

# eLucidate

Vol. 14 Issue 2-3, Winter 2017/18

ISSN: 1742-5921

Statements and opinions expressed in this journal are those of the various authors and should not be taken as being endorsed by CILIP or UKeiG.

eLucidate's editor is Gary Horrocks email: info.ukeig@cilip.org.uk

eLucidate is published by UKeiG, the UK einformation Group.

UKeiG is a Special Interest Group of <u>CILIP</u>: the library and information association. CILIP Registered Office: 7 Ridgmount Street, London, WC1E 7AE, Registered Charity No. 313014

# Contents

Editor's Note	1
ocabulary Management at the Department for Education	4
P & Security Implications for Jointly Shared Information	12
Data, Information, Knowledge & Disruptive Technologies in an Age of Uncertainty	16
nternet Librarian International: The Think Tank for Information Professionals	21
JKeiG Professional Development Update	26
Online Resources	31
Breaking the Book: Contrasting Paradigms of Print Culture	34
The Strix Award: In Honour of Tony Kent's Life & Achievements	37
Notes for Contributors	44

### Editor's Note

Welcome to Volume 14 issue 2-3 2017/18 of UKeiG's journal eLucidate.

UKeiG is committed to promoting the theory and practice of organising digital knowledge and information. ISKO UK, the UK Chapter of the International Society for Knowledge Organisation, is one of our partner organisations, overseeing the presentation of the prestigious Tony Kent Strix Award featured in this issue. ISKO brings together researchers and practitioners who develop and apply conceptual tools like semantic analysis and faceted classification. In previous issues we have emphasised that taxonomy and effective and systematically applied metadata continue to be key to breaking down information silos in organisations by enriching and structuring content, providing semantic context and integrating and linking disparate external and internal information resources. They underpin effective data management, information management and enterprise search. Helen Challinor contributes a fascinating case study of a project - Vocabulary management at the Department for Education - that takes us back to the essential basics of information retrieval, of nomenclature and thesauri. "This case study considers the use made of controlled vocabularies at the Department for Education. It outlines the principles of vocabulary management, before explaining the uses made of controlled vocabularies within the department. It includes explanations about why decisions were taken, how users were engaged and a forward look."

Her article takes me back to my information science studies at City University, London in the early 1990s, where we painstakingly discussed "neologisms" and all things "paradigmatic." Helen writes: "Most developers have no idea that there is a science underpinning the management of subject vocabularies, and why would they? Neither do end users, and why would they? Devising innovative ways of explaining the nuances of vocabulary construction to developers and end users has been challenging, enjoyable and a significant deliverable from the project."

The 2017 Internet Librarian International (ILI) conference was a huge success. Katherine Allen, Business Development Director, Information Today Europe, writes: "Information professionals wear many hats. They are leaders in tech, organisational influencers, expert marketers, change managers, internet super searchers, and much more." One of the themes that stood out was the fundamental issue of information integrity, "fake news", "disinformation" and the significant implications for information and digital literacy. Social media nurtures a world of titillation and outrage. The critical appraisal of information resources is in our DNA, and we are moving into another era with profound ethical considerations. "The fake, the false...is an opportunity."

Jisc's Lis Parcell, in a presentation for UKeiG - "Flexing our digital muscle: beyond information literacy" - explored tools and resources to help assess digital capability in individuals, teams and organisations. "Library and information professionals have long

been recognised for expertise in information literacy, but the need for more digitally capable organisations creates new avenues for staff to develop their roles and contribute to the digital strategy of the organisation." Digital literacy is a complex and morphing concept, embracing core ICT proficiency alongside content creation and innovation, communication and collaboration, information retrieval, technology enhanced learning and digital professionalism.

I was particularly drawn by the future proofing theme during ILI; the crucial need to keep a weather eye on digital trends that may/will loom and disrupt; to jettison our cynicism of new technologies and Artificial Intelligence (AI); to thrive on uncertainty and embrace new opportunities. This evoked memories of "disintermediation", the ongoing "fear" decade on decade that emerging technologies might render the LIS profession obsolete. "Reimagine, reinvent" was a core message. Similarly, "Stay critical. Stay curious." Ned Potter, who led our successful "Social Media for Librarians" CPD event in November last year, summed it up: "Stop acting like librarians. Start a revolution."

Martin White, Managing Director of Intranet Focus Ltd, provides sobering food for thought as he considers the intellectual property and security implications of jointly shared information in collaborative environment. Claire Carter, Academic Liaison Librarian at the University of Bedfordshire, reports back on last year's eclectic and stimulating CILIP Conference.

At ILI UKeiG announced that the UKeiG Jason Farradane Award winner for 2017 was Christopher Gutteridge, Systems, Information and Web programmer at the University of Southampton. The award recognises his outstanding contribution to the information profession, raising the profile of the importance and value of information in the workplace and pioneering new and innovative ways to derive value from information. The award was presented to Christopher by David Ball, UKeiG Chair on day two of the prestigious library innovation conference. During his career Christopher has been involved in many projects that have information at their core. He was involved in open access research from the outset, pioneering the development of the EPrints platform. EPrints has a wide uptake at universities across the country and has set the expectation that universities should support open access archiving. He was instrumental in pioneering open data services at University of Southampton. The service he developed has set the standard for open data services in the UK and was recognised with the Times Higher Education award for Outstanding ICT Initiative of the Year, 2012. Christopher founded <u>Data.ac.uk</u> as a place to stimulate discussion between UK universities on the subject of open data. The service has a mailing list where good practice and success stories are shared. Data.ac.uk provides a number of services for aggregating data from multiple institutions. It's been so successful that <u>Jisc</u>, the membership organisation that supports digital solutions for the UK education sector, have taken over ownership of the service to ensure its continued existence for the whole community.

During his acceptance speech at ILI Christopher quoted science fiction writer Robert Heinlein's book "Expanded Universe" (1950.) It sums up everything in a proverbial nutshell. "The greatest crisis facing us is not Russia, not the Atom Bomb, not corruption in government, not encroaching hunger, nor the morals of the young. It is a crisis in the

organisation and accessibility of human knowledge. We own an enormous 'encyclopaedia' - which isn't even arranged alphabetically. Our 'file cards' are spilled on the floor, nor were they ever in order. The answers we want may be buried somewhere in the heap, but it might take a lifetime to locate two already known facts, place them side by side and derive a third fact, the one we urgently need. Call it the crisis of the Librarian. We need a new 'specialist' who is not a specialist, but a synthesist. We need a new science to be a perfect secretary to all other sciences." There we have it.

eLucidate is published three times per volume: around spring, summer and winter and an archive of previous issues is available here. We endeavour to feature contributions from experts in the field, keeping members up to date with developments and innovations in the digital information industry, considering the impact on information professionals and consumers of e-information. Core topics for consideration include: digital literacy, effective information retrieval and search technologies, intranets, social media, open access, e-publishing and e-industry research and development. UKeiG encourages the submission of articles and reports about any of the topics covered by the journal, and contributions and suggestions for content can be emailed to me at: info.ukeig@cilip.org.uk

Pease refer to Notes for Contributors for further information.

Enjoy, and please give us your feedback and join us in discussions on social media.

### Gary Horrocks

Editor - eLucidate info.ukeig@cilip.org.uk LinkedIn **Twitter** 

# Vocabulary Management at the Department for Education

### Helen Challinor

### helen.challinor@education.gov.uk

Helen Challinor is the Departmental Taxonomist and Information Standards Librarian at the Department for Education. She has 25 years' experience of working in government libraries in a range of roles from enquiry services to thesaurus management.

### Summary

This case study considers the use made of controlled vocabularies at the Department for Education. It outlines the principles of vocabulary management, before explaining the uses made of controlled vocabularies within the department. It includes explanations about why decisions were taken, how users were engaged and a forward look.

#### Introduction

A controlled vocabulary, in its broadest sense, means different things to different people. It could be anywhere on a spectrum from a flat (non-hierarchical), alphabetical list, to an ontology with complex semantic relationships and all points in between.

Here the focus will be on the role played by a master controlled vocabulary file, from which we derive a hierarchical subject taxonomy and many flat pick lists. Together these drive a number of IT systems within the Department for Education (DfE). By using a single controlled master, we are able to provide a consistent approach to managing our information in these systems.

Controlled vocabularies are governed by standards and rules, but there are decisions to be made as projects evolve. These decisions have long lasting implications. How and why we made them is just as important as determining the subject content of the taxonomy.

User engagement is another important area in the development of any subject taxonomy. Every member of staff has to interact with our terms to a greater or lesser extent. This means that it is essential to have clear vocabulary structures in place and good support available, should it be needed.

### Principles of vocabulary management

The master vocabulary file has been developed using an industry standard thesaurus management tool called <u>MultiTes</u>. Our instance of MultiTes holds a subject thesaurus and a series of authority files. A coding scheme has been devised using the categories functionality, which allows us to separate and extract the different types of vocabulary that we have designed.

The principles of thesaurus construction have developed over a number of years and have been codified and standardised in ISO 25964. The discipline of following these rules is helpful both to the manager developing the taxonomy, and in explaining it to users of the systems.

Ad hoc vocabularies created on the back of the proverbial napkin rarely provide a consistent framework. However, this is traditionally the approach adopted at the last minute to populate newly developed IT systems. Most developers have no idea that there is a science underpinning the management of subject vocabularies, and why would they? Neither do end users, and why would they? Devising innovative ways of explaining the nuances of vocabulary construction to developers and end users has been challenging, enjoyable and a significant deliverable from the project.

So, what is a subject thesaurus?

There are five elements that make up our thesaurus:

- Hierarchical structure broader terms (BT) and narrower terms (NT), including some instances of polyhierarchy, where a narrow term can have more than one broader term.
  - o BT Curriculum
    - NT National curriculum
    - NT School curriculum

Every term then fits into the hierarchy by answering the question "What is this a type of?"

- Associative structure related terms (RT) where a term is connected to another term, but they are not related by hierarchy.
  - Foster carers
    - RT Fostering
- Equivalence structure USE and Use For (synonyms and quasi-synonyms, denoting preferred and non-preferred terms).
  - School dinners USE School meals
  - School lunches USE School meals
- **Disambiguation structure** refinements to a term that clarify the context of use.
  - BT School workforce
    - NT School workforce (academies)
    - NT School workforce (maintained schools)
- Contextual structure scope notes, history notes and term notes provide context and guidance for using the terms. They also give a decision making record, often useful in understanding how a term or relationship has been developed.

References to source material are included, where possible, to demonstrate the provenance of the term and to provide additional information. GOV.UK is the preferred source for our material and provides a "master" for settling the vexed questions of capitalisation and acronyms or abbreviations.

### The background to DfE's thesaurus

The DfE and its forerunner departments, including the Employment Department, started using and developing a subject thesaurus in the mid-1980s.

The thesaurus has grown and moved with the times, and changed to meet different subject remits. As of December 2017, the master thesaurus contained nearly 8,000 terms. At the start it was used as an indexing tool in a library catalogue. Later it provided subject metadata for document and records management. More recently it was used as a tagging tool for educational Internet content.

All of these thesaurus uses were behind the scenes, and few of the department's users were even aware of its existence.

### DfE's current taxonomy use

Everything changed in 2014. The DfE began work on implementing a customer relationship management (CRM) system to handle correspondence received by the department. It was replacing an earlier system which had used an uncontrolled, <u>folksonomy</u> approach to subject categorisation, where terms were devised "on the fly" to meet an immediate need and then re-used (or not) in the system.

In developing the new CRM (using Microsoft Dynamics Online), we wanted a controlled subject vocabulary for several reasons:

- to avoid unnecessary proliferation of terms
- to remove some of the guesswork that comes with a folksonomy approach
- to enable more effective browsing of terms through the use of a hierarchy
- to make retrieval more predictable, by using consistent approaches and standard formats
- to create links between the terms, teams and individuals

In Dynamics each subject term is connected to a team (or organisational unit) within the department. The act of assigning the subject team to the item determines who answers that enquiry. In this way, correspondence can be forwarded to the relevant team via Dynamics. It is very important that the subject terms are associated with the correct teams, and that the right terms are available for selection. Misallocated correspondence results in delays.

The department processes around 50,000 cases a year on the CRM system. This includes all external emails, letters, Freedom of Information requests and Parliamentary Questions. A team of trained loggers assign each case one or more subject terms from the taxonomy. The structure of the taxonomy needs to be clear and have little ambiguity, otherwise misallocation or inefficiencies can occur.

The taxonomy has another main use in the department. It forms part of our SharePoint Online deployment that runs our intranet, documents and records management and

collaborative working functionality. Each team member has a staff directory entry in SharePoint Online, this is contained within the SharePoint Delve app.

We have created a set of customised fields that staff complete in their profile. Of these, two are mandatory - responsibilities and skills. Both of these fields are populated using controlled vocabularies extracted from our master vocabulary file held in MultiTes. This means that every person in the department has to interact with the taxonomy, and the agreement of our most senior managers to make this field mandatory was another major breakthrough in our use of the terms.

Ensuring that staff choose their responsibilities from the taxonomy helps us to find colleagues who can help with particular enquiries using a standard vocabulary. It provides consistency in searching, as more and more people become familiar with the terms and their uses.

Every page of intranet content is tagged with taxonomy terms, along with every article added to our News area. We will be configuring search to make the most of the subject terms to aid retrieval.

### The need for pragmatism

Whilst we have followed the international standards for vocabulary construction, when it comes to practical implementation, we are constrained by the functionality of the systems we use. In an ideal world, we would use a controlled vocabulary and Boolean logic to manage search and retrieval in the way that you might in a library catalogue. However, it is not straightforward to use Boolean logic within Dynamics. Additionally SharePoint Online does not display the full hierarchy for a term when viewing a profile, even though this hierarchy can be seen during the selection process.

As a result, we need to use slightly convoluted structures to allow staff to select the most appropriate terms for their profiles.

Subject taxonomy terms are presented in Dynamics as a concatenated string with a maximum of three levels. Each "string" has to have at least two levels (a broader term and one narrower term), but some terms have a broader term and two narrower terms. This example shows both the separation of terms and the tautologous effects of the necessary refinements to cope with use in SharePoint Online:

Analysis: Data analysis: Data analysis (adoption)

Analysis: Data analysis: Data analysis (fostering)

Analysis: Data analysis: Data analysis (private fostering)

This level of detail and disambiguation is needed to reflect terms used in both Dynamics and SharePoint. If the team is split, then the terms have to reflect both the responsibilities of the individual, and ensure that Dynamics cases are directed to the correct team.

### Designing the taxonomy

From the 8,000 terms in the master vocabulary file we needed to select the core terminology to be extracted into the subject taxonomy. We started with three design principles and developed these over time through a process of engagement with correspondence loggers and policy teams. This process is ongoing. As the department's work evolves, so does the taxonomy.

**Principle 1:** How many levels of hierarchy would work best? We decided to follow the rule of three, commonly used in the world of presentation and publication.

For the end users we think that three levels works well. Four would have made it more difficult to keep the hierarchy in mind and would have added an extra layer of complexity. From the perspective of being the taxonomy manager, four levels would have been beneficial. It would have given greater flexibility and helped with some particularly complex policy areas. However, there is little point in developing a system that end users might find more difficult to navigate, so three it is.

### **Principle 2**: The level of detail must be right for each context

The master vocabulary file contains up to seven levels of hierarchy, so the next challenge was to decide how to slice the hierarchy in the best way to produce a taxonomy that gave the right level of detail for the task.

Each policy area has a different level of complexity and depth. We needed to understand the policy briefs, and determine where to pitch the level of the hierarchy to cover all of their work adequately.

We consulted the policy areas through a series of workshops using a starting point of 64 broader terms, which covered the highest levels of the department's remit. These terms were listed alphabetically on plastic sheets using a permanent marker. In each workshop, narrower terms were added and relationships between terms developed using dry wipe pens. Photographs were taken after each workshop for the record, and the annotations from each group were then erased so as not to influence the next group. The sheets could be rolled up, moved between the department's sites and used again for each workshop.

During the workshops, the policy teams used their own language to add terms to the sheets under the broader terms. At the end of the process, we translated their language into the more precise terminology used in the master vocabulary file. Then we used this information to create a subset of the master, pitched at the right level of detail. This resulted in an initial list of c700 terms, which has since developed into a taxonomy containing 2,200 terms (as at December 2017).

### **Principle 3:** Provide multiple entry points for a browse structure.

The subject matter of a piece of correspondence is not always clear and there are often many ways of categorising it. For example, a young person caring for a parent with disabilities is both a young person and a carer. When logging correspondence about this and browsing for a subject term, a polyhierarchical approach allows for multiple entry points to the browse structure:

- BT Carers
  - NT Young carers
- BT Young people
  - NT Young carers

Sometimes this can be confusing for users who see the polyhierarchical feature as a duplication of a term, and therefore a mistake in the taxonomy. Once the purpose and benefits of this approach are explained, colleagues see the value and potential that this aspect of the taxonomy provides.

### Engagement with the department

The original taxonomy development workshops were just the beginning.

We developed programmes of events to explain the taxonomy and engage with colleagues at both the general and specific level. We attend general team meetings, and various specific networks, to talk to as many people as possible about how to use the terms. These presentations vary from short, overview slots as part of a bigger meeting, to providing hour-long interactive sessions.

The hour-long workshops invite colleagues to not only find out more about the taxonomy, but to think about the hierarchical, associative and equivalence relationships in a variety of vocabularies from different settings. We show users of our vocabulary that other organisations use controlled language too, proving that it is not a "flight of fancy", but a serious undertaking that has many benefits to our work.

Finding the "hook" that inspires a user into understanding the taxonomy, or becoming an advocate for it, is very satisfying. Staff might be intrigued by the NASA thesaurus, interested in why we have a photograph of a green sea turtle on our subject terms wiki pages, or just get carried away with using language and working out how terms connect.

It can be about setting their own work in a broader perspective, the chance to see their role in a new light, or looking at the bigger picture of what the subject taxonomy can do to streamline our processes. Whatever provokes the response, the "Ah ha!" moment is always one of the highlights of any meeting.

[If you were wondering, the turtle is there to illustrate the species taxonomy developed by Carl Linnaeus and is used as another way of encouraging discussion.]

### Patterns, trends and mappings

We use the subject terms to help us look for trends and patterns, showing peaks and troughs in particular correspondence areas. This helps us to plan, and ensure that we can provide the best possible service at the right time. This might mean updating education GOV.UK content to meet particular needs at particular times, or changing a telephone queuing message to direct enquirers to alternative sources of information. The taxonomy helps to provide the management information that backs up these decisions.

A key area of mapping work is around the development of the education taxonomy that is used on GOV.UK. We worked with Government Digital Service (GDS) on the GOV.UK education taxonomy. We wanted to ensure that the mappings would "translate" between the departmental taxonomy and the GOV.UK taxonomy. There is more information available from the GDS blog posting: Finding things: how we're breaking down the silos on GOV.UK.

We knew from the beginning of this project that GOV.UK and the department would not be able to share the same taxonomy. This is mainly because of the level of detail that we need to use to map our correspondence to particular teams. However, by ensuring that both taxonomies are aligned, we get the best of both worlds because we can exchange terms and learn from each other.

### Future ideas and developments

Looking to the future we are keen to develop the taxonomy into different areas including:

- using the terms to index departmental information sheets
- assigning them to telephone calls in the same way as we apply the terms to correspondence
- expanding use into the metadata associated with documents and records in SharePoint
- investigating ways that we might link terms to particular SharePoint Team Sites
- using terms in other SharePoint collaborative features such as Groups and Teams
- incorporating associative (RTs) and equivalence (non-preferred term) relationships into Dynamics to help with correspondence logging

### Conclusion

At the DfE, we have designed and implemented a practical application of a subject vocabulary. We have built on the foundations and structure provided by rules and standards to put our taxonomy at the heart of what we do.

This has not always been easy, and there is more to do, but we have made a good start. We are looking forward to the next steps on the journey.

### Further reading

Aitchison, J., Gilchrist, A. and Bawden, D., 2000. Thesaurus Construction and Use: A Practical Manual. 4th ed. London: Aslib.

Dextre Clarke, S G. (2008). The last 50 years of knowledge organization: a journey through my personal archives. Journal of Information Science, 34 (4), pp. 427-437.

Flett, A. and Vernau, J. (2011). Applied taxonomy frameworks. Business Information Review, 28 (4), pp. 226-235.

Garshol, L.M. (2004). Metadata? Thesauri? Taxonomies? Topic maps! Making sense of it all. Journal of Information Science, 30 (4), pp. 378-391.

Gilchrist, A. and Mahon, B. eds., 2004. Information architecture: designing information environments for purpose. London: Facet publishing.

Hedden, H., 2016. The Accidental Taxonomist. 2<sup>nd</sup> ed. New Jersey: Information Today, Inc.

Hedden, H. (2017). *The Accidental Taxonomist*. [online] [Accessed 08 December 2017].

International Standards Office, 2011. ISO 25964-1 Information and documentation -Thesauri and interoperability with other vocabularies: Part 1: Thesauri for information retrieval. Geneva: ISO.

International Standards Office, 2013. ISO 25964-2 Information and documentation -Thesauri and interoperability with other vocabularies: Part 2: Interoperability with other vocabularies. Geneva: ISO.

# **Collaborative Applications:** IP & Security Implications for Jointly Shared Information

Martin White, Managing Director, Intranet Focus Ltd

martin.white@intranetfocus.com

Working as a consultant I spend my life sharing documents with clients, and of course being sent documents as well. I have been using Basecamp in its original version for many years now as a repository for shared documents and my clients value the simplicity of the setup and the way in which the sections are presented. It may not look elegant but it works. Eventually the project comes to an end. I will archive the project documents but never delete them as clients have the pleasing habit of coming back after three or four years. Of course, once archived the client cannot access the project site but there is nothing in my standard terms of business about the level of access they have to documents.

The entire purpose of collaboration applications is to be a resting place for documents that are of joint value to everyone in the team, be they within the organisation or just retained for the project. However, I suspect that few organisations have really worked through the Intellectual Property Rights of collaboratively posted documents (and I'm using "document" in a generic sense) especially when the organisation is not hosting the collection of files itself.

This is not an academic consideration. I am very grateful to Dion Lindsay (Real Knowledge Management) for alerting me to a court case that has (at least in my view as a non-lawyer) significant implications for hosted jointly shared data. This blog post is based on an opinion from Gowling WLG on the case of Trant Engineering Ltd v Mott Macdonald Ltd before the Technology and Construction Court (TCC.) The full judgement should be published shortly.

According to the summary published by Gowling WLG, Trant Engineering (Trant) was engaged by the Ministry of Defence (MOD) as contractor for the Mid Atlantic Power Project, a £55 million initiative in respect of the construction of a power station in the Falkland Islands. Mott MacDonald was appointed to provide design services and was also the Building Information Modelling (BIM) coordinator, controlling access to the common data environment (CDE).

When a fee dispute arose, Mott MacDonald suspended its services and blocked Trant's access codes to the CDE leaving Trant unable to access the design materials. This case focuses on the situation with the use of BIM files by the construction industry. These are of such a size that some form of external hosting may be the optimum solution, that is until a contractual issue arises that might prejudice access!

According to the Gowlings WLG opinion: "The TCC concluded that it had a high degree of assurance that Trant was entitled to have access to the design data which had, in fact, already been placed in shared folders. It was particularly relevant that Trant had previously had access to the CDE before Mott MacDonald had suspended performance of its services. The TCC therefore ordered Mott MacDonald to restore access to the relevant design materials, subject to Trant making a payment into court."

Although this case looks to be specific to BIM in English law, precedent is of the greatest importance in a court case. This case could set a potential precedent for future litigation to shared information depending on the view of the judge if it is indeed a valid precedent. Any organisation in a similar position would do well to bring this to the attention of its legal team. The issues are similar to those with cloud services where the implications for the integrity, sharing and deletion of files may not always be in line with the assumptions of the business. The cloud deal may make sense on a cost-management basis but care needs to be taken that the legal implications are fully appreciated across the organisation.

By coincidence the issues of joint and several IPR on project files is the subject of a paper entitled "The dynamics of intellectual property rights for trust, knowledge sharing and innovation in project teams" by Professors Johan Olaisen and Oivind Revang. (They only seem to publish as a duo!) It was published in the International Journal of Information Management in December 2017. Professor Olaisen's research interests are very much in the area of <u>shared information</u> in project situations. The abstract to the paper states:

"How can intellectual property rights (IPRs) influence trust, attitudes, commitment, knowledge sharing, and innovation in inter-organisational project teams? The four strategically selected team cases include eight global knowledge-intensive industrial oil service companies in Norway. The methodology included 24 in-depth interviews done in 2016. The study finds that formal intellectual property rights are key to building up and keeping trust in the team and also for building up the right attitudes within the team. The IPRs increased the innovativeness in the team and incremental innovations. The IPRs fostered a unique knowledge sharing in these four teams enabling them to work towards innovative solutions and delivering on time. Formal IPRs foster informal trust and expertise sharing and by that also the inter- organisational cooperation. The confidence and knowledge sharing strengthen the possibility for future collaboration and innovations both on an individual level and on a corporate level. The theoretical implication of our findings is that IPRs increase the trust, commitment, and attitudes within the team providing knowledge sharing and innovativeness for improved solutions and results. IPRs are positive for collaboration, and they are complementary governance mechanisms. The practical implication is that IPRs must be defined and accepted before the corporations start up the interorganisational teamwork. The contract typology should in the start up be sensitizing giving directions and security and in the end definitive."

As a one line summary, the clearer the IPRs the more valuable the information becomes. This might seem counter to common sense but in general in organisations very little attention is paid to information rights. Another aspect of this is the policy towards what is referred to as protective marking. Every content item should have a marking that unambiguously defines who has access rights to the material.

I enjoyed reading The Black Door on a recent vacation. Written by Richard Aldrich and Rory Cormac it is the story of spies, secret intelligence and British Prime Ministers from 1908 to 2017. Many of the themes in the book mirror those in any organisation, such as defining who is an "expert" in a particular area, and how to bring together and assess sources of information and knowledge from a wide range of organisations, each with their own reasons for taking a particular line on a topic because of corporate interests. As I write this article it's the first anniversary of the publication of the Chilcott Inquiry into the involvement of the UK Government in the Iraq war and in particular the dossier on the existence (or non-existence as it turned out) of Weapons of Mass Destruction. This of course highlights the issue of information quality, as a substantial element of the dossier was plagiarised from publicly available material. Another theme of the book is the extent to which supposedly secret documents end up being made public, and not just by Edward Snowden.

Recent ransom-ware attacks have highlighted the need for IT teams to ensure that corporate systems are safe from any form of external threats and also to ensure that information held by the organisation is not transmitted digitally to unauthorised people outside of the organisation. There is also a need to ensure that internally employees cannot gain digital access to information that they do not have permission to see. An important feature of a search application is ensuring that employees cannot gain access to limited circulation information.

I have added the word "digitally" in the above paragraph for the reason that information can easily be circulated in a paper format once it has been downloaded. This is where protective marking becomes so important as it should ensure that every document or data item is visibility tagged in a way that there can be no dispute about the permitted readership of the document. Protective marking schemes should be set out in a corporate information security policy (ideally compliant with ISO 27001) but the question then is who decides on the circulation of a document. (NB I'm using "document" in a generic way). The critical issue is whether the labelling on the document defines unambiguously who has access to the information. Role-based labelling ("Heads of HR") is of no value. Someone may be the local manager for HR and so regard themselves as Head of HR in the office, but that is almost certainly not the readership that the author envisaged.

A good starting point for understanding the scope of a protective marking scheme is the UK Government policy document, especially as many public sector organisations in the UK base their own policies on the UK Government document. This document also sets out how 'paper' versions of documents should be managed from a protective marking perspective. The current policy dates from April 2014. In addition there is a very good overview document on government information security management published in 2016 by National Audit Office.

The point I want to make is that just seeing information security as a digital asset management topic owned by IT is to totally miss the point. The damage that printed, or printed-out, information can do in the wrong hands can not only be embarrassing but it's very difficult to pin down the route by which the information broke out of its cage, a cage often no stronger that an attachment to an email that says "Keep this to yourself." As

with so many aspects of the digital workplace policies have to be developed, implemented and reviewed as a combined effort of IT and the business. How quickly can you find the current version of your organisation's protective marking policy?

All that I have written above should be covered by the corporate information management policy but in my experience this is rarely the case. I have come across instances where different parts of the same organisation have different approaches to protective marking, and then of course life gets really interesting when organisations merge or split. There are usually clauses in merge and demerge agreements about what are often referred to as controlled documents, but about the last description you can give to a collaboration space is that it is controlled. Indeed, the argument is probably that the less controlled it is the better. Well, the two Professors would suggest that this is not the case and the Trant v Mott case suggests that your legal team need to be involved sooner rather than later. Consider this a warning!

See also: Building Information Modelling

# Data, Information, Knowledge & Disruptive Technologies in an Age of Uncertainty -Reflections on the 2017 CILIP Conference

Claire Carter, Academic Liaison Librarian, University of Bedfordshire

claire.carter@beds.ac.uk

CILIP's 2017 Conference promised an extravagant line up with plenty to hear and learn. There were several strong themes throughout the programme including a definite push towards persuading information professionals, especially those in education and public sectors, of their worth in the private sector. The IT sector has finally realised our potential; that the skills we possess are ones the sector and the companies it supports are desperately short of. The sheer volume of data which we produce as individuals and within organisations - and how we maximise its impact - also featured heavily throughout the event, with an emphasis on Knowledge Management leading up to the launch of the new CILIP Knowledge and Information Group.

The opening keynote speaker, Dr Carla Hayden, is the first female, African American Librarian of Congress and surprisingly one of only a handful of professional librarians to have held the post. She has been dubbed the "superstar librarian" and we are, in turn, her "British peeps." More about her speech can be found here on the CILIP webpages. Her down to earth manner, enthusiasm and determination to make the data and information at her disposal accessible to everyone, really inspired and captured the imagination of the packed to capacity lecture theatre. Dr Hayden gave us the background leading up to taking on her current post. Twitter buzzed even more than usual with school librarians celebrating that it was their sector where Dr Hayden's career had begun before she headed into public library service. She explained how she'd worked with teenagers and engaged them in library services and casually slipped into the presentation that Barack Obama had interviewed her for her new job. When she'd expressed some doubts about the post, Obama reassured her that the role needed someone with her skills to make the Library of Congress more inclusive and to maximise the full potential of its 164 million-itemed collection for the people. Dr Hayden met with "pushback" and resistance to change but eventually won the day, proving that if you are brave, think big, persevere and believe in what you're are doing, then you are bound to succeed. She concluded to thunderous applause.

"Using Data and Information" was the first seminar of the conference. Speakers from Eden Smith emphasised that we are the best-placed profession to deal with data management, accuracy and integrity and that the demand for library and information skills is increasing. Companies are beginning to realise that they have a wealth of data that they know they should be utilising but are not sure how. They require experts to advise them on how it

can save them time and/or money, and who is more suited to doing this than information professionals?

The idea that librarians are in demand from the private sector was emphasised by the number of large corporations who attended the conference in order to woo us away from our traditional public, education and health environments. Ceri Hughes, Head of Knowledge, Research and Collaboration at KPMG, referenced the skills required in order to maximise an organisation's knowledge, information and data potential. She elaborated on the strategic importance of Information Management and Knowledge Management, focusing on continuing professional development and the need to inspire confidence and enable a learning culture. The company's Knowledge Centre of Excellence (KCE) aims to provide a robust and continually improving information protection environment that ensures the integrity and confidentiality of organisational assets. Via the KCE, every employee of KPMG has the opportunity to achieve their fullest potential and enable themselves and the company to deliver excellence at every level.

Ceri also announced that KPMG has partnered with CILIP to re-publish the 1995 Hawley Report. Hawley concluded that information should be treated with as much importance as any other asset to a business. It appears to have been left on a dusty bookshelf; a massive missed opportunity for the profession. CILIP and KPMG now aim to ensure that, by republishing the revised and updated report, information and knowledge management will once again be visible on board level agendas.

Sue Lacey Bryant, Senior Advisor, Knowledge for Healthcare at Health Education England (HEE), emphasised the importance of evidence-based services in the NHS. She has taken a strategic approach to empowering the workforce by initiating a dialogue with top level management and leaders; persuading them of the cost saving, quality and productivity implications of making greater use of data in decision making. It is obviously a no-brainer that knowledge management is essential in an environment like the NHS. HEE is also working to develop the workforce so that employees have the necessary skills, values and integrity to deliver outstanding care. Currently patients with cardiovascular disease are significantly better off in terms of care than patients with osteoarthritis as the evidence base is more advanced. HEE is working to address this with initiatives like the #AMillionDecisions campaign, leading the way to improve the understanding about the power of high quality, evidence based information in healthcare. HEE has also embraced open access and its **Knowledge Management toolkit** is freely available to all.

Later on in the programme Nick Milton, Director and Co-founder of Knoco Ltd offered a definition or possibly a clarification of the difference between Managing information and Managing knowledge. Beginning with a controversial quote that knowledge management is a confused discipline, simply rebranded information management, he navigated through the "white space" between the two disciplines. The visual nature of Nick's presentation was enormously helpful and introduced the draft International Standard on Knowledge Management systems, which will help raise the visibility of KM on organisational and management agendas.

The final presentation of the first day was Claire Bradshaw's session on improving our communication skills. Claire focused on HOW we communicate rather than WHAT we actually say. It was refreshing to take a moment out to assess what our key communication strengths are and to consider how they could impact on those we interact with, positively or otherwise. In groups we were encouraged to focus on a real life situation we either had encountered or were about to. Using a "style compass" we were encouraged to visualise our communication traits. Some of us are risk averse, some not. Some of us focus on detail, while others view the bigger picture. Some are people oriented, some process oriented. Communication is even more effective when you adapt it to your audience. This is key if library and information professionals are to communicate on an organisational level and market their impact to colleagues outside of the LIS sector.

Library and information professionals have long understood that IT is simply an enabling tool. Only after reviewing organisational processes, information requirements and data quality can IT function effectively. Caroline Carruthers, the first Chief Data Officer for Network Rail, used a household hoarding analogy alongside cognitive behavioural therapy to address the issues of effective data management. In her presentation "Is data even important?" she led us through stages to address and decrease our data hoarding and disorganisation. Jeremy Foot, information and data architect, in his session "Big I, Little t", reiterated this tendency to reach for the technology first before articulating the intended outcomes or solutions. Whilst data storage is cheap the true cost is spent on staff time trying to find information and data in the organisational quagmires that have been created.

The issue of using IT in a relevant and useful way was also highlighted by Neil MacInnes, Strategic Lead - Libraries, Galleries and Culture, Manchester, who recalled:

"I had a really interesting experience with the youth council once. We were talking about library apps and I proudly said to the youth council 'we've got a library app' and a youth council member said 'yes, but it's crap' because all we had done was lifted the transactional basis of the library management system and put it in the app."

Utilising quality data for evidence-based service development and negotiation with finance departments is essential. "There's not much that we don't count in libraries," MacInnes said, "but there's not much that we count that we actually use. So how can we actually use that rich quality of data to inform the business plan and service delivery?" In order to win the support of councils, politicians or whoever is holding the purse strings, we need to have the evidence to prove necessity. In order to collect it effectively we need to return to Caroline Carruther's warning against simply slinging data into cheap storage without first thinking about how it will be used. Neil has tirelessly championed the Manchester Library Services in a similar manner to Carla Hayden. Both have focused on what the library users need and how they use the services, providing access to resources and services based on the local community. Neil rebuilt the Manchester Central Library after a fire ten years ago with initially no budget and has overseen the refurbishment and modernisation of libraries in the area totalling in £75 million of capital investment. His statistics are dizzying: 144 locations with 18 million visits per year. By capturing this kind of data and using it to its full potential Neil has succeeded in gaining the political support

to make all of this happen. "Feedback from customers," he said, "is key to plan the library service of the future."

James Clay, from Jisc, opened the Conference Technology Briefing session, describing a vision for the 'intelligent library' and smart campus. Real time data could be harvested from smartphones and the Internet of Things in universities to improve student satisfaction and refine learning; to push specific, customised information and resources at individual students based on their mobile smartphone and online behaviour. Use of learning spaces, for example, could be analysed tracking a student's movement over time. As a higher education librarian I understood the need to resolve the frequent "I didn't know I needed to ask..." complaint. The ability proactively to respond to problems before they arise could revolutionise student induction, services and support. James suggested that facial recognition technology could identify students looking troubled/upset. Perhaps we could encourage students to have breaks if they've been studying in the library for a long time, freeing up library space, even suggesting where to grab a decent coffee? He encouraged us to jettison our cynicism and embrace the potential of emerging technologies and AI.

This raised the significant ethical issue of professional integrity. How do we navigate the fine line between making campuses smart or making them intrusive and detrimental to the student experience? What if individuals wanted to opt out of this kind of customised support? Those students less likely to ask for help would probably be the ones less likely to welcome such a level of personal intervention. These questions are beyond the scope of the single information professional. The ethical challenges an organisation would be confronted with if they had the ability to use personal smartphones to nudge students towards intended choices opens up huge discussions and the need for stringent, clear policies on institutional behaviour.

In contrast, Aude Charillon's presentation explored how individuals can protect their online and smartphone privacy. By focusing on how LIS professionals can support the public Aude encouraged us to address our own behaviour and lead by example. In order to advise others about how they protect their data we must be aware of how our own devices work. How many of us enable location checking on our smartphones, broadcasting when and where we are for the world to know?

Disrupt or be disrupted was **Dave Rowe**'s warning of what can happen if companies don't react quickly enough to new technology. Blockbuster and Kodak were two major casualties mentioned. Others have moved quickly to seize opportunities and organisations such as Netflix, Spotify, AirBnB and Uber have been game changers. Open data, Google and eBooks are disruptive models that have had a significant professional impact. The rally cry to brush off the traditional librarian stereotype and start disrupting things ourselves was an energetic ending to the briefing.

### A Philosophical and Ethical Conclusion...

On the similar theme of disruptive technologies, Luciano Floridi, Professor of Philosophy and Ethics of Information at the University of Oxford, provided substantial food for

thought in his keynote. The digital world has uprooted the status quo. What used to be joined had now been separated, and vice versa.

Technology has enabled presence and location to be split so you can be present at a meeting whilst in a completely different location. Previously this was the stuff of science fiction. Ownership and usage have also been subject to the same intervention. You can buy an electronic book however you cannot pass it on as you might a physical one. You've simply purchased the right to USE it, not necessarily to OWN it. On another level, what used to be split has now been forced together. Producers and consumers of content are now indistinguishable, for example.

Questions are now the key to control, not answers. "Digital has unglued the question from the answer." He used a simple formula to enhance his theory:

Question (Q) + Answer (A) = Information (I)

Traditionally, information professionals have been the keepers of "I" especially when we controlled "A." The manipulation of the question now influences the way the information we require is controlled. Professor Floridi issued a call to action. In order to "break the monopoly on the control of uncertainty" we need to look at where we now belong in a culture where previously assumed relationships with information have now changed. We have always been about the information but he urges us to start looking at the questions instead and to assume control of the future.

See also: Getting to Grips with Data Literacy and Data-Driven Decision Making

# Internet Librarian International: The Think Tank for Information Professionals

Katherine Allen, Business Development Director, Information Today Europe

kat.allen@infotoday.com

Internet Librarian International (ILI) 2017 took place at Olympia in London on 17th-18th October.

"The power of an international think tank of highly skilled librarians should never be underestimated."

Jan Holmquist, Co-Chair of ILI

Information professionals wear many hats. They are leaders in tech, organisational influencers, expert marketers, change managers, Internet super searchers, and much more. Last year's conference tapped into this impressive range of skills and experience, featuring almost sixty presentations and case studies from many different library and information settings, taking in Australia, Canada, Denmark, Italy, Norway, Spain, Sweden, Switzerland and the USA as well as the UK.

### Making a Noise about a Quiet Revolution

ILI's keynote speakers each contributed to the theme, "Celebrating Librarian Super Powers." Opening keynoter Kate Torney is the CEO of State Library Victoria, Australia's oldest and busiest public library. Kate joined the Library during an exciting period of transformation, overseeing its evolution into an innovative contemporary centre for knowledge, learning and culture. Previously News Director for the Australian Broadcasting Corporation, she led ABC News through a critical period of change in the global media sector, radically transforming the news model of a national broadcaster. In her keynote "Making a noise about a quiet revolution"; Kate celebrated the transformation that has occurred within libraries, acknowledging the sector's embrace of disruption and suggesting that the time for modesty is over. She explored how we can find and communicate our value to ensure the success and sustainability of our institutions, and how we can lead necessary transformation while staying true to our founding ideals.

### Expertise in an Era of Easy Answers

ILI's day two keynote came from David White, Head of Digital Learning in the Teaching and Learning Exchange at the University of the Arts, London, where he researches online learning practices in informal and formal contexts. David has coordinated and been an expert consultant on numerous studies of the use of technology for learning in the UK

higher education sector, and will be familiar to many as the originator of the Visitors and Residents paradigm which describes how individuals engage with the Web.

In his keynote, "Expertise in an era of easy answers", David argued that abundant online information provides easy answers to easy questions. Unfortunately it can also provide easy answers to complex questions, potentially eroding our ability to interrogate, evaluate and synthesise sources. David explored the role libraries can play in countering the "thinkless, find-more" mentality encouraged by the Web and the corresponding mistrust of "experts." In a time when we can Google our way to almost any answer, access to content has become less important than access to people who understand what that content means, and where to head next.

### Six Tracks Highlight Changing Services

ILI delegates moved freely between six conference tracks across two days, which together highlighted the extent of the information professional's role, sharing invaluable knowledge, skills and experiences to promote, and help secure, the future of information services.

Each track comprised multiple sessions addressing issues that are changing our libraries right now:

- THE NEW LIBRARY, THE NEW LIBRARIAN explored the strategies, teams, skills, services and collaboration that global librarians are using to ensure they stay at the cutting edge
- USERS, UX AND USAGE looked at the ways how libraries are working with users to redesign services, spaces, and understand usage
- **CONTENT CREATIVITY** investigated how libraries are creating, curating, publishing and marketing digital collections, and how they are driving collaborative content creation
- FIGHT THE FAKE, FIND THE FACTS celebrated two information professional superpowers - advanced search techniques and nurturing information integrity - in a post-truth/multi-truth era
- MARKETING THE LIBRARY shared stories from information professionals who are influencing use and expanding audiences, from the DJ librarian to the digital storyteller
- **NEW SCHOLARLY COMMUNICATIONS** looked at how the scholarly communications landscape is changing, and what this means for libraries and information professionals

In addition to the six main tracks, ILI EXTRA offered a series of supplementary one-hour workshops and activities covering a wide range of specialised skills, from tech topics to personal development.

### Session Highlight: Open all Hours - the 24/7 Library

Among the hot topics explored is the trend for libraries to open their doors all day every day - and all night too. The "Open all hours" session brought together two case studies from services doing just that.

In Allerød, north of Copenhagen, the library is always open to its citizens. Library Director Annette Wolgenhagen Godt explored what they have learned so far, how the members of her community use the library during self-service hours, and included a number of amusing anecdotes.

Jane Mansfield of De Montfort University discussed how one year ago, in response to student feedback, Kimberlin Library at De Montfort University became a 24/7 service. She articulated the challenges of staffing 24/7, how the transition was managed, and about student use and expectations of the service.

### Track highlight: Users, UX and Usage

ILI devoted a whole track to understanding how libraries are working with users to redesign services and spaces and to understand usage. Led by users' expressed needs and their observed behaviour, libraries can totally transform their service offerings, and new and innovative ways of understanding the user experience can have a profound impact on service design. The case studies discussed at ILI included:

- How a library refurbishment programme was led by student behaviour and resulted in a new zoning system - and a "love where you learn" campaign
- How a library renovation project used a variety of methods to gather data from library users to provide insight to staff, the architect and the designers
- How an academic library found new UX-inspired ways to develop real insights into user behaviours and service use after it stopped surveying students!
- How a public library service used customer journey mapping to gain a deeper understanding of user needs, expectations and behaviours
- How a traditional hospital library service transformed itself to support and reflect the 24/7 NHS
- How data visualisation is being used to convey complex library usage data
- How every single question asked in a library over two years has created a unique collection of user data that continues to inform service design

### Topic highlight: Fight the Fake and Find the Facts

Two of the information professional's most important superpowers are super searching the ability to use advanced search techniques to find the most relevant, timely and impactful information for our communities, and fostering information integrity - the librarian's role in nurturing information literacy and source evaluation in a posttruth/multi-truth era. Both were explored in detail, and ILI delegates were encouraged to "Fight the fake" and "Find the facts."

The **Fight the Fake** programme highlights included:

- The post-fact landscape: an invited international expert panel discussed the fake news phenomenon and explored the implications for the Internet librarian
- Empowering the digital citizen: a session explored the role of librarians in nurturing and empowering the digital citizen
- Teaching students about information integrity: explored how to develop information integrity in students

### **Find the Facts** highlights included:

- Websearch Academy 2017: a pre-conference workshop explored the intricacies of research on the web, led by international experts
- Super search skills: a mini-keynote explored new and changed search features to help the internet librarian keep their super search skills refreshed
- Experiments in search and discoverability: two case studies from academic libraries sought to improve search and discovery in their institutions.

Looking round at all the animated conversations that happen during ILI, it's hard not to conclude that ILI delegates are experimenters who like to get things done, try things out and are happy to learn from and work with others.

### **Postscript**

UKeiG Management Committee member Catherine Chorley, Senior Library Assistant St Anne's College, University of Oxford and Secretary to the CILIP North West Member Network submitted this article to NLPN - A network for new and aspiring library professionals.

"It has been remarked upon before - and doubtless will be again - that the Library and Information Services community really is a small world. In attending the first day of this year's ILI conference I enjoyed one of those 'meeting someone you know but don't really know' moments that only ever seems to happen at librarianship events. Not only did I meet a fellow former intern of Gladstone's Library (we knew each other by name, reputation and mutual connections, but had never previously met in person), I also found out later I had shared at least two sessions with the person who the following week became my new colleague.

Attending under the aegis of the New Library Professionals Network, I was there to assimilate as much information, advice and enthusiasm as possible about the insipient innovations in our profession, as it evolves to meet contemporary demands and anticipates what challenges may lie ahead.

The focal point of the day for those of us attending as 'new professionals' was the hourlong joint session by Natasha Chowdory and Ka Ming Pang, who both shared their experiences of forging careers in information services, and considered what faces someone entering the profession in the 21st century. The session was part of a breakout strand, ILI Extra, which is designed to offer more informal sessions on a range of pertinent topics.

Natasha's emphasis lay on the need for focus, self-knowledge and proactivity. Coasting is no longer acceptable (if indeed it ever was): the onus is on the individual to seek out new opportunities for professional development and growth, even if that means leaving a comfortable role when it no longer provides a challenge. Natasha candidly offered the following basic principle: 'If your job becomes too easy, you shouldn't be doing it anymore.'

In the follow-up question and answer session, an interesting point was raised by a fellow attendee: how to judge between the need to leave an unstimulating role and the responsibility to reshape it in such a way that challenges you afresh and allows you to meet your own potential. Though there is no definitive answer to this, as a group we discussed how important it is never to regard your role in the workplace as fixed, and to be open to taking on new and unfamiliar duties if they support the service provision you can offer. The 21st century acid test for library professionals struggling (as many do) to advocate for themselves and their service is to ask, 'How am I better than Google?'

Both speakers advocated the importance of professional networks, and the opportunities these provide for experiencing your profession from a range of alternative perspectives. Natasha spoke of her positive experiences with the Special Libraries Association; while Ka Ming reflected on the benefits she had wrought from being involved with CILIP. Ultimately, though, no organisational membership will develop you while you remain passive; you gain benefit in proportion to your investments of work and energy.

The same goes for the workplace. You probably could breeze through the duties stated in your job description in a matter of hours, and then spend the remainder of each day looking at cats on YouTube. In that scenario, though, you probably aren't likely to be any real use to the long-term sustainability of the profession you purport to represent. Nor are you likely to get any real fulfilment from your working day. Unless you really, really like cats.

Ultimately, library services may be changing materially, but in value they are more important than ever. The session closed with Natasha and Ka Ming anticipating the future of the profession in what they described as a 'knowledge economy'. Libraries are no longer just book repositories, but as information portals they will continue to serve myriad user communities, and it is up to us as new professionals to keep shouting about this."

### Call for Speakers

Internet Librarian International (ILI) - The Library Innovation Conference, 2018 will take place in London on 16<sup>th</sup>-17<sup>th</sup> October. UKeiG members benefit from a 25% discount on the full conference fee. A call for papers has been issued on what will be ILI's 20th anniversary. "We are looking for speakers to help us celebrate the very best of library innovation from around the world. Our speakers come to share their real-world projects, initiatives and transformations. Mostly they do this by presenting a 15-minute case study and we match them with one or more other speakers to create a themed session. We also welcome alternative styles of presentation. Let us know if you have an idea for a panel session, or a mini-workshop. Would you be interested in sharing your experience with an informal group or one-to one? Would you be interested in doing a lightning presentation? Or running a teachmeet? Perhaps you could present an interactive demonstration of a library innovation? We really are open to your suggestions. Do you have a great story to share? Or do you know someone who you think has something worth sharing with international colleagues? We'd love to hear from you and welcome your ideas. Find out more about conference topics below, or click here to send us your ideas."

The submissions deadline is 13th April 2018

## **UKeiG Professional Development Update**

2017 was a busy and successful year for UKeiG's CPD programme. Topics covered included:

- Search Usability: Filters and Facets
- Research Data Management for Information Professionals
- Advanced Knowledge Management: Strategy & Digital Implementation
- Better Social Media for Libraries
- Digital Literacy in the Workplace
- Open Access, Open Monographs, Open Data, Open Peer Review: Overview of a Disruptive Technology

UKeiG's 2018 CPD programme is due for publication and will be updated on a regular basis. Please visit the Professional Development section of our Group Page, and keep an eye open for new courses. Book early to avoid disappointment.

In order to ensure the relevance of our courses and events the UKeiG Management Committee is keen to work with our members to focus on seven key strands for development:

- Information Retrieval/Search
- Scholarly Communications/Open Access
- IM/KM/Intranets
- Social Media
- Ethics, legal compliance, intellectual property
- Digital Literacy
- E-information/E-industry R&D

If you have any questions, feedback or suggestions about our CPD offering please contact UKeiG's Honorary Secretary John Wickenden in the first instance at: secretary.ukeig@cilip.org.uk

### Search Usability: Facets & Filters (10<sup>th</sup> May 2017)

This course provided an introduction to the basic principles of search usability with a focus on the development of faceted navigation schemes that deliver both search effectiveness and user satisfaction. It attracted a diverse range of delegates including intranet/web managers, information architects and search specialists. Faceted search offers tremendous potential for transforming the search experience. It provides a flexible framework that can satisfy a wide variety of user needs, from simple fact retrieval to complex exploratory search. It is now the dominant interaction paradigm for most library sites and is being increasingly applied to a wide range of search applications. However, with this power comes a challenge: what kinds of categorisation schemes are effective and how should we use them to support search and navigation? Above all, how can we deliver search

applications that address a growing range of user needs without compromising usability? The course included presentations and group work to enable delegates to analyse, evaluate and improve the effectiveness of search applications within their own organisation, exploring the fundamental concepts of human-centred design for information search and discovery. The day was led by Tony Russell-Rose, Director of UXLabs, a UX research and design consultancy specialising in complex search and information access applications.

UKeiG Management Committee member Claire Carter writes: "The delegates who joined us for this workshop were from a variety of backgrounds including the online fashion industry, charities, specialist research libraries and HE. The day was divided into four well-defined sessions each building on from the previous session so that by the end of the day we had been taken from a blank canvas to being able to create a fully-fledged faceted search diagram. With the help of the workbook given to individuals we were guided through this process with Tony initiating enthusiastic discussions on topics such as search problems, user personas and the use of facets in search information architecture. Research was well documented throughout to support the day's assertions and some myths were also debunked.

There were a large number of complex definitions and processes to absorb. Tony was incredibly skilled at making sure everyone had got to grips with terminology before moving on. This was mainly because of his excellent use of real life examples and his ability to help relate these to individuals' situations. Tony left the group with a useful bibliography as well as other online resources in order to continue our usability journey."

### Research Data Management for Information Professionals (17<sup>th</sup> May 2017)

UKeiG Management Committee member Rose Marney writes: "This one-day course, led by Andrew Cox and Eddy Verbaan (University of Sheffield), was an excellent introduction to its subject and would be recommended to anyone who is at the beginning of a journey into research data. Featuring a mix of talks, exercises and discussions, it explored the nature of research data and the roles of the various parties who might be involved in its creation and management. They provided extensive and informative supporting documents: policies, job descriptions, checklists and models for assessing maturity, alongside a copy of the Concordat on Open Research Data. The Concordat 'proposes a series of clear and practical principles for working with research data that cover the many roles needed to support the research process. It is not a rulebook, but a set of expectations of best practice developed by the research community itself."

### Better Social Media for Libraries (10<sup>th</sup> November 2017)

eLucidate editor Gary Horrocks writes: "This has to be one of the most successful CPD courses that UKeiG has organised. Already there is a substantial waiting list for 2018. Course leader Ned Potter (@ned\_potter) writes: 'I work for nine days out of ten as an Academic Liaison Librarian at the University of York and one day in ten as a trainer in library marketing and presentation skills for various organisations including the Bodleian Libraries, the British Library and UKeiG. The thing I'm really interested in is

communication, both online and face-to-face. All my work revolves around that in some way.' And it shows.

The day embraced social media audit and strategy, with practical tips on best practice, including optimising the use of images, twitter lists, advanced searching and analytics. The feedback from delegates included: 'I'll be bringing loads of new things back to teach others. I'm bursting with ideas. Great content, all legitimately relevant. Lots of good tips. I agree that everything Ned taught us can be used immediately as opposed to just talking about future trends like a lot of presenters do. Super practical!!'

He referred to social media in libraries (Twitter, Blogs, YouTube, Tumblr and Instagram) as the 'silver bullet' that breaks the barrier of library austerity, engaging the user community in an informal, subtle, interactive, reiterative way; enabling more effective marketing, feedback and communication. Run, don't walk to book a place on this course."

### Digital Literacy in the Workplace (15th November 2017) #UKeiGDigWk

Claire Carter writes: "This multi-speaker event had a great line up of presenters with Ian Hunter from the law firm Shearman and Sterling, Charles Inskip from UCL, Lis Parcell from Jisc and Wendy Foster from City Business Library. The room was packed with delegates representing many sectors of the information industry. Each speaker sparked lively debates over language, definitions, roles and assumptions around the entire field of digital literacy. There still seems to be a huge difference in understanding around this concept depending on the type of role and industry one is working in. However, after an in depth debate on what digital literacy means, the room came to a consensus that it was time to stop quibbling over definitions (even though it would be nice to have a central one) and get on with the practicalities of how to teach digital literacy.

From a higher education viewpoint Ian Hunter provided evidence that his newly employed law graduates were still attempting to find professional information via Google, Wikipedia and similar resources despite all our rigorous attempts to produce law graduates who were information and digitally literate. This was further evidenced by Charles Inskip's presentation on the extensive research he had undertaken matching employer, student and university perceptions of professional digital literacy. Again the differences in language and what it means to be digitally literate at university versus the workplace were very clearly depicted. Despite a big push from the HE sector on providing employability skills for their graduates, there is clearly more work to be done here.

Wendy Foster concluded the day giving an insightful talk on the work of the City Business Library (CBL). If attempting to impart the importance of digital literacy on a distinct community such as students, graduates or members of a particular organisation was tricky, doing so with the dispersed public membership of the CBL was going to be harder still. Wendy took us through the different incarnations and tactics they had used to make sure their populace could use the resources effectively offering support to a range of business information seekers including sole traders, start-ups, entrepreneurs, small and medium sized enterprises, charities and job seekers. Again the language staff used was crucial to engagement with terms such as 'training' and 'databases' consigned to the rubbish heap.

Digital Literacy is a work in progress partly because of the ever-changing nature of the technology and media. The workshop was a source of inspiration and reflection for lan Gardner in his lifelong learning blog "Whose Education Is It Anyway?": "What does being 'digitally literate' even mean? What does digital literacy look like? What does it mean to different industries/sectors? How does it compare to 'information literacy?' My view is more in line with the Belshaw model. When I think about digital literacy, I think about digital competency and capability. This includes how people can be encouraged to be open to technological change, continue to develop their knowledge and skills within the requirements of their role and for possible future needs. In the initial brainstorm of what it meant for us, I made the point of saying that it really can mean anything and everything. The different perceptions, semantics and language used around the topic continued to come up throughout the day and I couldn't help but feel that businesses have adopted 'digital transformation' as a buzzword, largely via IT Services, whilst a lot of professions have been left behind. The Jisc presentation ('Flexing your digital muscle: beyond information literacy') considered the wider issues. Is the model of content creation, problem solving and innovation (in addition to an information focus) the way to go when thinking about digital skills? Skills are changed by technology, so knowledge and behaviours will also change."

### Open Access, Open Monographs, Open Data, Open Peer Review: Overview of a Disruptive Technology (November 21<sup>st</sup> 2017)

UKeiG Honorary Secretary John Wickenden writes: "Delegates from Universities, Schools and Further Education joined the course on Open Access (OA) in London. It was led by David Ball, an independent information consultant, with extensive experience in the subject. The day started with a definition of Disruptive Technologies and some early examples (for example, Honda 50s and Kodak cameras). We then looked at whether OA was a disruptive technology. Throughout the day we explored various subjects around OA in small groups, which helped us to understand the implications of the subject. This included looking at the traits of Open Science, Open Data and Open Access. We also looked at the different types of Open Access including: Gratis OA, Libre OA, Green OA and Gold OA. We looked at the implications for libraries, authors and Higher Education and the future of peer review. The format of the day led to lively discussions in the small groups around the subject. Because of the interactive format of the course everyone obtained a good grounding of the area and the implications for their jobs, their organisations and the wider information industry."

### Online Resources

Joy Cadwallader, Aberystwyth University (Aberystwyth Online User Group)

Please send your submissions for the next issue to jrc@aber.ac.uk

### **Cambridge University Press**

Reports emerged in the mainstream press in mid-August 2017 that that Cambridge University Press (CUP) had blocked more than 300 articles about a range of controversial topics including the 1989 Tiananmen Square Massacre from its journal China Quarterly because they were asked to do so by the Chinese Government's General Administration of Press and Publication (GAPP). In a press statement CUP excused their action by saying, "We complied with this initial request to remove individual articles, to ensure that other academic and educational materials we publish remain available to researchers and educators in this market." Following an outcry in academic circles including a Change.org petition threatening a boycott, CUP backtracked and announced that the articles would be reposted. A tweet from China Quarterly's editor Tim Pringle said, "Access to published materials of the highest quality is a core component of scholarly research. It is not the role of respected global publishing houses such as CUP to hinder such access." In another story, Reuters reported that in March last year LexisNexis had withdrawn Nexis and LexisNexis Academic from China after being asked to remove some content. Who's next?

### easyJet

Airport libraries are nothing new, however this summer easyJet's Library in the Sky has been selected by author and former children's laureate Dame Jacqueline Wilson and consists of ten titles. Five of the ten are Penguin Classics for which taster samples for download are provided on the easyJet website complete with illustrations, including Alice in Wonderland, The Wizard of Oz and Charlie and the Chocolate Factory. The first three chapters of Jacqueline Wilson's new book Wave Me Goodbye are also available for download. Some reports I found online about the initiative indicated that books would be made available as a free download upon landing but I couldn't find anything about that on the easyJet site.

### Elsevier/bepress

I was really hoping to leave Elsevier out of my article this time but ... here we go again. The acquisition of begress by Elsevier for an undisclosed sum has prompted speculation about its ambitions in the business of institutional repositories, preprints and open access. bepress provide products to showcase academic research including Digital Commons, "an institutional repository, a comprehensive publishing platform, and a fully integrated research and impact suite", with over 2 million articles from over 500 universities and an Experts Gallery Suite profiling researchers including a range of publication types and other features such as impact metrics to attract funding and prospective students. Together with their other research products HiveBench, Scopus, Mendeley, Pure, SSRN and SciVal,

Elsevier would appear to be in the driving seat. At the end of their news report, ATG include a link to this excellent Scholarly Kitchen blog by Roger G Schonfeld (Ithika S+R) which assesses Elsevier's position as "an increasingly dominant player in preprints, continuing its march to adopt and co-opt open access."

Meanwhile Elsevier continues to assert its ownership of published journal articles through the courts in the matter of Sci-Hub against whom they have been awarded \$15 million damages in the US. This news article in Nature suggests that it is likely that the fine may never be paid as Sci-Hub and its founder Alexandra Elbakyan are based outside the US and hence the ruling may not have the intended impact of discouraging other pirate sites. The article also quotes structural biologist Stephen Curry (ICL), who while acknowledging that Sci-Hub is illegal has said, "But the fact that it is so immensely popular, inside and outside academia, is a symptom of many people's frustration with the status quo in academic publishing." There's more about this and other recent piracy lawsuits in an article from July 2017 in Information Today.

#### Faber & Faber/Bookswarm

Publishers Faber & Faber have engaged the services of Bookswarm to develop a new website to showcase the work of crime-writing legend P D James. The <u>new site</u> was launched in 2017 on the date of her birth (August 3<sup>rd</sup>) with a home page based around photos of Phyllis, her signature, a short biography, links to review articles, awards and her own words.

### IFLA (International Federation of Library Associations and Institutions)

IFLA has released *Library Map of the World*, an interactive tool where you can explore by country a range of library performance metrics. For instance, find out how many libraries a country has, how many of them are national, academic or public, how many have full time staff or Internet access, numbers of visitors and loans. Although a bit short on data so far (nothing for UK and Ireland yet) this looks like it could become a terrific resource and will allow us to compare ourselves to others, for example, public library provision and staffing following the cuts they've been suffering. Library Map of the World is also being used to host stories about library initiatives contributing to UN Sustainable Development Goals such as "Coding for Kids in Libraries" in Romania and "Mobile Libraries for Peace" in Columbia. Find out more in their press release.

### Marxist Internet Archive/NA Publishing

Serials publisher NA Publishing and the voluntary organisation Marxist Internet Archive are partnering to produce Left of Liberalism: Marxist-Socialist Newspapers, 1900-2015. The collection comprises 141 English language newspapers including The Daily Worker (1923-1958), The Liberator (1918-1924) and The Communist (1926-1945) which are currently available for purchase on the Marxist Internet Archive's website. The new product will be enhanced by OCR so the newspaper content will become fully searchable, and also by, "article level indexing, saved search capability, and usage reports". Left of Liberalism is scheduled to be available for purchase in the first half of 2018 after a partial trial version ended in December 2017.

### **Stanford University**

A new digital humanities resource of translations of medieval literature into English has been created and launched by Stanford University. The <u>Global Medieval Sourcebook</u> has been funded by Stanford's Center for Spatial and Textual Analysis (CESTA) and the Roberta Bowman Denning Fund, with content, "in such languages as Chinese, Arabic, Middle High German, Old English, Old French, Old Spanish, Latin and Italian," curated by Stanford staff and students. Features for researchers include introductions, bibliographic detail, bibliographies, side-by-side comparison of the original with the translation, high-quality images from the manuscripts, critical notes and some audio recordings imagining how they may have sounded at the time. There are only 14 items so far but this is a rich, attractive model for sharing this kind of content. The <u>press release</u> notes that the project director, "incorporate text submissions from other universities and scholars." I particularly enjoyed the German comedy drinking verse "Der Weinschwelg|The Wino".

# Breaking the Book: Contrasting Paradigms of Print Culture

### Michael Upshall, Consult MU

Michael@consultmu.co.uk

I opened Breaking the Book: Print Humanities in the Digital Age (2015) (which, paradoxically, I read in digital form on a smartphone) with a lot of anticipation. Laura Mandell is a scholar of eighteenth-century literature, and an enthusiastic pioneer and advocate of digital collections such as Early English Books Online (EEBO) and Eighteenth Century Collections Online (ECCO) for studying early English texts. Therefore, I expected this book to have insights into how digital texts differed from print, and how academic discourse can make effective use of digital resources, for example to analyse texts. What the book contains, however, is much different. Rather than being an assessment of digital texts, Breaking the Book is much more ambitious: it emphasises changes in print culture for much of the book, only considering digital publishing towards the end. Mandell asks, "how does the book machine work," by looking at the history of the printed book. The book concludes with a manifesto for print humanities - not, in fact, a manifesto for digital humanities at all, but a claim for how digital print can transform "the book machine." Nonetheless, a reader will see this book more as a contribution to the history of the printed word than a study of digital humanities.

Mandell's main argument, which I find compelling, identifies three key "medial ecologies" - 1700, 2000 and 1800 ("in that order") - and makes a very telling contrast between the "coterie" print culture of 1700 with the mass print culture that had become established by 1800. Coterie print culture is publishing for a small audience, of course, and characterised by authors making frequent changes to the books they publish - in many ways closer to circulation in manuscript than the print culture with which we are familiar. Thus, Alexander Pope treated his own published books as if they were manuscripts, that could be revised substantially at any time - not just his own books, but others' books also (including his edition of Shakespeare).

This is contrasted to the age of mass print, exemplified by Burke's Reflections on the Revolution in France, one of the earliest best-selling print titles, with over 12,000 copies sold in the first month of publication. Key to the mass print age is an implication that the text of a printed book is perfect and without error.

Finally, the year 2000 offers a glimpse of the possibilities of digital publication, which appear to include the possibility of annotating a text once more, as took place in 1700. This time, however, the annotations are courtesy of a digital textual model that enables readers to tag metaphor, simile, stylistic features, and so on, to create a truly annotated edition. Right at the end, Laura Mandell states that we should enshrine in a digital edition such things as ambiguity, repetition and symbol [p183]. Although such a vision is now

being realised, I believe it constitutes only a small part of the transformation that digital texts can provide as an educational tool. But that's a subject for another review.

Mixed with the main comparison of print culture, 1700, 1800 and 2000, is an argument about different kinds of language: ordinary language, the language largely derived from speech, which we use in our everyday discourse, and "book language." Clearly there is no question that the language of academic monographs is very different to ordinary language. Perhaps more controversial is what Mandell claims academics use book language for:

"Academics publish books to clear up the confusions of ordinary thinking by redefining the meanings of words ... Publishing books while educating people to read them is implicitly, I would argue, the goal to which most humanities scholars in the academy devote their lives of teaching and writing." [p29]

This activity is described by Mandell as "bookwork." This is a very heroic vision of the academy; my view is rather different. In the sciences, by contrast, scholars are typically motivated by the search for "truth", even if such truth may in fact be far more socially mediated than many of them assume. Only a very small minority of research scientists would see their role comprising any kind of education. But even in the humanities, I don't think the situation has changed so dramatically since I was an undergraduate; I don't think any of my teachers were dedicated to global education in the way Mandell describes.

Has the year 2000 enabled this educational role? Mandell claims, "We publish disciplinary monographs now...that wish to reform customary language with their own, much more carefully articulated idiom." But, she claims, academic book-language "fosters the fantasy that mass-printed disciplinary books can change common language, clear it up, and this utopian fantasy is shared by ... all modern disciplines of the book." Mandell appears to acknowledge that the if an academic's aim is educational, there is little evidence that they have an effect on everyday language.

"In our medial ecology [2000], now the fantasy that publishing books can legislate linguistic usage, trumping ordinary language is not something any currently active literary critic would seriously maintain: decades of culture wars and conservative backlash in the U.S. have demonstrated how little political impact can be had by 'public intellectuals.'"

This does not prevent Mandell discussing at length the role of the public intellectual - not something I expected in an assessment of digital humanities. Part of her critique of the mass print book culture is her condemnation of the mystique of print publication, the idea that when words appear in print they have a kind of magical correctness. It is not clear to me what Mandell is arguing for here. She is certainly an advocate of committed writing: "Since when have we ever thought that academic work in the humanities was an 'end in itself'"? [p138] - but I've encountered many humanities scholars who think just that. Does that make them less of a scholar? Political commitment is not "breaking the book" - there are plenty of examples of committed writing from the academy, which combine critical rigour with a thought-through political message, for example, E P Thompson's The Making of the English Working Class.

I should emphasise that I am quite drastically simplifying the author's argument in the above account to reduce it to a clear outline. The book is the result of wide reading, and can be engaged with at many levels.

I felt that more could be made of the development of technology around the discovery and reading of digital texts. The book only touches on developments in technology that are moving from string-based discovery to true semantic concept matching. In the Conclusion, Mandell writes how she worries that "we'll import the worst of book culture into the use and abuse of digital archives of our cultural heritage, just as books and articles have become rather unusable pdfs on screens of all sorts, unsusceptible of being marked by reading hands." [p150] We certainly don't want unusable PDFs, but it was academics who asked and who ask for them, compared to any other delivery medium available, such as HTML.

In a book defending the role of the print humanities academic, I was surprised that there was no discussion of the professional situation of the university lecturer. Their academic advancement is based around the number of papers and books that they publish, not on their success in influencing common language. A jaundiced view might suggest that many academic humanities books have little effect on common language because they were never intended to be read outside their peer group. In fact recent thinking is questioning, just as there seems to be little need to have print journals any more, whether we need to have printed books at all?

# The Strix Award: In Honour of Tony Kent's Life & **Achievements**

The Tony Kent Strix Award was inaugurated in 1998 by The Institute of Information Scientists. It is now presented by UKeiG in partnership with the International Society for Knowledge Organisation UK (ISKO UK), the Royal Society of Chemistry Chemical Information and Computer Applications Group (RSC CICAG) and the British Computer Society Information Retrieval Specialist Group (BCS IRSG). The Award is given in recognition of Outstanding Practical Innovation or Achievement in the Field of Information Retrieval. Last year UKeiG was delighted to announce that the winner of the prestigious award was Maarten de Rijke, Professor of Computer Science at the University of Amsterdam. The Award was presented to him by Doug Veal (Strix Chair) and David Ball (UKeiG Chair) in London on Friday October 20th 2017 in recognition of his major and sustained contributions to the field of information retrieval and web searching.

Professor de Rijke is a well-known and highly respected member of the international information retrieval community having made considerable and widely recognised contributions to the field. He has an impressive and formidable high impact publications record in a range of areas including semantic search, semi-structured retrieval and social media. He has produced influential research outputs on the large-scale semantic analysis of online content and on the analysis of subjective aspects of information (sentiment, credibility, memory, reputation and experiences). His contributions to information retrieval, in particular to the fast evolving areas of computational methods for analysing, understanding and enabling effective human interaction with information sources, have been profound.

Professor de Rijke leads the Information and Language Processing Systems Group at the Informatics Institute of the University of Amsterdam. It is one of the world's leading academic research groups in information retrieval and intelligent information access, with projects on self-learning search engines, semantic search and the interface between information retrieval and artificial intelligence. Further details of his nomination and career can be found here. Maarten was presented with the award at the Tony Kent Strix Annual Memorial Lecture at The Geological Society, Burlington House, Piccadilly, London during the afternoon of Friday 20<sup>th</sup> October.

The 2016 Strix Award winner Maristella Agosti, Professor in Computer Science, Department of Information Engineering at the University of Padua, Italy, presented at the event. Professor Agosti has built a worldwide reputation for her work in many aspects of information retrieval and digital libraries. She was one of the first people to work in information retrieval in Italy where she acted as a catalyst for creating a vibrant and internationally recognised IR research community.

Her lecture was entitled "Behind the Scenes of Research and Innovation." She writes: "We often excel in producing scientific achievements, but at times turning those achievements into innovation and technology transfer can be a tall order. Furthermore, even though we

may document our findings well in scientific publications and reports, we are far less accomplished and proficient in documenting and explaining how the complex process of transforming scientific results into innovation has been performed and proven successful. In general, most of the knowledge of this transfer process remains only with those taking part in it, while certain aspects such as the time and context when the transfer took place may be rich in lessons to be learnt and provide opportunities for future teaching in diverse fields. This talk addressed the complex process of transforming research outcomes into innovation using some relevant examples in the fields of information retrieval and digital libraries."

A link to a video of the lecture is available here.

To celebrate the Award and the man who inspired it, UKeiG is reproducing below two extracts from the Tony Kent Strix Award booklet, republished every year as the roll call of luminaries it celebrates expands. Previous winners are listed here. The Annual Lecture series is sponsored by Google.

#### Foreword

Tony Kent was not only a rotund jovial man, but a man of many parts; a leader, an innovator, a teacher and someone highly active in the international information scene. He made a major contribution to the development of information science and to information services in the UK and internationally, particularly in the field of chemistry.

After his death in October 1997, a group of us met for lunch and each spoke of what he knew of Tony's life and work. From each speaker's recollections came new revelations to each of us of the breadth of his work and the influence he had exerted in the information field. Out of this new appreciation of the achievement of this modest man grew the idea of an Award to commemorate him and his work.

A proposal for the Strix Award was submitted to the Council of the Institute of Information Scientists (IIS) (of which Tony had been a Fellow) for the setting up of an annual Award in recognition of an outstanding practical innovation or achievement in the field of information retrieval. These achievements could take the form of an application or service, or an overall appreciation of past achievements from which significant advances had emanated. The Council approved this proposal, and agreed that the Award should be presented after the Institute's Annual General Meeting in September each year.

The initial luncheon group then became the Working Group to turn this into reality.

In addition to the tribute accorded by the IIS in the form of the Award, Doug Veal, as Chairman of The Royal Society of Chemistry's Chemical Information Group, organised on March 11<sup>th</sup> 1998 a special half-day seminar in memory of Dr Tony Kent. The meeting afforded an opportunity to step back from today's hectic pace of on-going developments in the information field and look at earlier developments, which paved the way for many of the information systems as we know them today.

Four speakers traced firstly the background environment in which Tony worked; then his contributions in his early days at the Chemical Society; his software development phase

and finally the philosophy that guided him in his developments. It is these contributions that form the backbone of this booklet. As news of the proposed Award spread, additional tributes were received from as far afield as the United States and New Zealand. These additional tributes have been included.

The Working Group would like to thank the many that have either contributed with donations to the Award or have written in their appreciation. Particular thanks go to Val Metanomski of the American Chemical Society for his unstinting help in coordinating American contributions and especially for preparing a special tribute that dealt with Tony's impact on the American scene - much of which was not widely known in the UK.

In compiling this Tribute Booklet, the Working Group has been happy to act as recorders to the contributions that Dr Tony Kent accomplished in his lifetime.

Derek Barlow, Alan Gilchrist, Doug Veal, Peter Vickers.

### Tony the Philosopher: The Pioneer of Practicality and Good Sense

Tony Kent was a totally unassuming man who profoundly affected - transformed indeed - the lives of the people who were privileged to be touched by him. I am one of those people.

It was in about 1984 that I found out that microcomputer software could be used to classify and retrieve microfilm, exciting news for a content analyst for whom multidimensional classification is at the core of intellectual life. I saw an advert in the *Financial Times* for a system from a company called Imtec. I went up to Stanmore and tried to explain what I wanted to a bemused salesman who ended up giving me Tony's number in order simply to be rid of me. I remember the sausage and salad lunch we had in Chimes, Pimlico's then brand new English Cider bar, while I tried to explain content analysis, business intelligence and trend reporting in less than half an hour. Unlike the Imtec salesman, though, his eyes did not glaze over, but he tugged his beard in astonished perplexity, while asking difficult questions about specifying what I wanted. We agreed to meet again at his home and office, Stud Farm, in a couple of weeks.

It was a hot day in early August. I was uncharacteristically in tie and jacket, Tony and Jenny, his wife, were far more comfortably dressed. Tony had been planting oak trees, while Jenny was deadheading roses and tending to the barbecue. It was then we first started talking about the only thing for which Tony showed any reverence: the living world of nature, especially birds. He always said that if it had been his choice, he would have lived the life of an eighteenth century cleric with a passion for botany. On any other subject, Tony's attitude was one of profound and slightly mischievous irreverence, especially on the subject of the computer industry. So, even before seeing STRIX, I knew I had found a soul brother.

After lunch Tony showed me STRIX on his early Imtec micro. It did not take very long for me to see the power of this technology to change the way people work and even think. Remember, I was looking at free text retrieval from the point of view of someone with a lot of experience in developing and executing multifaceted classification with large collections of newspaper, magazine and journal articles. I saw that if easy multivariate

classification were to be combined with the total safety net of every single word being indexed, knowledge could be managed in a vastly cheaper, faster, more convenient way than most people in those days could even conceive. I knew right then and there that Tony could be on the way to making it big time, if only people could be made to understand how to use it. And combining this technology with content analysis, we could together make a significant impact in the hypermedia of the future (which was finally born to the world misshapen and organisationally handicapped, as the World Wide Web).

We decided to work together to find funding for the development of text retrieval and content analysis as tools for future media. I somehow arranged a meeting with some very senior Philips executive in Eindhoven to discuss including us in the development of its Megadoc optical disk document management system. Although we did not succeed in our objective, I recall us deciding to cement our relationship by trading shares in our companies over a beer or three on the return ferry. That is how I became a Director of Microbel and Tony became a Director of Trend Monitor. Every week, he would come to London to work on a client site. I would meet him at Warren Street station at 9:30 a.m. where he would hand me the not even luggable Imtec, which he had lugged all the way from Newark, so I could use it for the day to gain enough experience with Strix to write my specification.

The two great things about Microbel as a company were Tony's total dedication to the continuous improvement of the product and his deep caring for all its stakeholders, including its Directors, its employees and its customers. Customer care could mean staying up all night, driving 400 miles in a day or just ever so patiently and cheerfully sorting out their often self-inflicted difficulties over the phone. Product development took the form of late night conversations between us over whisky and late night programming sessions with cigarettes and coffee.

The company's greatest drawback came from one of Tony's greatest charms: his fundamental disinterest in money and what it could buy (with the notable exception of Safaris in Kenya). Many times Tony and I were lectured by his wife and fellow-director, Jenny, on how "pathetic" we were when it came to sales and marketing. Sometimes during the many financial crises, her criticism would develop an edge of desperation, but she knew he would never change. And she loved him for it, too. Microbel survived thanks to its exclusive UK agent, John Crowther of Business File and its Dutch agent Fred van Bremen of Informatica Avies, which is why Strix became a major player in the UK Executive Recruitment market and the Dutch Library and Government markets. Derek Barlow also made valuable contributions, saving the day on more than one occasion.

As for Strix itself, for a lone programmer, it is a near superhuman accomplishment. Tony knew exactly what was needed from a full function text retrieval package and then he did it, himself. He was obsessed with retrieval speed and efficient memory usage. He also designed the most easily usable search procedure for non-information specialists that I know. To my knowledge, its set-by-set logic is still unique. But Tony was decidedly not interested in what he called the "bells and whistles" of software design. This attitude was Microbel's second greatest drawback since in the Windows environment it turned out that software sales and marketing depended much more on the Window dressing than on core functionality and usability. Although he knew this sorry truth - I told him enough times -

he would not be diverted from what he considered to be his more important (and more fun) programming priorities.

As a co-director of two companies with Tony, I was in a privileged position to induce him to write about those priorities in prose. In his opinion, writing prose was just another irritating impediment preventing him from doing what he liked to do best which was to write code. One of my greatest successes was a letter he wrote to an Aslib magazine I edited in 1991 called the *Intelligent Enterprise* in response to a dialogue I had started on a "new dawn" of practice, rather than theory centred information management. The week before, the already legendary Cyril Cleverdon, former Chair of Information Transfer at Cranfield, congratulated me for "desecrating" the concept of information science and celebrating the end of mentalism in the field which theorises that minds have innate organisational structures which it is the job of information science to discover.

Here are some excerpts from Tony's letter:

Dear Jan.

It is of course a great thing to be optimistic; if I were not an optimist I would have given up banging my head against the notion of "information science" twenty years ago. But it is also important to be a realist; and the reality is that it is more ego enhancing to invent theorems for even a non-existent subject like information science than it is to get on with the job of providing folk with systems that find the information that they want.

If there is a central truth that can be identified in this field it is that there is not, and never will be, one best way of achieving the goal. Neither free text retrieval, nor classification, nor statistical analysis, nor weighted search, nor any of the 101 other ways doing things necessarily suffice on their own.

I will no doubt be accused of elitism if I expressed my long-held view that the processes of information management and retrieval can never be simplified to a point where they may be conducted by half-wits (which is why incidentally it is a waste of time and effort to sweat blood building pretty user interfaces and the like). Finding useful information is an intelligent process requiring intelligent people because at the end of the day only the intelligent can recognise what is useful.

Let us apply the procedures of science to the evaluation of information art and practice and stop kidding ourselves that there is, or ever will be a science of information.

In our own Trend Monitor Reports (December 1991), he wrote:

Though speed and versatility are desirable goals for full-text retrieval products, they should not hide the need for information analysis and organisation. Until systems developers recognise this need, we will continue to be bombarded with new systems that retrieve information as badly as now, but faster. [Meanwhile] the trend towards the release of more word finder utilities and few true text database systems continues.

The future for most of these needle-in-haystack products is gloomy, however, because searching essentially unorganised text is liable to produce essentially unorganised and

relatively useless results. Text databases, on the other hand, combine an organising structure, along with the convenience of being able to find every word or code.

This needle-in-a-haystack mentality is exactly why nowadays the World Wide Web is so often a waste of time and a source of confusion and why metadata is seen to be the next great hope. In our July 1991 edition, he wrote: "I refuse to believe that knowledge can be inferred from any conceivable software system". This opinion reflects what Tony wrote five years earlier in his generous introduction to Trend Monitor's first intelligence report published by Aslib in 1986, called Computers & Communications: A Panoramic Synthesis.

"As the power of the nuts and bolts of information technology has grown at a rate that is spectacular, and even awesome, there has been a growing belief that all problems may be solved if only enough power is thrown at them. In my particular area of interest, we have seen the burgeoning of systems for providing access to huge volumes of scientific, technical and business information. These systems operate and continue to multiply in the belief that if you make the haystack big enough and provide a large enough Magnet, you will be able to find the needles you want. You will certainly find needles. But what of those items of information that cannot be attracted to the magnet (made no doubt from clay or straw) which may be the most sharply pointed for your problem, as well as all those needles the magnet attracts having nothing to do with your problem."

He went on to recommend the report on the basis that

"it illustrates the benefit that comes when thought rather than brute force, is applied to the problem of converting raw information into knowledge"

And here is a final quote from Trend Monitor Reports (December 1989) illustrating his humble, anti-hype view of the true capabilities of the software he enjoyed so much inventing and writing:

"Making life easier for text-retrievers is a great objective. The fact this perceived need exists, begs the question as to why it should be difficult in the first place. What is really required is a recognition that real literacy (as opposed to computer literacy) is a necessary prerequisite for the effective use of information, and that computer technology can only, at best, provide gadgets that reduce drudgery."

In conversation he constantly warned that many of these "gadgets", such as automated relevance ranking and sophisticated thesauri, may be of use to information experts who understand exactly what they are doing and can treat results with the necessary scepticism. He emphasised that they can be positively dangerous for non-experts who believe the vendor hype that a "software solution" will solve their information needs. In these terms, the current pack of World Wide Web search engines would be the epitome of danger. Tony insisted on starting the software development process from an understanding of users whom he treated as authorities in their own domain and "idiots" when it came to understanding the software domain.

This unrelenting focus on user needs was what made him insist, from the very first day we met, again and again that I come up with the dreaded specification when I used to gush about the enormous potential of text retrieval software to manage multimedia content in

a networked future. It was only about two years ago when I met Simon Eaton, a self-made expert in mind mapping and thought illustration, that I began to think again seriously about the specification. We decided that Tony would concentrate on writing a Windows DLL for a search engine and we would specify its user interface. And it was only last August that Simon came up with a comprehensive new metaphor for managing the computer environment which would form the core of the long awaited interface specification. We arranged to meet Tony on October 17 to show him the first draft outline of the specification. He died two days before. But he had left behind an uncharacteristically well documented DLL, called WINEng, which performed all of Strix's core search functions in a Windows environment. I am pleased to report John Crowther has seen our specification and we are negotiating a deal to roll out our new user designed interface to the computer environment powered by WINEng by next autumn!

Years ago, when I lived in Pimlico with Gay McManus, Tony used to stay the night once a week. After supper, it was usually Scotch and ideas innovation time, well into the night. Gay used to tease us that we were always just about to make it, but we never quite did. However, as the ancient Chinese Book of Changes perseveres in saying over and over: "Perseverance furthers". If we do finally succeed in the mission we started nearly 15 years ago, in one sense, Tony will not have made it. In another sense, he will have literally made it. He will have made it for us. The beauty of Tony was that he did not really want to make it in the first sense. Only the second sense - making it for others - mattered. Lucky others; lucky us.

Jan Wyllie

### Notes for Contributors

eLucidate is the journal of the UK Electronic Information Group. It is published three times per volume, around spring, summer and winter. It aims to keep members up to date with developments and innovations in the digital information industry, considering the impact on information professionals and consumers of e-information.

UKeiG encourages the submission of articles, reports and reviews about any of the topics covered by the journal. These include: electronic resource awareness, information management, digital/information literacy, effective information retrieval and search technologies, intranets, social media, open access, e-publishing and e-industry research and development. UKeiG can't pay contributors, but you will retain your copyright and will be able to republish your work elsewhere.

Please follow these simple guidelines:

#### About our members

Our membership is eclectic and includes information professionals at all levels of the UK workforce involved in digital content management and awareness, information dissemination, training and service delivery. The UKeiG demographic comprises academia, but also the private, commercial and public sectors, embracing schools, further and higher education, the NHS, healthcare and pharmaceutical industries, science, law, finance, arts, humanities, archives, museums and libraries.

UKeiG's most popular CPD courses include search tools and strategies, knowledge management, open access and research data management.

A key benefit of membership is that the CPD courses, meetings and networking forums provide "crossover" insight from one discipline to another. Members see UKeiG as a way of keeping up to date with trends and developments outside of their core, day-today business. Few other organisations provide this kind of cross-sectorial context and oversight.

### Technical level

Although members rate themselves highly for technical awareness, they are typically users rather than creators of technology. Articles should not assume understanding of technical terms without explanation.

### Length of article

Feature articles should be in the region of 1500-2500 words, but the editor is flexible on article length. Each article should be prefaced by a short summary (around 50 words.)

#### What to write

The world is your oyster in terms of suggested themes and subjects as long as they reflect the disciplines and membership base articulated above. You should never assume that readers will be entirely familiar with your topic, so anything you can do to offer definitions, explanations, examples and context would be welcome. You should always link to suggested reading and alternative resources to enable readers to explore your article further.

While the obvious focus of the group is the UK electronic information sector, the industry, by its very nature, is global and international developments should be reported when they impact on the UK landscape.

The most valuable viewpoint you can give is that of a practitioner. While UKeiG welcomes theoretical debate, we are primarily a forum

where peers can share their practical experiences and understanding. So, if something worked for you, tell the readership. If something didn't, tell the readership why not.

#### How to submit

Please e-mail your copy to the editor, Gary Horrocks at: <a href="mailto:info.ukeig@cilip.org.uk">info.ukeig@cilip.org.uk</a> Articles should be delivered in a simple Word format. Hyperlinks to alternative/suggested content/further reading should be embedded in the text. Images are welcome if they illustrate a point or clarify a statement. Please send them separately, and also place them in the Word document in the appropriate sections. They may be in gif or jpeg formats.

#### **Rights**

By submitting an article to eLucidate, authors grant UKeiG the non-exclusive right to publish the material in any format in perpetuity. However, authors retain full rights to their content and remain the copyright owner.

### About you

Please provide a 10-20 word biographical summary about yourself, alongside an email address and job title.

### **Editorial process**

Your article will be copy-edited for spelling and for sense. If there are major changes to the article we may return it to you for your comments and approval, but most articles require only light corrections before appearing in eLucidate, and do not need a further review by the author.