UDC classification in use: stories from the field

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Introduction

The UDC has been one of the leading general classification schemes over the past century and has been deployed in multiple libraries worldwide. As with other library classifications such as Dewey (DDC) and Library of Congress (LCC), UDC is gradually coming to terms with the digital transition in libraries and the consequent diminution in the importance of classification systems.

UDC stakeholders world-wide, including publishers and library and research communities continuously monitor the use of the system. Usage data are collected either internationally (e.g. Slavic, 2008; 2012), nationally (cf. Makke, 2016) or across different types of applications including those outside libraries (cf. Slavic, 2006). The starting point of such surveys is that there are different types of application of UDC (for collection shelf arrangement or for metadata-based retrieval) and that the scheme's use is distributed between different types of libraries and bibliographic and other information services. Thus, the type of application and associated issues vary greatly; you can observe discrepancies in the practices and applications both geographically and linguistically. There are 136 countries in which there are libraries using UDC, and in 27 countries in Europe (and Central Asia), UDC is used as the main classification system in all type of information institutions. Based on statistics provided by National Libraries and Library Associations in these countries, at least 150,000 libraries using UDC can be counted.

In English speaking countries and outside Europe in general, UDC is used only in certain types of libraries (often only special and academic) and the application scope tends to be different. In English speaking countries, there might be anything from only 5-10 to several hundred, rarely reaching 1000 libraries. Thus, assessing the library needs and practices is rather complex as it demands an understanding of the country's bibliographic culture, library tradition and professional and economic environment.

The UDC Consortium, the owner of the scheme, periodically conducts internal surveys of how the scheme is being used, to better understand how best to adapt and develop the scheme to meet the challenges of libraries today. Thus, in the summer of 2017, a short survey was undertaken to determine how users were deploying the scheme and what problems and issues they faced, so as to inform the strategic direction of both the UDC and the Consortium itself.

This report reflects on the part of the survey related to the UK. The sample of Institutions included universities, special libraries, national libraries and other agencies with an interest in classification and its implementation and others whom it felt would be interesting interviewees.

UDC use in the United Kingdom

Although we do not have the exact number of libraries using UDC in the UK there are some indicators that can help estimate and monitor use of the classification. The last comprehensive survey on the total of UDC libraries in the UK is from 1979/1980 and shows a count of 640 libraries (out of 2,895), 358 of which were in London (Hindson, 1981). The survey was commissioned by BSI, the then publisher of the UDC in English. The complete data with addresses and list of all UDC libraries in England, Scotland, Wales and Northern Ireland is now held in the UDCC archive in The Hague. With 22% of all surveyed libraries using the system, the UDC was, as Hindson noted, the most used classification in the UK after Dewey. His data show that the majority of UDC users were special libraries, followed, by a big margin, by academic libraries.

The interest these libraries have in UDC comes from the very detailed schedule and extensive terminology, especially in sciences and technology (the full edition, published by the BSI at the time was approximately ten times the size of DDC).

From Hindson's survey and BSI customer's data in the UK in the subsequent decades, it is possible to observe a trend of decline in UDC use in the UK. This trend was confirmed by the Consortium's own research reported in Task Force for System Development (1990) and user surveys in 2004 and 2006. Two reasons were recognized as being predominant in the decline: many of the named special libraries listed in the Hindson data were in the industrial sector (chemical technology, metallurgy, pharmaceuticals, manufacturing industry). The notable decline in UDC use in these libraries from 1980s onwards was perceived as a logical consequence of the shrinking of the industrial sector (especially metallurgy and chemical technology) and the closure of libraries or libraries moving from traditional tools to text retrieval systems, abandoning classification all together. The decline of use of UDC in academic libraries, however, is attributed primarily to the decline of funding and libraries' dependence on off-shelf bibliographic data. In this sector libraries tend to migrate from UDC to DDC or LCC for which there is readily available metadata and which therefore do not require the same level of cataloguing staff. Based on what we know, the number of UDC using libraries in the UK is probably now not likely to exceed 100-200, although this would need to be confirmed by proper research.

Apart from an interesting development of the use of UDC to support the implementation of subject gateways in the 1990s (Slavic, 2006), the overall trend that could be noted from sale and research data of UDC in the UK is the one of diminution, which may not be particular to UDC but to library classification in general.

The 2017 survey aimed to provide further insight into these trends in order to determine the issues and the needs of libraries using UDC which might then be addressed by the Consortium. This was a limited qualitative, but in-depth review whereby users were engaged through face to face or email interviews in discussions about their usage of the scheme. Information about UDC use was collected from about 20 Institutions. Thus, the whole has provided a snapshot of views at a certain point and within a limited geographic spread. The results are represented in this paper. Thanks, should be offered to the libraries consulted for their time and thoughts. A full-scale survey is still needed.

UDC Variations

UDC has always been subject to local variation – for example it is recommended that facet order reflects local priorities rather being subject to any standard overarching structure. And so it was that of the libraries we spoke to all the special libraries at least, made sometimes serious changes to the published scheme to cope with the depth of their collections in their core discipline. Thus, the British Film Institute had in effect its own class scheme for film - in house developed but with UDC style notation - whilst the National Maritime Museum varied the facet order to deal with their particular need to highlight naval battles. Even those who largely followed the scheme, local variations would be made, to some extent locking the library into a particular, and sometimes old version of the schedules. This finding was in line with the Task force review where they reported "all had undertaken some adjustments" and "ten of the institutions had been involved in (local) revisions and expansion of the schedules". Another section provided the relevant quote "All the libraries were more concerned with their own situation than the general good of the UDC".

Reclassification

One noticeable and continuing trend is the move away from UDC (and other schema) towards Dewey – and to be more specific Dewey as proposed by national agencies and taken unchanged and largely unchecked. The benefits of this are obvious and are being sought in particular by academic and university libraries; it is less the case with special libraries (though they have their own issues) or to public libraries (where in the UK at least, we suspect most already use DDC).

Thus at least 3 libraries on our list had either already moved to Dewey or were in the process of reclassifying. The primary argument for reclassifying is the consequent economy as the bulk of records can be downloaded at the point of acquisition or even earlier through CIP. Class numbers may not entirely suit the library concerned but that seems to be of less concern, coupled as it can be, with the secondary argument that the print collection is now only a fraction of the total resources available and hence is of decreasing importance. There are also more longstanding issues such as the lack of user understanding (or even librarian understanding) of notation.

But the decision to reclassify is not taken lightly, and at least one library had considered it and decided against given the lack of depth in the DDC scheme. Reclassification will imply a potentially long period of confused sequences, especially if it implies a move from an alphanumeric notation to a numeric. And though the process of assigning new numbers can be done to some extent automatically (there are mappings available) the effort is as much that of relabelling as anything.

Alongside such major decisions are the routine arguments about whether to adopt changes within the scheme itself, as new editions are published and areas revised as new concepts emerge – even the most synthetic schema will require updating. Strategies on this seem to vary but there is a genuine unwillingness to adopt changes unless they are really needed; those libraries who already vary the scheme are less likely to adopt universal changes in those areas and may well just drift away from the authorised version.

The drive towards accepting a shared or pre-provided classification in not confined to Dewey (or LoC). Within the UDC user community outside the UK, there are many instances such as Portugal, Spain, Poland, Slovenia etc. where UDC is recognised as the national system and which implies that a book is classified just once and all parties accept that version. In all such cases, it requires some acceptance that the interpretation of UDC and the assigned class number are correct.

Discovery

Enabling discovery is clearly a key function of the classification scheme and we were interested to see how that was playing out in today's digital library. In its original context UDC would provide a classified catalogue accessible through a separate but linked index. In theory, users would use the subject index to identify relevant class numbers and then search the classified listings for items – though in practice (in the UK at least) they would often go direct to the open shelves. None of this search process has really translated into the online catalogue intact i.e. the extent to which online catalogues support discovery through UDC is varied and often weak. Although there are multiple ways in which UDC can help subjects seeking in the OPAC - Slavic (2006) for example, details 10 different functions based on UDC data held in the bibliographic record and additional functions if the library maintains a UDC authority file - it would appear that classification continues to provide only a limited role in ensuring effective subject searching of collections. Indeed, the project undertaken by Casson, Fabrizzi & Slavic (2011) looked at changes in the UDC offer in Opacs between 2003 and 2008 and it is hard to see that the situation has changed greatly since then. Whichever way, direct user searching of the classification sequence is not common in opacs – indeed of all the users we spoke to, it was not evident in their catalogue. What is more common is for the class number to be hyperlinked at the point of retrieval of a record so as to provide a shelf browse option – though even this is sometimes absent. (Shelf browse may or may not include e-resources depending on whether they themselves have been classified). The extent to which these functions are used in practice is unclear and we suspect forms only a small role in discovery.
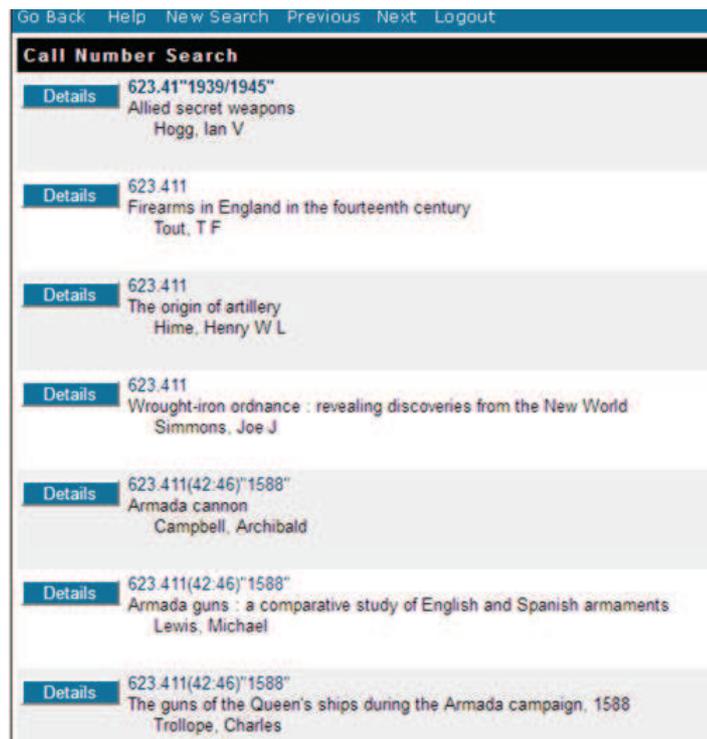
Figure 1 Searching a classified sequence of UDC Numbers (the National Maritime Museum)

There is also evidence that the emergence of web scale discovery layers has to some extent displaced the Opac as first port of call – with some libraries prioritising the discovery system over the Opac. Moreover, is the drift from subject authorities as a means for search to probabilistic searching and even where facets are used in a probability search they are as often as not just keywords or the like rather than anything controlled. A good example of this trend is that of the University of Leuven, where Schallier (2004) reported on the development of an Opac with classified browsing available in UDC at that time but which now provides an Opac based on a discovery system with only limited subject facets to improve precision in searching.

Vocabularies in Library Records

Thus if classification has become less prominent, the deployment of subject terms in the library record has become more critical with the increasing provision of systems based on probability and word matching. All the University libraries in our sample were in one way or another populating their records with subject information - using LoC subject headings or the like if nothing more. The special libraries (all but one) had gone some way towards controlling the vocabulary in their records through the provision and maintenance of a taxonomy. These varied from in house taxonomies -based on national or international bodies often from a mix of sources – to those with a specialised vocabulary being used to manage a core discipline and a more general scheme for everything else. Our interest was in the potential of UDC terminology (captions as they are referred to) being used as a vocabulary to provide a controlled terminology – conceivably also to bring other disparate vocabularies together. This is by no means a new idea; Riesthuis (1990) argued the case for using UDC in this way in 1990 (sometimes referred to as thesaurification) – however he also raised a number (8) ways in which UDC captions might present problems as a vocabulary.

Nevertheless, it is an entirely feasible idea and there is no doubt that some libraries are using UDC in this way. Figure 2, (the OPAC of the British Film Institute who use UDC as a thesaurus) illustrates the point. In another case an organisation (a publisher in fact) was proposing to use UDC to semantically enhance their records so a as to improve the search experience. The idea is to map their existing records onto the UDC MRF and then derive the relevant terms to add to the knowledge base. And Slavic (2006) also noted that that over 37% of the libraries she surveyed were using UDC in this way. Given that there are considerable benefits in a multilingual environment for using a scheme such as UDC which can map across multiple languages, it seems odd that it has not been used more in this way; perhaps it is just that UDC is not known as a vocabulary and there are limitations in trying to do so.

Title	TV and screen writing
Material	Book
Author	Lola Goelet YOAKEM (Editor [Library role])
Corporate author	Writers Guild of America
Pagination	124p
Publication place	Berkeley, CA
Publisher	University of California Press
Publication date	1958
Keywords Subject	Scriptwriting: films ; Time and motion study ; Films: uses, specific fields ; Society: reflected in films ; Religion ; Broadcasting: television ; Fiction: adaptation of novels into film

Figure 2 UDC vocabulary used as subject terms in the BFI Catalogue

Classification in Repositories

Many libraries worldwide have invested in institutional repositories (sometimes research or open access repositories) to support institutional archiving and publishing. The discoverability of content in these systems remains notoriously weak; see the recent experience of Strathclyde (Macgregor, 2017). We were interested in the extent to which UDC, or more specifically its vocabulary, is being or might be used to populate the subject metadata in repositories; but determining the extent of usage is problematic in that it needs the ability to address e.g. survey all the known repositories for the presence of UDC terms. There is no obvious way in which that can be done unless records in each repository are classified with a UDC notation and identified as such, then of course it becomes feasible. Indeed, we corresponded with the University of Bielefeld who maintain the BASE directory of repositories and Friedrich Summann pointed us to work he and colleagues have done on this issue (Pieper, 2015) Those records which have class numbers can be identified through the relevant data field being populated. He reported that out of a total of circa 77 million records in the BASE directory approx. 4% had a UDC class number. However, those that have any kind of class number at all are a small percentage of the total and it is not possible to determine the extent to which UDC captions may or may not be being used - independent of the class number.

We have noted that discovery in IRs is poor – as Macgregor (2017) said "*Universities to date have probably preferred to focus on establishing the infrastructure repositories and the collection without overly worrying about discovery*". It should be that UDC has a role here in that the drive must be to maximise the exposure of content, to render it retrievable through a mix of search engines and enable its use in a multilingual environment.

Summary

The usage of UDC remains extensive worldwide; many libraries do not have the same challenges as those in western Europe and the States and UDC is thoroughly embedded in their library operations. In the UK, special libraries are particular champions of UDC though they themselves are under threat (many business or technical libraries have closed or merged or effectively subsumed into the intranet). Otherwise there is a drift in classification usage towards increasing standardisation coupled with a diminution in its importance. And this is not the case for just UDC.

The use of traditional classification in search and discovery is limited and yet it ought to have a very positive role to play; repositories and the like lack effective discoverability and a controlled vocabulary such as UDC should be way of correcting that. This might require more project investigation and certainly a greater awareness of the potential of UDC as a taxonomy to bring about.

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