congresses represents approximately one quarter of foreign (social) congress visits by Dutchmen (see below). We only look into the organizations which they represented or were affiliated with, and which were mentioned in the congress proceedings, but also probes further into local and national backgrounds that emerge from other sources (national and/or specialized biographies, almanacs, address books, library catalogues digital resources, etc.). So, starting from the international level (i.e. participation in international congresses outside the Netherlands), we ‘gear down’ to national and local spheres of action, and thereby highlight the truly transnational space in which social reform was taking shape.

We frequently resort to the adjective ‘transnational’ to capture transfers and interconnections across borders. Using the word implies adopting a dynamic research perspective rather than denoting a fixed geographical place. For conceptual clarity we try to reserve the word ‘international’ for organizations operating in several countries or for activities taking place at a level beyond the nation-state.

We define social reform as a wide variety of activities trying to counter the adverse effects of industrialization, urbanization and globalization. These activities had many different motivations, goals, and modes. They were ‘political’, in the sense that they were often inspired by certain world views and aimed at concrete reforms in the form of social legislation, but only seldom – before the 20th century – do we see political parties emerging as the main organizational unit (with the exception of Socialists in some cases) and – almost equally seldom – do we see immediate and concrete results in the form of new laws. The reform themes varied from public and private charity to prison reform, from public hygiene to workplace accidents, and from statistics to cooperative alliances. Julia Moses, for example, has shown that the international congresses on accidents at work held between 1889 and 1914 never pushed for a binding international convention, but ‘provided a forum that governments could choose to ignore, manipulate or search for new ideas’. The congresses we have highlighted were to a large extent bourgeois endeavors; international Socialist and trade union gatherings are not included in our selection, except the international Socialist workers congress of 1889 in Paris. The mostly bourgeois reformers were active in a diffuse discursive

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12 The historiography on social reform and its transnational ramifications is rapidly growing. We have drawn our inspiration mainly from Christian Topalov, ed., Laboratoires du nouveau siècle. La nébuleuse réformatrice et ses réseaux en France, 1880–1914 (Paris: Editions de l’EHESS, 1999), and Davide Rodogno, Bernhard Struck and Jakob Vogel, eds., Shaping the Transnational Sphere. Experts, Networks and Issues from the 1840s to the 1930s (New York: Berghahn Books, 2015).

13 Julia Moses, “Policy Communities and Exchanges across Borders. The Case of Workplace Accidents at the Turn of the Twentieth Century,” in Rodogno, Struck and Vogel, eds., Shaping the Transnational Sphere, 62.
field, a ‘reformist galaxy’ in the phrase of Christian Topalov (see footnote 1), in which the worlds of politics, government, religion, art and science converged and collided, also across national borders. The transnational activities emanate from individual initiatives, friendships, correspondence, clubs, associations, bourgeois sociability, learned societies, representative bodies, administrative institutions, and the like, as has been shown – for the Low Countries – in the work of, for example, Christianne Smit, Maartje Janse, Dirk Jan Wolffram, Kaat Wils, Joris Vandendriesche, Carmen van Praet and Thomas D’haeninck.

3. Overview of reform congresses

Graph 1 gives an idea of the total number of international congresses on social reform, held in the period 1840-1914. What counts as a ‘social reform’ congress remains a point for discussion, which we do not want to solve a priori. We have cast our nets quite wide, and have also included certain medical congresses, international law congresses, statistical congresses, and the like, which one way or another addressed social reform issues that fall within the definition mentioned above. Medical congresses, for example, often focused on public health matters; at statistical congresses participants compared methods to measure contemporary social problems, such as crime, suicide and disease.

Graph 1. Overview of social reform congresses 1840-1914. The important data lines are the grey (all congresses held outside the Netherlands) and brown (2TBI) lines. Source: own calculations from Union des Associations Internationales, *Les congrès internationaux de 1681 à 1899, 1900-1914: Liste complète*, 2 vols (Brussels: Union des Associations Internationales, 1960-64).

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What one immediately observes when comparing the different colored lines is that our selection generally follows the trend of all congresses. The size of the selection is even better visible in Graph 2, which also shows the total number of Dutch participants to congresses outside the Netherlands by decade (in our selection). The rising trend is evident, and was only interrupted by the outbreak of the First World War.

**Graph 2.** Number of international social reform congresses (10-year intervals) and participation by Dutchmen, 1840-1914. Source as in Graph 1. The size of the 2TBI selection represents the state of the research on 26 October 2018.

### 4. Dutch participants

Table 1 breaks down the figures of Graph 2 in a different way, and shows the total number of Dutch participants in the 2TBI sample, divided up over male and female persons, and over two time frames. The dividing line of 1890 roughly coincides with the same 'generational' transition in congress visits that has been suggested by Thomas D’haeninck on the basis of a sample of Belgian and Dutch participants. The period after the World Exhibition of 1889 in Paris is anyway characterized by a dramatic increase in international congresses, and hence of congress visitors. It is not surprising that the number of female participants markedly increased in the period around 1900. By then, feminism had kicked off as an international social movement, which, albeit at a somewhat slower pace than in many other countries, had mobilized Dutch women.

<table>
<thead>
<tr>
<th></th>
<th>1846-90</th>
<th>1891-1914</th>
<th>1846-1914</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of participants</td>
<td>319</td>
<td>839</td>
<td>1115</td>
</tr>
</tbody>
</table>

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16 D’haeninck, *Sociale hervormers op zoek naar een moreel reveil*. 
Table 1. Number of Dutch participants (female and male) to international congresses in the 2TBI sample. Source: TIC database, 2TBI sample, also deducible from the 2TBI pages on anansi.clariah.nl. Please note that the numbers given for the two times frames do not add up to the totals, since there is a certain overlap (some people attending congresses before 1890 were also present afterwards).

<table>
<thead>
<tr>
<th>Female</th>
<th>8</th>
<th>149</th>
<th>156</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>311</td>
<td>690</td>
<td>959</td>
</tr>
</tbody>
</table>

In Social Network Graph 1 we see the total number of female participants (black nodes) and the congresses they visited (brown nodes). The congresses with an obvious feminist agenda, such as the international women suffrage conferences, are quite markedly present, but other congresses also attracted female participants, such as certain welfare congresses and the religious freethinker congresses. The visualization shows that towards the end of the 19th century and even more conspicuously after 1900 female participants began to catch up with their male counterparts as activists in the transnational sphere of social reform.

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All social network graphs are generated in Nodegoat. The size of the nodes represents the degree centrality of the node. The positions of the nodes is calculated by means of the force algorithm of the javascript library D3 (version 3.x) which implements a velocity Verlet numerical integrator for simulating physical forces on particles.
Social Network Graph 1. Reform congresses and Dutch female participants. Source: visualization created in Nodegoat based on the 2TBI sample. Congresses: brown; participants: black.

The places of residence of all participants are visualized in map 1. The western part of the country – the quadrangle Amsterdam–The Hague–Rotterdam–Utrecht is clearly (over)represented, but other places appear as well. Whereas the international congresses mainly attracted urban visitors, some topics, such as those of the international cooperative movement, lent themselves also to visitors from the countryside, for example members of Zuid Nederlandsche Zuivelbond.

Map 1. Geographical backgrounds (places of residence: blue) of the persons included in 2TBI. Nodegoat allows playing an animation which follows the participation of Dutch reformers in international congresses over time, as a network graph. Social Network Graph 2 only shows the total picture covering the entire period 1840-1914. The better readable video capture also shows the evident take-off of participation in international congresses in the 1890s. One other interesting outcome is that despite the growing specialization of congress topics (see below)
there is still a certain number of cross-visitors who link different causes, not only in the early decades, as Leonards and Randeraad have shown, but also in the period around 1900.

Table 2 shows the list of congress visitors with more than 8 congress visits (the number is to some extent arbitrary). ‘Multiple visits’ – as an indicator – resembles the multiple membership approach in social network analysis. They are indicative of proximate themes and allow the identification of boundary spanners, those persons who acted as go-betweens in the varied landscape of social reform issues. High on the list are Von Baumhauer, Van der Aa, and

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Ruysch. This result is to some extent surprising, since they are not household names in the Dutch socio-political history. W.P. Ruysch – with 25 visits outside the Netherlands – who combined various professional and personal interests (public health, temperance, housing, etc.), is until now not found in Dutch national biographies, and hence does not yet have an entry in the Biografisch Portaal. This underlines the absence of a transnational dimension in traditional biographies, not only in Dutch but in national biographies in general.  

<table>
<thead>
<tr>
<th>Name</th>
<th>Number of congress visits (in sample)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aa, Jan Simon van der</td>
<td>17</td>
</tr>
<tr>
<td>Asser, Tobias Michel Karel</td>
<td>8</td>
</tr>
<tr>
<td>Baart de la Faille, Samuel</td>
<td>10</td>
</tr>
<tr>
<td>Bachiene, Marianne Carolina Francisca</td>
<td>9</td>
</tr>
<tr>
<td>Baumhauer, Marie Matthieu von</td>
<td>15</td>
</tr>
<tr>
<td>Cuijpers, Petrus Josephus Hubertus</td>
<td>8</td>
</tr>
<tr>
<td>Engelen Daniël Otto</td>
<td>10</td>
</tr>
<tr>
<td>Goeman Borgesius, Hendrik</td>
<td>9</td>
</tr>
<tr>
<td>Gunning, Johannes Hermanus Wz</td>
<td>9</td>
</tr>
<tr>
<td>Hamel, Gerardus Antonius van</td>
<td>8</td>
</tr>
<tr>
<td>Marken, Jacob Cornelis van</td>
<td>9</td>
</tr>
<tr>
<td>Nolens, Willem Hubert</td>
<td>8</td>
</tr>
<tr>
<td>Ruysch, Willem Hubert</td>
<td>25</td>
</tr>
<tr>
<td>Snijder van Wissenkerke Frans Willem Jan George</td>
<td>9</td>
</tr>
<tr>
<td>Suringar, Willem Hendrik</td>
<td>10</td>
</tr>
<tr>
<td>Treub, Marie Willem Frederik</td>
<td>8</td>
</tr>
<tr>
<td>Verrijn Stuart, Coenraad Alexander</td>
<td>12</td>
</tr>
<tr>
<td>Zuylen, Gustaaf Eugenius Victor Lambert van</td>
<td>8</td>
</tr>
</tbody>
</table>

Table 2: Dutch congress participants with more than 8 visits. Calculations in Nodegoat based on the 2TBI sample.

5. Congress topics

A full list of international congresses taken into consideration is available on the Anansi site (see https://anansi.clariah.nl/). The visualization below groups congress visits related to similar themes. Sometimes the causes represent a series of clearly related, numbered congresses (e.g. the 1st-9th international statistical congresses, 1853-1876) but they may also combine ideologically different congresses in one concept, e.g. temperance, which sparked off gatherings of various, sometimes competing anti-alcohol groupings. What we clearly observe, also on the still, is the interrelatedness of the congresses taken into consideration (brown nodes), and the centrality of certain themes (e.g. hygiene, temperance, insurance, crime). When the visualization is run in a time-sequence, it becomes clear that the number of (specific) causes increases over time, but there are quite a few visitors who linked different causes, also in the last two decades.
Social Network Graph 3. Related causes, 1840-1914. Source: social visualization created in Nodegoat on the basis of the 2TBI sample. Themes: white; participants: black.

6. Organizations

In Table 3 we find figures on the numbers of affiliations of Dutch participants, as these emerge from the published proceedings (so without considering other sources). In the last column, the number of organizations to which congress visitors were affiliated over the entire period is given, divided up over four sectors: government and politics, academia and education, private sector, and ‘other’, mostly periodicals. In Column 2 and 3 one sees the same numbers divided up over two time frames, before and after 1890. To be sure, the totals do not add up to the total in Column since some organizations appear in both periods.

<table>
<thead>
<tr>
<th></th>
<th>1846-1890</th>
<th>1891-1914</th>
<th>1846-1914</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total</td>
<td>118</td>
<td>337</td>
<td>407</td>
</tr>
<tr>
<td>Gov&amp;Pol</td>
<td>46</td>
<td>100</td>
<td>125</td>
</tr>
<tr>
<td>Aca&amp;Edu</td>
<td>23</td>
<td>42</td>
<td>52</td>
</tr>
<tr>
<td>Private</td>
<td>45</td>
<td>187</td>
<td>218</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>8</td>
<td>12</td>
</tr>
</tbody>
</table>

Table 3. Number of organizations linked to participants in congress proceedings. Source: Calculation in Nodegoat based on the 2TBI sample.

The most conspicuous result is the increase of private organizations, coinciding with the growth of political and state organizations. Our evidence clearly shows that the growth of the state is accompanied by a substantial increase of private organizations. This runs to some extent counter to the conventional idea of growth of state responsibilities, and state penetration into society, in beginning of the 20th century. It ties in, on the other hand, with the idea of a ‘mixed economy of social welfare’ around 1900, when the spheres of ‘public’ and ‘private’ were in flux, and acquired new meanings.21

From the available datasets on Anansi – and this is arguably the largest potential benefit of the linked data environment – it is now possible to link information about local and national affiliations of persons to the data on visits to international congresses, so not only the data that are given in the congress proceedings.

In Graph 4 we see a screenshot of organizations (in red) linked to congresses (the people representing the organizations are omitted from the visualization). While political and administrative organizations (Second Chamber and ministries) are clearly prevailing, various universities are also noticeable. The only private association in this graph with a sufficiently

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high degree centrality to be depicted here is the *Volksbond tegen Drankmisbruik*, one of the largest temperance movements in the Netherlands.

**Social Network Graph 4.** Links between organizations and congresses, 1846-1914. Source: visualization created in Nodegoat based on the 2TBI sample. Organizations: red; congresses: brown (persons collapsed).

### 7. Opening new research paths: publications

During the project we also gathered the virtual international authority files (viaf numbers) of the persons involved in the sample (586 out of 115 so far). Viafs combine multiple name authority files into a single name authority service, and are used by numerous libraries around the world.\(^22\) With the help of these viafs it is relatively simple to import publication data of these people into our Nodegoat environment. The Dutch transnational reformers proved to be prolific writers. Approximately 22,000 publications, quite a few of which are already digitized, have been added to our database. First this enables us to integrate publications in our network analyses – it appears for example that a surprising number of publications were co-authored by congress visitors. Second, the digitized publications open up new ways of combining insights from the structured data with systematic text-oriented investigations of the social reform field. Distant reading of the congress participants’ writings, together with the deliberations and

\(^{22}\) [https://viaf.org](https://viaf.org), accessed 26 October 2018.
reports included in congress proceedings, allows a novel, comprehensive understanding of the transnational space in which reform ideas and practices were shared.

8. Conclusion

The CLARIAH research pilot (2TBI) presented here has resulted in one of the first biographical linked-data environments available in the Dutch academic landscape (but of course open to the world). It has been a project with a limited scope, but we are confident that many larger projects will follow, which can profit from the technical infrastructure now available at Huygens ING. 2TBI is characterized by an explicit research objective, highlighting the transnational dimension of social reform in the Netherlands around the turn of the 19th and 20th centuries. We have seen that Dutch social reformers were active in international congresses, thereby linking local and national ties with international fora, and shaping – with participants from many other countries – a transnational sphere of social reform. This research focus, embedded in the history of transnationalism, rather than an indefinite amount of data, is the reason – we believe – that the team consisting of historians, computer scientists, and data specialists has worked so well together, and delivered a ‘product’ that can stand alone and has the potential to be extended in numerous directions.

The current design very much focused on transnational ‘networking’ as a crucial factor in the history of social reform. Our use of Nodegoat as supplier of data to Anansi has been instrumental in this. Of course, this is also a limitation. As we have indicated in the last section, the ‘galaxy’ of social reform does not only consist of data on persons and their affiliations, but also includes many other elements. The next step is to ‘synchronize’ the structured data with relevant digitized texts, in order to write a more comprehensive history of the welfare state, which transcends the borders of individual nation-states, yet recognizes local, regional and national constraints.

References


Fokkens, Antske et al. “BiographyNet: Extracting Relations Between People and Events.” In Europa baut auf Biographien: Aspekte, Bausteine, Normen und Standards für eine


Rodogno, Davide, Bernhard Struck and Jakob Vogel eds. Shaping the Transnational Sphere. Experts, Networks and Issues from the 1840s to the 1930s. New York: Berghahn Books, 2015.


