

CONFERENCE REPORT

“STRATEGIC PARTNERSHIPS FOR ACCESS AND DISCOVERY”, 36TH IATUL CONFERENCE: HANNOVER, GERMANY; 5-9 JULY, 2015.

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CONFERENCE SPONSORING ORGANIZATION: INTERNATIONAL ASSOCIATION OF UNIVERSITY LIBRARIES (IATUL)

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This report gives a general summary of the IATUL conference and is laid out so that the sessions attended by the author are outlined in brief. The aim of the conference was to explore collaboration, provide talks at the cutting edge of strategy, management and practice, while allowing attendees to discover state of the art developments in librarianship, worldwide. Any errors or omission are entirely the author's own.

The conference was spread over 4 days, succeeded by a half day visit to the TIB library [German National Library of Science and Technology] at Leibnitz University. A large range of topics were covered, with days being structured with a unified morning session, followed by break outs into parallel sessions. This allowed attendees to focus on topics of relevance / interest to them.

TOPIC STREAMS:

Library Strategy and Management: Methods of strategic planning and steering

Strategic Partnerships: International and national networks and alliances for improving library services

Changing Environment for Librarians: In between new types of publication, access options and discovery tools – challenges and solutions

Open Science/Science 2.0: Enabling networked web-based scientific collaboration

Management of Research Data: New approaches and best practices for data repositories

Non-textual Information: Novel ways to provide added value while managing growing data volumes

Digital Preservation: Collaborative projects, service and business models, limitations in legal framework, involving researchers in curation

DAY 1

OPENING SESSION:

The Host library *TIB* was highlighted: with 9 million items, 500 staff, 1700 workspaces, and opening 95 hours a week, as the largest science and technology library in the world. The T9 Universities were also introduced. The T9 libraries are the libraries of the nine leading German Institutes of Technology, many of whom have University status. The role and importance of IATUL was outlined, in that since its formation in 1955 IATUL has provided an international forum for the exchange of information.

KEYNOTE 1:

Martin Hofmann-Apitius: “Innovative usage of unstructured information sources: From text- and data-mining to model-driven decision-support”

This session outlined efforts undertaken to develop methods to make unstructured scientific data available in a structured format enabling computer processing. The illustrative example of a needed genome sequencing to facilitate personalized medicine was used. As each person differs, the question of how to assess the individual case becomes imperative to answer. This is especially true when one might be met with the case of a patient with 6 weeks to live. Existing tools, at the Fraunhofer Institute, for such analysis include: [Text miner](#), [Prominer](#), [SCAView](#), Dictionaries, Medline Abstracts, NLM pdf's, PMID and entities, are analysed using Named Entity Recognition (NER) and Normalization. Pro-miner pre-processes include NLP and NER [named entity recognition]. SCAviewer allows for semantic search and document retrieval. To develop this further and identify causal relationships, machine learning is needed. [KNIME](#) is leverage for this. [UIMA](#) (OS standard for content analysis) is used to identify relationships and allow for the extraction of [BEL like statements](#). This simplified syntax allows for the application of automated reasoning. Encoded queries or statements can create graphs. The process is still quite manual and input intensive. See examples of this graphing at <http://www.sciencedirect.com/science/article/pii/S1552526015000837>

A recent project (sponsored by Philip Morris) worked to create a more integrated workflow linking UIMA, SCAview, to create a semi-automated workflow called [BELIEF](#). During the project it became evident that there is a greater information gain if the full text of an item is mined as opposed to just the abstract.



This process has a 70-90% recall and precision rate for the biomedical field. As more dictionaries are added NER matches improve, the data is improved culminating in improved results.

BEL records full provenance of the process, can encode entire datasets, thus significantly speeding up the analysis process. This is especially important if you are faced with the example above, where the patient has weeks to live. There needs to be a change in the management of copyright and copyright law to allow for this type of decision support to begin saving lives, in critical time sensitive scenarios, as many databases where important research in this area do not allow for full text mining.

KEYNOTE 2: JOSÉ COTTA: “FROM OPEN ACCESS TO OPEN SCIENCE: A VISION”

Mr. Cotta outlined changes that have resulted from the appointment of the new European Commission in 2014, relative to his position in the European Commission Directorate General for Communications Networks, Content & Technology [DG Connect]. The directorate is working towards their aim of creating a single digital market, which allows for the free flow of data, including research data. Copyright reform is a very important aspect of this new direction, especially in relation to text and data mining. This move dovetails with the EU commission's policy for open science, plans to create an e-infrastructure, and the commission's emphasis on open access publishing.

As much of the research undertaken within the EU is done under the auspices of publicly funded institutions, the case grows for research, data, process and even software generated via such funding structures to be made publicly available, so the citizens of the funding countries can see the end result of the projects undertaken, and when applicable, benefit from the results. The open availability of this information is essential with the move towards evidence based decision making, but may necessitate a change in publishing, intellectual property, data protection and copyright models. Indeed Mr. Cotta called attention to issues with peer review, and indicated that this too, may also need an alternative. For example, the Horizon 2020 funding stream emphasises the open access publishing of project results, as evidenced by the OpenAIRE project.

PANEL DISCUSSION: “INFORMATION RESOURCES AND SOCIETAL CHANGE”

Chair: Peter Löwe

PANEL DISCUSSION PARTICIPANTS:

- **Martin Hofmann-Apitius**, Fraunhofer Institute SCAI
- **José Cotta**, European Commission
- **Frank Scholze**, Karlsruhe Institute of Technology University, Germany

- **Elisha Chiware**, *Director CPUT Libraries, South Africa*

This lively discussion created insight into how similar issues are in relation to sourcing funding, globally, although the scale of the funding may differ. Mr. Chiware argued that the information which users consider critical to their needs is often that which is most expensive, leaving the librarian with the need to balance budget against the provision of relevant information. Mr. Scholze, spoke about issues surrounding relating data back to the basis of science, and emerging issues around transparency and reusability vis a vie scientific data. Mr. Cotta highlighted the importance of ensuring the rules relating to copyright and data protection do not 'kill' science, especially in relation to data and text mining. Mr. Hofmann-Apitius spoke of the lack of critical thinking skills in the current generation of researchers, as they have become Google dependant. Mr Chinware, confirmed this as a global trend, while Mr. Scholze, put forward that libraries are needed as facilitators, for the teaching of skills to access scientific data commented on by Mr. Hofmann-Apitius. The importance of making research data available in its raw formats was discussed, especially in the light of young students facing societal change, not just that of the 'academic world'. Additionally the importance of exposing research published in local periodicals to global users was identified as an issue.

At the end of this session it was interesting to see the illustration of the issues and topics created by the graphical artist who was present in the main hall for the duration of the morning.

LIBRARY STRATEGY AND MANAGEMENT SESSION

ELLEN SAFLEY: "UNCOMFORTABLE – COMMITTING TO CHANGE – FINDING SUCCESS"

Ms. Safley discussed the decision of the library to become an early adopter of the Alma library platform, the issues which arose from this, and integrating it with the resource discovery layer. The project was outlined, and approaches to relieving staff stress given. In addition testing and problems which arose from going live on the new system on the first day of semester were detailed.

CAROLIN BECKER: "PERFORMANCE INDICATORS AT TUM LIBRARY"

Ms. Becker outlined, how, in pursuit of ISO9001, performance measures both qualitative and quantitative were needed which integrated into budgets, staffing structures, policy and strategy. The quality management team were able to identify data already gathered which match Key Performance Indicators (KPI's) in the German national library statistics scheme (BIX). However, the weakness of the existing data is that they focus on traditional library tasks, with over 400 KPIs for 6 dimensions. TUM decided to select 10-20 KPIs for each functional area, and consulted staff in the area as to what these should be. While some overlap arose, the library executive committee decided on the final set.

A Quality Management Officer has been put in place, and the focus on measurement moved to improving services, rather than controlling staff.

Examples of KPI's included, physical and electronic collections versus the levels of usage, and cost per use, the library as a place - down to branch level, technical services workload versus the up to datedness of services, information support requests via phone, e-mail what's app, usage of e-learning materials, Facebook reach. Only some KPI's have a target.

PETRA DÜREN: "SHADOW OF THE LEADER: HOW LIBRARY LEADERS UNDERMINE OR BOLSTER CHANGE EFFORTS"

Prof. Duren stated that with 19% of major changes evaluated as successful, there is a need for managers to use leadership skills to manage change both perpetual and deliberate, to have a vision of the outcome, a plan for the change process, and to address staff anxieties. A study was undertaken in Germany and the USA of what staff expect from managers implementing changes. While there were some similarities, there were also significant differences, indicating a different set of expectations / culture around change. For example to German speaking respondents, clear project management was more important than participating in the process. Communication was identified as a key element in both countries responses.

SIMONE FÜHLES-UBACH: "VALIDATING LIBRARY STRATEGIES BY ASSUMING THE USER PERSPECTIVE"

Dr Fuhles-Ubach put forward a new model of addressing library strategy, which has been used on New Zealand, and the UK in the business administration arena, where the strategy is looked at from the user perspective, leveraging the PRUB model. [See <https://openstrategies.com/what-is-prub-introduction> for more on this model] This should help describe what users want to do. The Horizon Report 2014, Library Edition was listed as containing examples of the types of strategies that libraries should consider applying the ORUB model to. [It can be found at <http://cdn.nmc.org/media/2014-nmc-horizon-report-library-EN.pdf>]. The common characteristics of strategies were outlined and a definition put to the attendees. All strategies should be evaluated using at least the

following questions: Is it logical? Will it definitely work? Is it worth it? Applying the PRUB model is not as easy as it looks, but it can help identify orphan projects in advance, as you can apply the model to backwards planning. It was reported that libraries are often in a sandwich position, needing to address the strategy of the host organisation, while integrating the user perspective to avoid investing in orphan projects.

It was advised that as it is hard to get user participation in strategy planning sessions, the alternative is to observe user behaviour, as in what they do, not what they say they do.

EWALD BRAHMS: "HILDESHEIM UNIVERSITY LIBRARY – USER-ORIENTED CHANGE MANAGEMENT"

Dr Brahms began by discussing change management as a business management concept, and then expanded this to library management, highlighting that change is an ongoing process, and definitely non-linear in nature. His experience indicates that there can be several change processes happening at once, all of which need to be managed, but perhaps using different approaches to do so. Hildesheim experienced significant changes as a result of external decisions regarding funding sources for the University, including the introduction of fees, which had a knock on effect on the library. In addition, parallel to this was an increase of +78% in student numbers, and + 60% in staff numbers between 2002 and 2014. Dr Brahms pointed out that libraries can make Universities more attractive, and leveraging this over 8 to 9 years allowed significant investment in library resources and facilities to be achieved. In recognition of the level of change facing the library, the librarians took part in a change management workshop. The closing remarks for day 1 included the assertion to always have a plan B.

DAY 2:

KEYNOTE 3:

WILMA VAN WEZENBEEK : "OPEN? MAKE IT EASY AND FAIR!"

Ms. Van Wezenbeek focused on the how and why of open access publishing, making the argument that everyone should have easy access to research, as science grows when you spread and use results. This also prevents the unnecessary repeating of research. The assertion was made that science is for all, and that taxpayers should have access to the research that they pay for. The point was made that open access ties to open science, open education and open ICT, which requires responsible data management along the way.

The 3TU federation in the Netherlands have been leaders in the field of data repositories, being founder of the Datacite service in the 3TU Datacentrum. [See <https://www.datacite.org/>]. Policy in the Netherlands is to work towards 100% open access publishing by 2020. To this end there have been negotiations, including the Chairs of the Dutch Universities, with Elsevier, Springer, Wiley, Sage, Oxford University Press, the American Chemical Society, Taylor and Francis, and Kluwer.

The argument was made that substantial open access output is needed to flip the publishing model in its favour. A call for a FAIR system was made.

Fair System		
F	FINDABLE	FLEXIBLE
A	ACCESSIBLE	ASSERTIVE
I	INTEROPERABLE	INNOVATIVE
R	RELIABLE	REALISTIC

KEYNOTE 4:

WOLF-TILO BALKE: "UNIVERSITY LIBRARIES – BETWEEN SERVICE PROVIDERS AND RESEARCH INSTITUTIONS"

Mr. Balke argued that the idea of the library is an old one, and now libraries have a big data problem, and need to care more about the semantics in the metadata that they index, as the aim is to provide access to knowledge. The analogy was used that trying to get information from the web was like trying to get a drink from a fire hydrant. Consequently semantic indexing of heterogonous formats is need, such as that used by Google Scholar and Microsoft Academic Search. Major challenges facing indexing at the moment include automatic indexing and searching across paths. The culture of search in the chemistry discipline was used as an example, where researcher search for the chemical structure, but by 2009 the CAS index (for which a license costs +\$30,000), had +50 million substances. The proposal was made that index retrieval interfaces are needed for every discipline, type of use and type

of person... which differentiate at the level of detail provided in the result. For example: the results to match the question 'What is the Higgs Boson particle?' need to be different for users at the primary, secondary and tertiary levels of education.

Many automated data mining approaches now exist, and libraries as information institutions need to be connected to capture the semantics of these, as a large corpus of information sources is now held external to the library itself. In addition libraries should be aware of the increasing levels of publication withdrawals as issues with quality, data massaging, and honest mistakes in research are increasingly identified.

Mr. Balke questioned how reliable Science 2.0 is, and whether it represents collective intelligence or the dictatorship of the few. Hence his call for more collaborative research, and assertion that to extract the full potential of a corpus for researchers is important so that they can truly stand on the shoulders of giants. He stated that collaborative researchers looking to achieve the full potential for their corpus need to remember that what is good for one discipline, is not necessarily so for another, as personalized knowledge spaces are still a distant hope at this point in time.

POSTERS ON STAGE:

10 posters were presented to the conference, all of which could have provided enough content for an individual parallel session.

Topics covered included:

- The united activities of 26 Latvian libraries.
- An analysis of the social networks of chemistry academics, identifying invisible colleges, who collaborates, and where collaboration is generated by this activity.
- The TIB AV portal, where descriptive metadata is automatically generated leveraging linked open data.
- Partnership approaches to strategic planning, illustrating 6 phases, 10 steps and 6 key questions.
- An approach to the digital long term preservation of human data.
- The use of social media in Academic Libraries
- New approaches to Reference Services – bridging the digital divide
- Open Science – Open Access along the research cycle, and data management tools
- Publishing in an Open Access Repository and the data management infrastructure required to support this.
- Providing free access to professional organization members to key peer reviewed resources, and the associated advice services.

CHANGING ENVIRONMENTS FOR LIBRARIANS SESSION

SAGREN MOODLEY: "REPURPOSING LIBRARY SPACE: HOW THE TEACHING AND DEVELOPMENT GRANT AND STRATEGIC PARTNERSHIPS MADE THIS A REALITY"

This speaker detailed the challenges faced by this relatively new TU (merged in 2003), with 26,000 students of whom 97% are undergraduates. Included in these challenges was the need to change the library 'as place', especially as we enter into a period where the size of the physical collection is no longer relevant, as is evidenced by the increase in e-book usage and corresponding fall in circulation. The changes which were undertaken were a strategic response to the introduction in 2010 of a student centred philosophy, aiming to create an environment conducive to learning. Specific issues were to be addressed by the project, including space for the physical collection and reducing noise levels. However, the expected funding did not materialize leading to the necessity of examining other streams of possible funding.

The library applied for funding from the teaching and development grant as the changes would support its role in supporting learning, e-learning, retention to graduate level [graduate hub], differing learning styles, and enhance information literacy provision.

2 pilot projects were undertaken and some interesting observations emerged as a result of these, for example students found the traditional issue desk, the first thing that greeted them when they came in the door, a threat. Sustainability was built into the design, with green technologies applied where practicable.

HILDEGARD SCHAFFLER: "VALUE-BASED PRICING, OPEN ACCESS, ENHANCED RIGHTS – THE IMPACT OF CURRENT TRENDS ON COLLABORATIVE COLLECTION BUILDING FOR DIGITAL RESOURCES"

Ms. Schaffler outlined her experiences as Head of Serials for the Bavarian State Library, and trends observed in relation to subscriptions, renewals, licencing and pricing while in that role. In relation to digital resources she spoke of twenty year trends, which inform what is happening today, the work of the 'International Coalition of Library Consortia', [<http://icolc.net/>] and how 'Big

Deals' emerged in response to journals crises. Models of publishing and pricing were discussed. For example 'Library Journal's' Annual survey of periodicals pricing [<http://lj.libraryjournal.com/2015/04/publishing/whole-lotta-shakin-go-in-on-periodicals-price-survey-2015/>], issues with double dipping by publishers, charging for access and charging to publish, issues with the price of Gold Standard Open Access Publishing, Mega journals which are essentially databases themselves, Hybrid models such as that used by Springer [where only selected articles are available via the open access model], PLOS publishing on the basis of scientific soundness rather than potential impact, ACS' pricing based on more non-traditional usage figures, being the introduction of a tiered pricing structure, and perhaps a next generation publishing model. Further discussion revolved around the 2012 Finch report in the UK where Gold Standard Open Access publishing was put forward as the way to go to Academics in the UK [<http://www.researchinfonet.org/wp-content/uploads/2012/06/Finch-Group-report-FINAL-VERSION.pdf>], and the 2014 Report for JISC Collections on Total Cost of Ownership Project: [<http://www.jisc-collections.ac.uk/Global/News%20files%20and%20docs/IPL-Jisc-Total-Cost-of-Ownership-Data-Capture-Report.pdf>]. It was put to the attendees that in relation to e-journals, the 'big deal' still dominates.

The 'LIBER Response to STM Statement on Text and Data Mining' was discussed in relation to copyright and licensing changes proposed at EU level, [<http://libereurope.eu/blog/2015/06/09/liber-response-to-stm-statement-on-text-and-data-mining/>], as well as Library Journals assertion that the financial tipping point for Open Access to become the dominant model still being a while away from fruition. Attendees were reminded that it is in our own interest to standardise pricing models, but be aware that usage statistics are ambivalent and value-based price analytics could be a more useful tool.

The Austrian model, which avoids double dipping, was put forward as an exemplar. The point was made that usage right should be considered in addition to access rights when negotiating licenses, with perpetual access viewed in some quarters as added value. Issues with enforcement arise, especially in relation to hosting of open access articles on local servers, and repositories, as text and data-mining rights may not automatically transfer to the local service. The Green Standard was put forward as that most beneficial to libraries and their home institutions, but the point was made that transition to this may differ across disciplines, or take very different directions, due to the differing nature of the content and subject scope.

It was noted that there are hidden costs to moving to these 'next generation' models, as those who use a lot, may also produce a lot, which in turn generates administration costs.

SHARON L. BOSTICK/BRIAN IRWIN: "CHANGING SPACES: CREATING THE NEXT GENERATION OF WORK ENVIRONMENTS FOR LIBRARY STAFF"

This joint presentation by a Librarian and an Architect was interesting in that it illustrated two differing views of the same project. The librarian's point of view was that the Architect comes to the project with a different eye. Ms. Bostick asserted that space impacts on behaviour, and that staff spaces were key to the strategic planning of the project. Currently libraries are going through a time of huge change, from storage and study to learning spaces, and becoming busier than ever as a result. This change means that Academic Libraries are now repositioned at the core of Academic Architecture. This has an impact on the special typographies applied to projects such as this, as one size no longer fits all, and spaces need to be designed to be flexible. Contemporary models of study require differing special layouts, as activities are no longer stratified; making the real issue the retro fit of one size fits all buildings to facilitate these blended activities.

Attendees were reminded that the library desk provides the visitors first impression, and asked to consider what it says about their institution. It was highlighted that to break down barriers between staff and patrons it is important not to squirrel staff away in attics, or diffuse them too far away from their collaborative teams. As libraries shift from transactions to consultations as the main business at hand, funding sources and existing building layouts can make it hard to be innovative with the use of space. It is essential therefore to look at the dynamics of the staff to be located within the space at hand. Uniform spaces / room can have multiple uses: offices, project space, group study etc. depending on need / demand. The University of Helsinki City Campus Library was examined in relation to its transition to the promotion of self-service activities with library staff moved to more consultative roles.

The project included the design of library specific furniture, including the library desk, which can be reconfigured easily. The Munday Library was discussed in relation to the desire to test out space usage and not commit to any one solution. Attendees were reminded to design based on library mission rather than staff personality, and that no one gets it right the first time.

Notable trends observed by the project team included the removal of issue desks, and their replacement with information desks, and in parallel the introduction of academic enrichment services into library spaces, in addition the introduction of consultation areas gives some flexibility. (Academic skills, CELT).

The Hunt Library [<https://www.lib.ncsu.edu/huntlibrary>] was put forward as an example of a very experimental library space where some elements of the space are very successful, in non-traditional library ways.

The project being discussed was designed to create flexible library spaces in response to organisational structure changes and to support the tasks allocated to the library, tying the project into the strategic plan. Green approaches were integrated from the beginning. The common problem of a library having a huge desk with stacks behind it was identified as a key component to be addressed. Significant effort was put into designing a flexible library modular library desk, which in the long run ended up with just one module being utilized by staff to provide services. The rest was repurposed for student use. Spaces for collaboration were included in the project design, both for staff and students.

A key lesson learned was not to design the space around operational needs. In this project it led to:

- The consolidation of some spaces to create space for new services
- The relocation of key services to improve access [the special collections and archives being the illustrative example here]
- Staff being moved out of priority spaces, including the library issue desk, which is now called the information desk
- Noise management based on the physical hierarchy of the building; quieter spaces are located higher up
- Spaces were provided for support partners where the user would need support, for example IT support on the IT floor

Achieving this was only possible via organization wide support. The Centre for Learning and Technology became an Information Literacy program partner, the Student Representative Council purchased library use laptops, an iPad zone was introduced, and faculties gave support for new equipment and furniture. The key to receiving this support was the Library being seen as a partner in academic success not just a support.

The project was done within the teaching and learning framework. It is now at the stage where the spaces need to be evaluated, as there have been +600,000 more visits.

There was a discussion around the issue of the 'copyright' of the design residing with the Architect, and the challenge that provides, as there is often a clause disallowing change to the design once the building is complete.

Mr. Irwin asked librarians to protest the lack of availability of good study furniture, and mentioned a New Zealand source.

HESTER MOUNTIFIELD: "IMPACT2: THROUGH POWER OF COLLABORATION. HOW WE INCREASED OUR IMPACT BY HELPING RESEARCHERS TO INCREASE THEIRS"

Ms. Mountifield spoke of the learning team becoming part of the library team, and the introduction of a compulsory information literacy course for all students. The focus of the University of Auckland is to improve research quality, and to this end the library began exploring the concept and tools available around research impact. This led to the idea of creating an evidence portfolio for each researcher, as there seems to never be enough information available about researchers, either to the public, or when applying for funding. This portfolio should also include a description of peer esteem. The library selected a publication management system provided by Symplectic [Elements] in the UK. [<http://symplectic.co.uk/products/elements/>]. This research information management system has significant functionality. Parallel to this discussion the Institutional Repository was relocated to the library, as the staff had the metadata management and technical skills required for the service. There are 8 full time staff dedicated to publication management on campus. Library staff skills have been utilized to leverage the system so that uploaded portfolios add value to the project. Academic members of staff can manage their own profiles and upload to the repository from there for example they can choose 'favourite' publications, or have their last eight publications show in the university directory [i.e. their top output]. This system allows for lots of metrics, including altmetrics.

In tandem with the introduction of the publication management service, a flagship Biblioinformatics Services was introduced. Consultations with Academics and Researchers indicated that they want to be aware of all the metrics which apply to their publications. To this end the library uses the SciVal [<http://www.scival.com/>] and Incites [<https://incites.thomsonreuters.com>] citation analytics tools / services. Reports can be generated for Departments / Disciplines, and can assist in raising the profile of some publications. An 'Uploadathon' was held to encourage the addition of materials to the institutional repository, with the by-line of 'increase your impact'.

The library is a sought after partner in these projects where funds from strategic development funds regarding open access publishing are made available for the delivery of services. However, it remains to be seen who / which department will pay for gold access publishing in journals by staff. The library works with the Dean of Research on this. The Research / Publication management system was relatively cheap for what it delivers. ORCID will be launched at an institutional level in the near future.

DAY 3:

STUDY TOUR: HERZOG AUGUST BIBLIOTHEK & VOLKSWAGEN AUTOSTADT

Participants in the study tour first had a guided tour of the Herzog August Bibliothek in Wolfenbüttel, and a visit to the Volkswagen Autostadt in Wolfsburg. Transport was by bus.

The Herzog August Bibliothek, is a very impressive imposing building in the centre of the town, which along with 13 other buildings comprise the library and archival storage for the German national output of the 17th century. Illuminated manuscripts, rare versions of the bible, early maps and globes all form part of a unique collection. The display and preservation methods in use were of particular interest. It was good to hear that there are funding opportunities for research to visit, but recommended that their Latin language skills are strong if planning to do so.

The visit to the Autostadt was interesting as it exposed participants to elements of automotive history, in addition to a fantastical selection of modern display equipment and techniques for a diverse range of materials. From Bugatti motor cars, to interactive touch screen displays the range of artefacts on display and the methods used to do so were simply staggering. It was an inspirational visit.

DAY 4

THE FUTURE IS ALREADY HERE ... SHORT PRESENTATIONS

EVELINDE HUTZLER/SILKE WEISHEIT: "EASY ACCESS TO OPEN ACCESS: INTEGRATION OF OPEN ACCESS PUBLICATIONS INTO THE EZB LINKING SERVICE"

The first speakers of the morning outlined the EZB link resolver service [<http://ezb.uni-regensburg.de/>] from the University of Regensburg, how it is used by almost all German institutions, and over 125 international one's, including the Library of Congress. It has access to the metadata of 80,800 journals, which is collectively collaboratively gathered. The linking services checks for full text availability against the metadata and returns results using a traffic light coding system, to indicate availability or lack thereof. The system leverages OpenURL, and offers results based on the IP origin of the query, responding to millions of requests a day.

The EZB service hopes to improve its direct article linking, especially for open access publications, and repositories. They have also worked with Bielefeld University on the base-search.net search engine for academic publication searching [<http://base-search.net/>], which allows 'open' documents to be boosted within the results listing.

LAMBERT HELLER: "AUTOMATIC HARVESTING, INDEXING AND PROVISION OF MULTIMEDIA OPEN ACCESS OBJECTS USING THE INFRASTRUCTURE OF WIKIMEDIA COMMONS AND WIKIDATA"

Mr. Heller detailed the case for the handling of pictures / images within publications, especially those with unique information content. He highlighted that some images have their own DOI allowing them to be cited separately from their original document of publication. These pictures can help understand a search result while browsing, and some can / have been licenses for reuse, as open educational resources (OER), on MOOC's, in PowerPoints, in the press. Images can cross language barriers and are therefore a powerful tool for conveying research results. It was observed that the Google images search for reusable images currently has a low rate of precision, and that some disciplines are now highly centred on digital imagery (biology, medicine, geography).

Mr. Heller went on to detail a text mining project leveraging Wikipedia and Wikidata [https://www.wikidata.org/wiki/Wikidata:Main_Page], to identify peer reviewed images. Wikipedia was chosen because it is usually returned in the top results by search engines, and is all about open access. Data was put into the Wikimedia [<https://www.wikimedia.org/>] commons and viewed on Wikidata to identify peer reviewed images. This approach is similar to how the google knowledge graph that is created from Wikidata. It was noted that there are some very advanced image recognition projects currently via Wikimedia.

SVEN STROBEL: "SEMANTIC VIDEO RETRIEVAL OF THE TIB|AV-PORTAL"

Mr. Strobel highlighted the TIB's video portal [<https://av.getinfo.de/?0>], which allow for +2900 videos / 1900 films [mostly open access] to be searched, using automatically generated metadata. Named Entity Recognition is leveraged to for the index. An

algorithm is used to disambiguate the terms. The resultant taxonomic schema is only partly semantic, with the German name registry [GND] providing sub-heading for the semantic part. Thesauri were included to increase synonym matching.

PALOMA MARÍN ARRAIZA: "VIDEO ABSTRACTS: A NEW WAY OF SCIENTIFIC COMMUNICATION"

Ms. Arraiza spoke of the use of video abstracts as a method of scientific communication, as it allows the author to focus on the intelligibility of their abstract content, while allowing data to be represented in a way that is beyond 2D. ACRL have guidelines for dealing with videos, while the TIB AV Portal allows citation and archiving via DOI. This also allows for the tracking of use for impact measurement. Possible issues still need to be addressed in the area of file size, workflows, rights and impact measurement, in addition to linking for semantic searching.

INA BLÜMEL: "COMPLEMENTING A RESEARCH LIBRARY'S KNOWLEDGE MANAGEMENT USING VIVO"

Ms. Blümel spoke of Vivo [<http://www.vivoweb.org/>] as a research information management system. This open source system is well maintained by the user community, and allows for the identification of sources. Open Refine [<http://openrefine.org/>] was used to try to create linked name spaces, as the information is no longer in unavailable silos. Alternatives such as Elsevier Pure, [<https://www.elsevier.com/solutions/pure>], and Research Gate [<http://www.researchgate.net/>] were all discussed.

CHIA YEW BOON: "IT ALL STARTED WITH BLOGS: DEVELOPING NEW ROLES FOR LIBRARIANS IN COLLABORATING WITH FACULTY ON TEACHING, LEARNING AND RESEARCH"

Mr. Boon spoke of the library's decision to provide a blog services to staff and students. This service sees 1/3 of its traffic from outside of the Nan yang TU Campus. One issue is that students prefer ease over quality. The service is provided via a server configured to run WordPress, this allows the URL to include NTU, and makes the blog more 'official'. Training, new feature introduction and design are all provided. As are the integration of library resources and the migration of blog content to other platforms. Some students have to create a blog as part of assignments. For example Art students use it to create an online personal portfolio over the 4 years of their study. This service, while self-maintained, allows for the exposure of academic research beyond the confines of the campus. It resides within the library sphere because of the staff's skills and information awareness.

WOLFGANG STILLE: "MOBILE DISCOVERY FOR LIBRARIES AND MUSEUMS"

Mr. Stille outlined how at Darmstadt all patrons bring at least one device with them, hence, the decision to create an app to expose the collection of the library and museum to the wider world. An app is suitable in this case as the museum alone has +110,000 items which can be more easily viewed and browsed via the app than a static web page. Funding was received from the Louvre for the project. Html 5 and JavaScript were used as the base of the app to allow it to be compatible with all devices. A topic pie leverages metadata to create browse-able facets. Future plans for additional features include: personalization, a recommender, present old scanned stock, and investigating licencing with an industrial partner.

OLIVER BRIDLE: "3D PRINTING AND SCANNING: NEW WAYS TO ENGAGE WITH STUDENTS AND RESEARCHERS"

Mr. Brindle outlined the introduction of 3D printing at the Radcliffe Library. The library has a proactive strategy to provide services that the researcher would not normally expect. Options for file creation include CAD (which requires maths, design, flair and training), or online repositories of prepared files. Creative Commons licensed files can be downloaded from these and modified. One example of this is Thingiverse [<https://www.thingiverse.com/>]. Scanning an existing object is another option.

Before undertaking the project the library established the extent and general availability of other 3D printing facilities on campus. Existing services were not open for use beyond those in the Department where they were located. The library decided to offer the service as it ties into the strategy of providing access to new technologies, as evidenced by the previous projects to introduce iPads and Kindles to campus.

As the library is not trying to make a profit from the services, they can afford to run it cheaply. The selected printer uses PLA which is non-toxic. The user provides a .stl file, staff check the file is sound and there are no issues with copyright, calculate the length of

Niamh Walker-Headon, ITT Dublin, Report from IATUL conference attendance, July 2015

time required for the print job to run, and the user pays upfront. Items are available the following week. The week of the service launch there were a series of events highlighting 3D printing research.

The printer is noisy, but the service is so in demand that a second printer has had to be installed.

CLOSING SESSION

PRESENTATION OF THE 37TH IATUL CONFERENCE, 2016.

The next conference will be in Halifax, and attendees were introduced to the city and the theme "*Library Leadership in a Sea of Change: At the Bowsprit of Service*" by the hosts.

DAY 5

TOUR OF TIB LIBRARY, LEIBNITZ UNIVERSITY

The morning was taken up by the opportunity to visit the TIB library, in the Leibnitz University, providing attendees with a fascinating insight into this internationally renowned library, and its services. Of particular interest was the storage of materials both on and off site, leaving only current course materials and items borrowed in the last five year on the open stacks. This leaves the vast majority of the public space in the library available for study. Varied and flexible learning spaces were available on every floor. Group study, post graduate 'office' style rooms, and flexible instruction space were just the tip of the iceberg. We also got to see behind the scenes, with a trip to the basement to see the storage of rare materials, the scanning centre for document supply, and even the book elevator.

CONCLUDING THOUGHTS

In addition to a very busy and insightful programme, I attended some sessions with the staff of the TU9 libraries in the exhibition hall, discovering services such as Bibsonomy [<http://www.bibsonomy.org/>] on the way. Exploring the exhibition hall led to discovering library system suppliers such as H+H Software and angewandte Systemtechnik GmbH, which were previously unknown to me.

This was a very worthwhile programme, which certainly brought me more up to date with developments in the library and technology fields in a very short space of time, in addition to allowing me to meet colleagues from all around the world.

Selected photographs taken at the conference are available at:

<https://photos.google.com/story/AF1QipPOPCP8wtEwCk9l0sX3pHGAslHa2klOg5vy2oxNNNBLw2TguE78dNS9Z9qltra5LQ>