Inheriting Digital Projects:
How to Keep Ibsen Alive Online

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Abstract. This paper addresses the challenge of managing digital projects on a long-term scale. In most digital projects there is no strategic plan for the afterlife and maintenance of the project results, leaving them to an uncertain fate. This can be illustrated by the inherited digital resources hosted by the Centre for Ibsen Studies at the University of Oslo, and the challenges they represent when it comes to functionality and maintenance. Due to the rapidly increasing number of digital projects, many institutions will be asking the same questions as we do: How do we keep digital resources alive and up to date in a continuously changing digital reality?

Keywords: Henrik Ibsen, Digital Editions, Sustainability, FAIR.

1   Introduction

When starting up a digital project, it is easy to underestimate what it takes to secure the results for the future. A research project on print basically needs a shelf in the library to be accessible. A digital project on the other hand needs a lot more.

The basic and most obvious need is to secure the storage of data and metadata, which takes long-term funding. However, it takes more than storage to keep a digital project alive. With every browser or software update there is a risk of losing functionality, and new technology may cause problems you weren't able to predict, leaving the website impossible to navigate or access. Even old-fashioned design may be a problem, because the visual expression on the web is constantly developing and plays a role in how we interpret what we see. If a website looks old and deserted, we suspect that it is not updated and hence not to be trusted. Functionality and appearance will often decide to which extent a website will be used and determine whether it will survive as a living resource. This means that if you want your content to be used, there will most likely be a need for updates in design and functionality.

The user's expectations to digital projects have also changed. Searching has become the main way to find what you are looking for, often skipping the built-in navigation functionality and going straight to the search field, expecting a google-like efficiency in finding what you wanted to search for, even if you use the wrong spelling.

In short, digital content that fails to meet these challenges, risks ending up on the rapidly expanding digital graveyard.

2   The Virtual Ibsen Centre (www.uio.no/ibsen)

Norway's most important playwright, Henrik Ibsen (1828–1906), is the most frequently performed dramatist in the world after Shakespeare and was a prominent participant in his contemporary cultural life, which makes him part of numerous networks and disciplines on a global scale. After years of research and documentation the Centre for Ibsen Studies at the University of Oslo now hosts a unique and rich amount of digital material related to Ibsen's life and works. The projects include the scholarly edition of Henrik Ibsen's Writings [1], the performance database IbsenStage [2], the translation project The Multilingual Ibsen [3], The Ibsen Archive [4], and The international Ibsen Bibliography [5].

However, these projects have not been part of a strategic plan. They were initiated by separate research environments, and established on different platforms and in differing formats, with the result that they are mutually incommensurable and not interoperable, despite the overlapping content.

In order to make them more easily accessible for the public, the projects were recently gathered under the portal The Virtual Ibsen Centre [6] as a temporary pilot. The different projects are presented as separate resources available from the front page, but are not integrated in each other and not available through a common search.
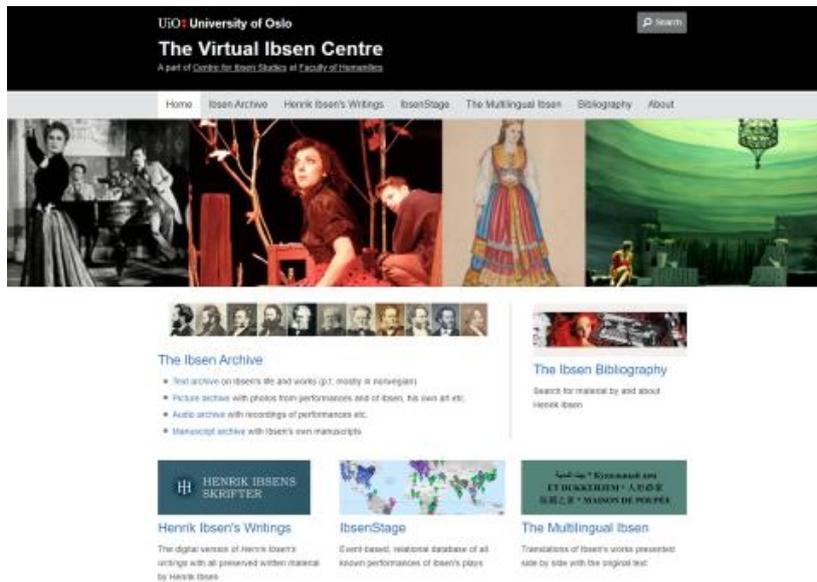

Fig. 1. The Virtual Ibsen Centre.

2.1 Henrik Ibsen's Writings (www.ibsen.uio.no)

One of the main digital resources is the scholarly edition of Ibsen's collected works. This was an ambitious pioneer project lasting from 1998 to 2010, resulting in a 33-volume book edition and a digital edition containing everything Ibsen wrote – dramas, poems, letters, speeches, articles, greetings, private notes, drawings and paintings – in transcripts and high-resolution facsimiles, commented and described in regard to cultural, historical and textual content. The transcripts and commentaries are encoded in TEI P5 XML [7], and the xml-files are available for download, as well as the formats pdf, epub and mobi (Kindle).
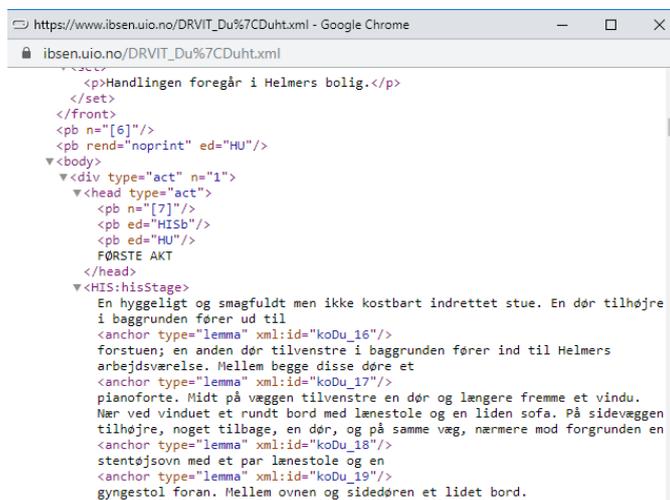
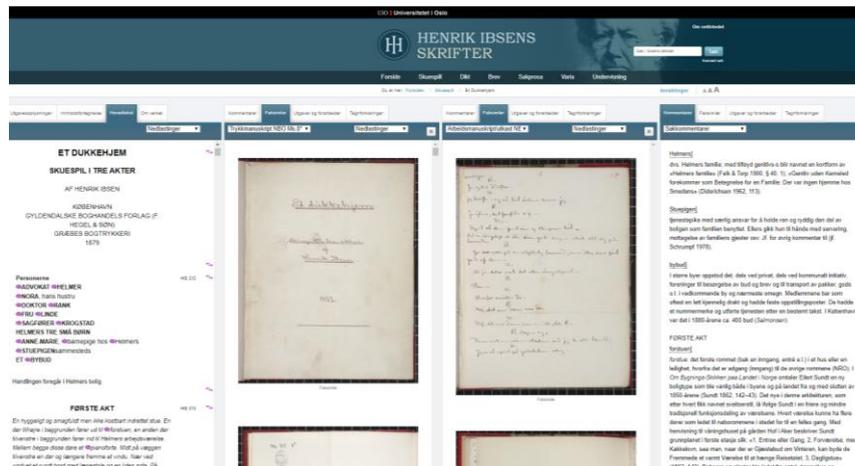**Fig. 2.** Drama encoding from Henrik Ibsen's writings.

Fig. 3. Synoptic view of transcript, manuscripts and commentaries to *A Doll's House*.

The financing of this project ran out before it was completed, leaving some issues still left to solve; facsimiles are for example only integrated for dramas and letters, not for poems, speeches and articles, even though most of the facsimiles are present in the Ibsen archive. There is also a range of obvious possibilities that have not yet been realized, for example integration with the other projects and linking to other resources, as other correspondence collections, biographical archives and cultural history institutions, and the letters would lend themselves naturally to network analysis and geospatial visualizations.

2.2   IbsenStage (www.ibsenstage.hf.uio.no)

IbsenStage is a relational database of all performances of Ibsen's plays worldwide until today. The platform is MariaDB/MySQL, developed from the Australian database Aus-Stage [8] and adapted to the Ibsen material. It provides the possibility of displaying all performances on a world map, filtered by date, country, language, work etc., and gives detailed information on events, actors, tours and theatres. It is possible to retrieve data-sets for analysis on request, but not yet from the public website.
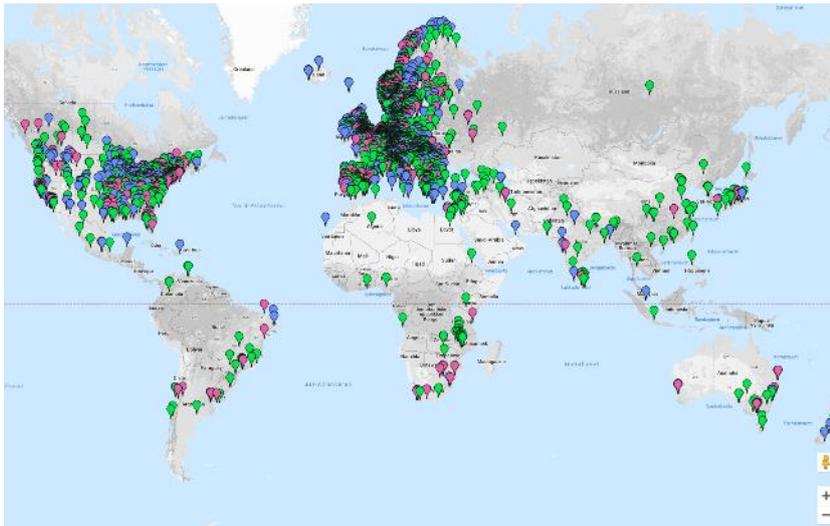

Fig. 4. Map view of three Ibsen-works.

Fig. 5. Detailed view of data on one event.

2.3   The Multilingual Ibsen (www2.hf.uio.no/polyglotta/)

This project provides a synoptic view of Ibsen's plays in multiple languages, presenting translations side by side with the Norwegian original. The texts are stored in a separate database and are encoded in HTML [9], which makes an integration with the XML-encoded Ibsen edition difficult, and the chosen Norwegian version of Ibsen's text is not identical with the one in the scholarly edition.

Fig. 6. Synoptic view of ten translations of *A Doll's House*.

2.4 The International Ibsen Bibliography (www.nb.no/bibliografi/ibsen/)

The Ibsen Bibliography contains references to material by and about Ibsen and his works. It was developed in cooperation with the Norwegian National Library and is continually updated mainly by the librarian at the Centre for Ibsen Studies. At the moment it contains more than 37 500 titles, including Henrik Ibsen's writings in the original language and in translation, rewritings and parodies of his works, and documents and audiovisual material on Ibsen's life and writings in books, theses, pamphlets, articles and films. It uses a cloud-based Library Management System, ALMA [10], and currently the metadata format MARC 21 [11]. Posts entered after 2015 are linked to digital versions of the texts if available and to the library catalogue. Old posts are stored in the original system, Mikromarc [12], and not yet linked to resources.

Fig. 7. The International Ibsen Bibliography.

2.5   The Ibsen Archive (www.hf.uio.no/is/english/services/knowledge/ibsen-archive/)

The Ibsen Archive offers a compilation of old and new material on Ibsen, made available through the University's Content Management System for web content, Vortex [13], a basic HTML-platform with limited functionality.
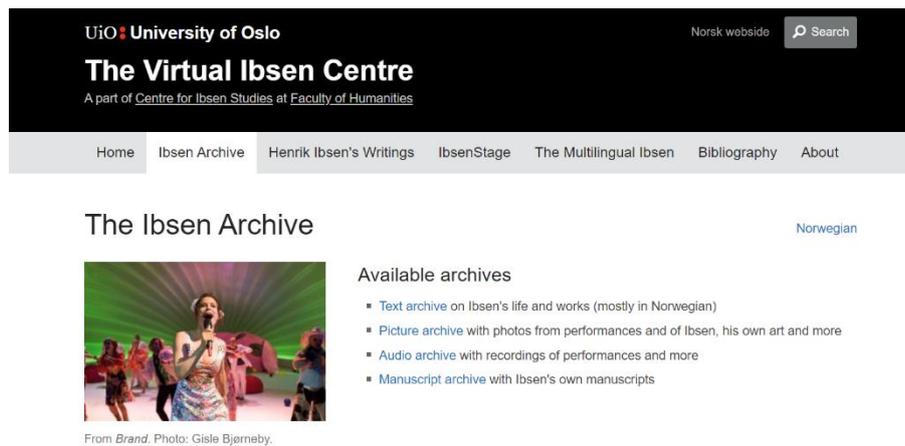

Fig. 8. Front page of The Ibsen Archive.

The main content in this archive derives from ibsen.net [14], an abandoned website developed over a period of ten years for the Ibsen anniversary in 2006, presenting Ibsen's life and works in three languages. In 2017 the external firm responsible for the website did not support the platform for the database any longer, and as the National Library did not want to invest in upgrading it, the content was handed over as raw data to the Ibsen Centre.[1] We have published some of the most important text material from this dump in the Text archive [15], a.o. the transcripts of more than 600 newspaper reviews of the first editions and contemporary performances of Ibsen's dramas. These transcripts, however, are inconsistently encoded in HTML, making them hard to integrate into the Ibsen edition, and they are therefore stored directly in the Vortex structure in the Text Archive and supplemented with links and new entries to relevant parts of the resources to broaden the accessibility of the separate projects.

The numerous photographs and facsimiles inherited from Ibsen.net have been made temporary accessible in the Picture Archive [16]. It provides a wide range of photographs, portraits and caricatures from Ibsen.net, and presents the paintings and drawings Ibsen himself made as an artist. It also consists of more than 2000 photographs from performances of Ibsen's plays worldwide through the years, including posters

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[1] Ibsen.net stopped being updated by the Norwegian National Library in 2014 and was donated as raw data to the Centre for Ibsen Studies in 2017. The original website is partly available through WayBackMachine, but only the top levels of the structure have been archived, leaving out the most important parts of the content.

from the first performances. None of these are connected to the related events in the IbsenStage database or other parts of the Ibsen resources.

While the Audio Archive [17] is under development and as of yet embeds a handful of recordings of Ibsen performances, the Manuscript Archive [18] gives access to a project that was finished in 1997, resulting in a collection of high resolution facsimiles of Ibsen's manuscripts. Most of these facsimiles, but not all, are included in the online edition of Henrik Ibsen's Writings, and until the digital edition is complete, this old website is kept available.

3 Future Perspectives

As a result of the long timespan and lack of coordination of the projects, they are left in different stages – some of them are "dead" and outdated when it comes to design and content, others are continuously updated but still in lack of some expected functionality. As the quality of digital content has improved, the users' expectations have increased accordingly, leaving old digital resources like ours with a challenge. How can we keep them alive and bring them more in accordance with the FAIR principles [19]?

To make the Ibsen content more Findable, there are some major improvement to be made: We need to establish a common search function, an index layer which makes it possible to search across all our projects at the same time. As of today, you may only search inside each of the separate projects, and some of them are not available for Google searches. The metadata will also have to be improved and translated for the projects that are not yet in both English and Norwegian, in order to make both languages searchable. Another important task will be to establish persistent identifiers in the resources where such are not present.

For the projects to be Accessible, we will need to ensure the long-term preservation of the data and of the functionality. This is especially important in the Ibsen edition, where the structure and functionality is based on complex stylesheets and vulnerable to updates. We also need to improve access to downloads and extractions of data for research purposes, text- and data-analyses and visualizations, and to establish descriptions and protocols on how to access and/or download them.

Interoperability is another major challenge. This could be improved by making the formats more uniform, possibly by converting some of the content into more broadly applicable languages, like TEI XML, which is already in use for the Ibsen edition. It may also be a solution to migrate the SQL Database IbsenStage into a uniform TEI data space. These steps would make it easier to integrate the content in different formats with each other, but would also take a lot of time and effort to accomplish.

Last, but not least, the content needs to be Reusable. One important step is to add a proper license to regulate how the content can be used, preferably choosing one of the Creative Commons licences [20]. Maybe most crucial is to develop a thorough documentation of the data and data models, describing the systems, software, scripts and databases in use. Only with this documentation will it be possible to keep the content of The Virtual Ibsen Centre usable and reusable for the future.

4 Lessons Learned

One of the main lessons to be learned from the digital Ibsen projects, is the necessity of planning for the afterlife of digital projects. Putting data on the web is not enough. You need to have a long-term strategy for how to keep data and infrastructure alive online in a presentable and functional manner for the future. This strategy should include binding agreements with the institution responsible for storage and support. It should also include using generalized platforms, broadly applicable formats supported by major libraries and research institutions, and sufficient documentation, in order to keep the project accessible on a long-term scale.

References

1. Henrik Ibsen's Writings, https://www.ibsen.uio.no, last accessed 2020/01/10.
2. IbsenStage, https://www.ibsenstage.hf.uio.no, last accessed 2020/01/10.
3. The Multilingual Ibsen, https://www2.hf.uio.no/polyglotta, last accessed 2020/01/10.
4. The Ibsen Archive, https://www.hf.uio.no/is/english/services/knowledge/ibsen-archive, last accessed 2020/01/10.
5. The International Ibsen Bibliography, https://www.nb.no/bibliografi/ibsen, last accessed 2020/01/10.
6. The Virtual Ibsen Centre, https://www.uio.no/ibsen, last accessed 2019/12/15.
7. TEI XML, https://tei-c.org/, last accessed 2019/12/15.
8. AusStage, https://www.ausstage.edu.au, last accessed 2020/01/05.
9. HTML, https://html.com/, last accessed 2019/12/10.
10. ALMA, https://www.exlibrisgroup.com/products/alma-library-services-platform/, last accessed 2020/01/10.
11. MARC 21, https://www.loc.gov/marc/bibliographic/, last accessed 2019/12/15.
12. Mikromarc, http://www.mikromarc.com, last accessed 2019/12/15.
13. Vortex, https://www.uio.no/english/services/it/web/vortex/, last accessed 2020/01/10.
14. Ibsen.net (archived), https://web.archive.org/web/20170804190348/http:/ibsen.nb.no/id/83, last accessed 2019/12/15.
15. The Text Archive, https://www.hf.uio.no/is/english/services/virtual-ibsen-centre/ibsen-archive/text, last accessed 2020/01/10.
16. The Picture Archive, https://ibsenstage.hf.uio.no/arkiv, last accessed 2020/01/10.
17. The Audio Archive, https://www.hf.uio.no/is/english/services/virtual-ibsen-centre/ibsen-archive/audio/, last accessed 2020/01/10.
18. The Manuscript Archive, https://www.hf.uio.no/is/english/services/knowledge/ibsen-archive/manuscript/, last accessed 2020/01/10.
19. FAIR principles, https://www.go-fair.org/fair-principles/, last accessed 2020/01/05.
20. Creative Commons, https://creativecommons.org/licenses/, last accessed 2020/01/05.