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Résumé. Depuis 2002, le Laboratoire d'étude de l'architecture potentielle de l'Université de Montréal a mis en place un programme de recherche articulé autour de la constitution de bases de données documentaires de projets conçus en situation de concours. L'accès au Catalogue des concours EUROPAN-France est en ligne depuis le 18 janvier 2008 (www.arclab.umontreal.ca/EUROPAN-FR), le Catalogue des Concours Canadiens étant accessible depuis le printemps 2006 (www.ccc.umontreal.ca). Dans les deux cas les problèmes et les avantages pour la recherche sont analogues. Ils dépassent rapidement la dimension technique, pour plonger l'équipe du LEAP dans les affres et les vertiges de questionnements épistémologiques et théoriques exacerbés par les impératifs de la logique informatique. Ces banques de projets et de documents ne seraient-elles pas d'abord et avant tout des modes d'archivage de ces « événements comparatifs » que sont les concours ? Ne sont-elles pas appelées à préserver les connaissances de ce que les architectes considèrent parfois comme des « projets perdus » ?
Mots clés : Banque de données documentaire, concours d'architecture, projets, connaissances, Internet, classification, recherche.

Abstract. Since 2002, the *Laboratoire d'étude de l'architecture potentielle* team at *Université de Montréal* has been compiling databases on architectural and environmental design competitions. The EUROPAN-France Competitions Catalogue has been accessible on-line since 18 January 2008 (www.arclab.umontreal.ca/EUROPAN-FR), and the Canadian Competitions Catalogue has been on-line since spring 2006 (http://www.ccc.umontreal.ca/index.php?lang=en). The architectural research problems and advantages of the two cases are analogous. They go well beyond the technical aspects and present the team with the epistemological and theoretical issues that are exacerbated by the logical demands of computer programming. Could these "projects banks" provide, first and foremost, ways of archiving these "comparative events" as represented by competitions? Could they be a means of preserving the knowledge and ideas carried by what architects sometimes consider as "lost projects."
Keywords: Documentary database, architectural competitions, projects, knowledge, Internet, classification, research.

**Session 4 : La valorisation, la diffusion et l'exploitation
des archives numériques
Session 4: Dissemination and Use of Digital Archives**

DOCUMENTING COMPETITIONS, CONTRIBUTING TO RESEARCH, ARCHIVING EVENTS

Classification is disorder

Let us start by tackling this paradox, which brings archivists, librarians and architects together around the notion of classification. French philosopher Michel Foucault has highlighted the role of order in the development of modern science and has shown that mankind only became a knowledge-bearer after the Renaissance, once a vast range of correspondences and relationships had been exhausted. From this perspective, 'knowing' would seem to be a question of creating relationships and classifying. Foucault was much amused by "a certain Chinese encyclopaedia" cited in a novella by Jorge Luis Borges, and he used this image in the preface to his own monumental work *The Order of Things* (1966).

In this typically Borgesian encyclopaedia, "animals are divided into: a) belonging to the Emperor, b) embalmed, c) tame... f) fabulous... i) frenzied, j) innumerable... n) that from a long way off look like flies." Although archivists would probably find this monstrous classification method amusing, the same seems to apply to architects, and this may be why their imagination is wired in such a strange way. To come back to our subject, this may be why their archives are organised so strangely too.

The fact that the same quotation also crops up in the cannily organised disorder of the 20th-century's last architectural manifesto, *S, M, L, XL* (1995), even if only in the "animals" section, is perhaps a further testimony to this strangeness. Koolhaas has read Foucault and correctly quotes Borges (who himself is quoting ancient Chinese treatises) but Koolhaas does not, any more than Foucault, highlight the debt this story owes to an encounter between a great archivist and a great architect. In architecture, pedantry sometimes gives way to ignorance, because what is so often forgotten is that in this rather too frequently quoted passage, Borges gives the encyclopaedia a magical name, a name which could be taken as a touchstone for any digital architecture archive project – but I will keep you waiting to the conclusion to find out.

Let us start, however, with the Belgian librarian to whom Borges is alluding who is, of course, none other than Paul Otlet. Otlet, along with Henri La Fontaine and then Le Corbusier, dreamt up the *Mundaneum*, an ambitious project to say the least, which aimed to document the whole world's knowledge in one single location. Let us continue Borges' quotation up to the passage that implicitly refers to Otlet: "The Bibliographical Institute of Brussels also resorts to chaos: it has parcelled the universe into 1,000 subdivisions: Number 262 corresponds to the Pope; Number 263, to the Lord's Day; Number 268, to Sunday Schools... It also tolerates heterogeneous

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subdivisions, for example Number 179: «Cruelty to animals. Protection of animals. Moral Implications of duelling and suicide. Various vices and defects. Various virtues and qualities.»"

Surprisingly, Foucault did not pick up on this important, even crucial reference, since Borgesian criticism focuses first on decimal classification, on its potentially absurd yet potentially brilliant juxtapositions! It is well-known that decimal classification was invented by Melvil Dewey (1876) and that it was perfected, but also adapted to a more complicated usage by Henri La Fontaine and Paul Otlet. Having said this, however, who has not, in the well-ordered shelves of a public library, found himself selecting a book just next to, two shelves further on, than the one that he actually came in to look for?

From an archiving perspective, two further paradoxes related to classification could be added. Firstly, it can be said that archives and libraries above all 'bring together' what archivists and librarians have managed to collect. Secondly, we can rest assured that any gaps and shortfalls in any documentation system disappear "with use," as if all classification systems had a natural repulsion for emptiness.

At the *Laboratoire d'étude de l'architecture potentielle* (L.E.A.P.) at the *Université de Montréal*, we focus specifically on the phenomena of 'do-it-yourself' and assembly, which help us understand many aspects of architectural design and imagination. L.E.A.P. is a multidisciplinary research team dedicated to studying the theory and practice of contemporary architecture. We are not professional archivists, nor are we librarians or pure historians, but we see ourselves as 'do-it-yourself' theorists, to quote Lévi-Strauss, in other words, analogy theorists. Our research looks as much at issues around the project-based approaches of current architects as at questions of architectural heritage, land development and the key question of social housing. In tackling such a wide variety of issues, we have developed an original approach whereby we see architectural, urban planning and landscaping competitions both as a knowledge item and an instrument for knowledge and experimentation.

Documenting competitions

Our approach to design is an extension of the work of Donald Schön, whose epistemology of professional action has contributed significantly to acknowledging the central role of 'reflective practice' in design. Reflective practice is differently embodied, depending on the professional or educational context, and we have therefore posited the hypothesis that the experimental nature of competitions can provide a key opportunity for theoretical, historical and critical observation. Whether they are run for cultural, heritage or domestic programmes, competitions, by their very nature, offer an experimental situation well-suited to comparing projects. Each competition, by definition, is based on the confrontation between interpretations of a request formulated as a brief and is, as it were, a type of 'laboratory.' The contradictory nature of the process,

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however, is such that the competition phenomenon is always threatened by its spectacular aspirations. In general, only the winning projects are disseminated and the public exhibitions at the end of the selection process do not do enough to ensure lasting visibility for the different projects. Comparisons are therefore difficult, if not impossible, and the other projects – the losing projects – are doomed to be forgotten in the depths of professional architectural offices. This paradox only serves to enhance the dispersion of documents and ideas, and further devalues architecture in 'project' form.

Nonetheless, these projects have an architectural value that goes beyond their selection by a competition jury, and the history of architectural competitions is marked by unsuccessful candidate projects which influence the practices and the discipline as a whole, sometimes in a more profound way than the project actually built. Two modern paradigms of this phenomenon are Le Corbusier's *Palais des Nations* project in 1927 and Rem Koolhaas' *Parc de la Villette* project in 1982. In our view, all projects designed in a competition context represent an architectural heritage, a poorly-known, neglected 'potential architecture.' In other words, the losing projects should not be lost forever!

The unique feature of our research programme is its focus on and connection with the gradual and regular compilation of documentary databases on competition projects (Canadian Competitions Catalogue, EUROPAN Competitions Database). With the help of librarians and IT specialists, we have achieved a systematic, annotated archive of competition projects in digital form, including preparatory documents, official documents, sketches (draft versions of the project), presentation prints, photos of physical models or digital models, presentation texts, jury reports and media and trade press reports. A genuine digital archive – a project library – is being developed, through research work and monthly updates.

Since 2006, a substantial amount of these documents are freely accessible from the L.E.A.P. public access site (http://www.leap.umontreal.ca), with an original search engine designed by a team led by Simon Doucet, IT manager at the *Faculté de l'aménagement*.

Before presenting a few thoughts on the operation and dissemination of digital architecture archives, it is important to briefly present these documentary databases. The first database focuses on Canadian competitions and the second on a certain type of competitions best known under the name Europan, which is the largest competition-organising body in Europe.

The Canadian Competitions Catalogue (C.C.C.) aims, in the long run, to document all competitions organised in Canada over the last 50 years. Compared to the European context, this challenge seems achievable. Unlike Switzerland, which organises approximately 200 competitions a year, or France, with over 1,000 competitions annually, this catalogue will cover less than 200 competitions since 1945, once complete. We have already achieved one-third of the task, having archived approximately 70 competitions. This represents, however, several thousand projects, since for some competitions, such as the Montreal

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Symphonic Orchestra (2002), more than a hundred teams were in competition. There are major geographic and cultural disparities across Canada, and, of the 10 Canadian provinces, Quebec has organised the most competitions. From this perspective, the archive already gives us an insight into contemporary Canadian history. It should also be noted that, in the majority of cases, the competitions were organised by private developers, despite the fact that in Quebec, the Ministry of Culture tried to drive this process in the 1990s. North American governments have been torn between the principles of free market economics and the unpredictability of competition juries, and the very principle of competition itself. With all due respect, the contradictions found in this area resemble the contradictions seen in the International Union of Architects' (IUA) claim to manage competitions worldwide, without so much as establishing consensual assessment guidelines ensuring the credibility of the process, and without having taken the necessary measures to organise the archives for these competitions.

What about the European situation? The issue of digital data is raised to an altogether different scale, if we consider that the Europan-France phenomenon involves several thousand projects and that if the Europan-Europe Catalogue, for which we have designed a prototype, provided a comprehensive record, more than 15,000 projects would become accessible! For the ninth session of Europan Europe, there are more than 22 participating countries and 73 sites, and for the French session alone, there are 6 sites, for which approximately 200 teams have designed development proposals. In summary, therefore, the Canadian Catalogue offers a relatively limited corpus, covering a very large territory, with no apparent coordination, a collection that is constantly but randomly growing, making comparative research very difficult. The Europan catalogue likewise covers a very large territory, with a rapidly growing corpus, but there is a certain level of control and coordination from the Europan management team. Theoretically, this should ensure ideal conditions for operation, observation and comparison, both for archivists and for researchers.

These databases will never really be complete, for the simple reason that the records are at best scattered and at worst largely destroyed. In the case of Europan, it is known that many competitors, young teams of architects less than 40 years old, have not always been capable of keeping a sufficient record of their project. Moreover, it is now known that the European organisers were no more capable themselves of archiving and documenting these projects in any more detail than those monograph publications which had required access to this information. Records are kept of shortlisted and winning projects, but all the others were rejected. In any case, from the perspective of research into design operations, which requires the process to be traced back, if most of the presentation prints have been lost or destroyed, what is there to be said for the design documents, drafts, sketches, diagrams and working models?

Nevertheless, each competition session highlights the urban and territorial issues affecting a given period. The Europan phenomenon is a bit like a snapshot of

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the generation of architects and the urban issues in play. Each topic generates a diverse range of perspectives and responses, offering a rich potential. Our databases and their respective search engines and web interfaces are designed to enable comparison within a single site, across different sites and according to topics suggested by the organisers, etc. It goes without saying that the scale of this work represented a real challenge to our organisational capacities and to our ability to convince architect's offices to contribute to the undertaking. In the case of Europan, the plethora of prints and presentation books led to the destruction of the archives by the organising countries themselves. On the other hand, for the Canadian competitions, which were more conventional, architectural archivists will not be surprised to hear that it is sometimes easier to find drawings from the 1960s than digital files from the late 1990s.

Two types of events should be distinguished, because they point towards two different perspectives on the dissemination and use of digital archives. In the Canadian context, professional offices seem to be increasingly inclined to take part in the documentation effort. They willingly entrust their documents or a copy of their files to us, since this helps to raise their professional profile. Some people, at the start, thought that the project would breach the privacy of their offices (and that competitors would steal their ideas), and others chose to wait for the Canadian Centre for Architecture to become interested in their work. Most firms however changed their minds when they saw that commercial search engines, such as Google, Yahoo, etc., systematically referenced their sites because they featured on ours. As I mentioned in my introduction, online digital archives have a "repulsion for emptiness." It is increasingly easy to get architects to cooperate with us, especially when they see that their competitors are documented on-line but they are not. The 'emptiness' gets filled very quickly. This has led us to start documenting some competitions with no more than the competitor's names and some very basic information. Since architects or their staff regularly check their internet ranking, they increasingly get in touch with us to offer their archives.

Within Europe, we have unfortunately not been in a position to contact competitors individually, since the teams for these competitions are often formed fairly informally. We have had to work instead with what the organisers receive. Braving the paradoxes, and with the aim of "birthing archives where they are most likely to appear," we recently attempted to influence document acquisition and document formats prior to the launch of a Europan session, by encouraging the French organisers to change their competition management practices between one session and the next. Contrary to expectations, some rather surprising reactions have ensued. When we presented the model of our system to the various organisers in other European countries in the summer of 2006 at a large Europan-Europe forum in Dordrecht (Netherlands), some managers were surprised that our system gave as much credence to the losers as to the winners. Even though we clearly announced the results and stated the competition winners and other shortlisted and commended

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projects, some organisers were worried that all the projects were being showed, instead of eliminating projects that the juries had not selected. A similar attitude can be noted within professional architecture offices that lose too many competitions and end up rejecting some of their own projects. I am aware that archivists take the question of elimination very seriously, but what about architects and competition organisers! It seems as if a project only has any value if it is conferred by a jury. Architectural history, which is made up of project-to-project transfers and influence, would seem categorically to contradict this incorrect assumption.

Another interesting issue, from the architects' perspective, is to ask what aspects of a project they want to show or keep. In general terms, to what extent does an architectural project have to be documented in order to do it justice? Does the whole design process need to be reconstituted? At L.E.A.P., we feel that this idea is illusory and pointless, the chief concern being to ensure that the relationship between the project and the competition is well preserved. The validity of this 'slimmed down' approach is supported by the fact that architects themselves identify certain sketches or a partcular design document as being emblematic of a project, despite our observation that with the advent of digital design tools since the middle of the 1990s the relationship with drafts has radically changed. I will come back to this point, to talk about 'native' documents a little later.

Contributing to research

To what extent do these project databases change our working methods? Although in some ways they enable contemporary architectural productions to be made available, let us not forget that their primary purpose is to enable research into contemporary architecture. One of the most helpful features of relational documentary databases is their ability to integrate analysis levels at every scale, and these analyses are in themselves a layer of interpretation for the data stored within the archive. One example of the new capacity this gives us is in distinguishing those winning projects that genuinely bear witness to their historical era from shortlisted projects that sometimes reveal ideas whose full meaning only becomes clear with historical hindsight. In Brest in 1997 (Europan France, session 5), the jury selected a project inspired by fractals and a certain 1980s deconstructivism, but did not seriously consider a project which now highlights a widespread fascination for its 'hybrid networks,' and which has therefore since acquired a new value.

By juxtaposing projects and comparing them, with hindsight, one can see, as in the 2003 Nanterre competition (Europan France, session 7), that the issue of tower blocks was starting to raise its head again in the Paris scene and that Rem Koolhaas' ideas were a major influence on most competitors. From this point of view, these collections of projects become historical tools that, in some cases, can assist in political decision making.

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To close this chapter on research, it should be highlighted that, in addition to proven historical research methods, our work has drawn on genetic analysis methods when focusing on 'project drafts' (texts, drawings, models). This approach consists of bringing scattered data from annotated archives with live observations and interviews, enabling the event history of the project to be reconstituted (oral archives). Although these records are not always systematically collected, they can be integrated with the documentation system, as an 'intermediate' source of information and interpretation. I should, however, further highlight that the most fruitful aspect for researchers is the possibility of using very flexible tools to work directly on the archive records. It is possible to 'play' with these documents. I no longer have any issues with suggesting that my students and assistants take great liberties with the digital files we hold, ever since the day I saw one of the world's greatest specialists on Leonardo de Vinci's thought and work, Martin Kemp, playing with hundreds of photocopies of the master's notebooks strewn across the floor and tables of the Canadian Centre of Architecture Study Centre, creating a sort of theatre of memory.

If we go beyond these technical questions, genuine theoretical issues can be identified. To do this, I feel it is important to distinguish between two types of digital archives. Firstly, there are archives that aim chiefly to store and preserve, and most of such archives feature two layers, the first of which is composed of a set of digital documents and a second layer comprising an elementary contextualisation of such data. I say elementary, because when I compare what these archives offer and what we are aiming to offer, I cannot help but notice a major difference in the area of data contextualisation – our aim being to genuinely 'model an architectural competition.' In our case, the order of things went from formulating research questions to identifying the corpus, then compiling documentation and finally analysing the data. In some ways, the fact that our databases are now used as historical records is simply one of the many paradoxes that we live with on a daily basis in research.

For researchers, compiling a documentary database, even more so a relational database, seems like an invitation, a challenge even, to start theorising. Focused, monofocal research is not enough – a determined process of defining the contours of certain concepts within the discipline is required.

This is, of course, the main advantage of relational database systems – enabling an architectural event, such as a competition, to be reconstituted or at least modelled to a certain extent. The bottom line is that the projects in themselves are in some ways less important in such a digital archiving system than the tissue of relationships that can be represented and, even more importantly, than what researchers can uncover using the documentation tool. When an IT technician asks simple questions such as, "What is an architectural competition?", "What is a project?", the researcher needs to climb back down to the bottom rung of the epistemological ladder. He cannot wriggle away by using contorted descriptions and

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language; he has to take the risk of defining the relationships between the objects of his research, if only subsequently to think more clearly about the weaknesses of his modelling endeavour.

It is clear that, as architectural researchers, and to a certain extent as architects, we have much to learn from archivists. However, I would also say that in the digital era, archivists have a lot to gain in working more systematically with architectural researchers, to help them grasp some of the profound changes in design thinking and also to identify what should be kept – perhaps not always an AutoCAD or Photoshop file with all its layers. It is not just about changes in storage medium or in architectural forms, but much more about new ways of rethinking and imagining architectural research. To give an example, when computer technology was introduced to architectural practices in the 1990s, there was a redefinition of the role of scales in architecture and, as I have already mentioned, a different relationship with project 'drafts.'

The issue of 'native' documents is only one part of the new technical problems, and should not hide the theoretical and epistemological problems. With the Canadian Competitions Catalogue we have developed a whole line of thought on comparative project analysis, a practice that is inherent in the competition process but for which very little theory has been developed in architecture. With the Europan-France competitions database, the issue of ideas, and the relationship between ideas and projects seemed to be particularly noteworthy, amongst other exciting issues raised by Europan. In 2006, therefore, we produced a multidisciplinary analysis on the projects shortlisted for session 8, at the request of Europan France, in order to test the advantages of the archiving system (PDF document accessible via the L.E.A.P. site). In summary, I would say that the multiple comparison levels allowed by the relational database encourage us to ask an audacious yet necessary question, "What is architectural knowledge?" This new freedom, however, will undoubtedly require us to shatter two myths that trouble both researchers and archivists – firstly, the myth of necessary authenticity and secondly, the myth of a comprehensive record.

To explain the reservations we have as to the importance of the 'native' form of documents, I could refer to the experiment carried out by Pierre-Marc de Biasi, a genetic analysis theorist working on literary drafts, who in 2001 worked with Réjean Legault, then manager of the CCA Study Centre, on transposing genetic analysis into the field of architecture. His proposal was valid for the study of literary drafts, but hit a stumbling block in architecture, for the simple reason that a project is neither the sum nor the result of the collected drafts. Following an invitation from these two researchers, I worked to develop a critical approach to the relationship between comprehensiveness and relevance, based on analysis of Le Corbusier's Ronchamp project. How far does one have to go back to find the origins of this work? Should one go back to his visit to Tivoli in 1910? Should one accept the post-modern interpretations offered by Charles Jencks in the 1970s? Rather than a whole collection of sketches, sometimes

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just one drawing is enough to transform historical analysis. The sketch I selected to prove this point was not even a sketch by Le Corbusier, but by Meissonnier, his assistant at the time.

In fundamental terms, architects never submit native documents for competitions, but always present copies, and these very copies, in the jury's hand, are decisive in the "destiny of the project," to use Giulio Carlo Argan's pretty phrase.

To researchers who still cling to conventional archives, I would further blow the trumpet for the statistics and hit counters available with online databases, which provide 'audience figures,' showing the researcher whether such or such a project is generating interest. This provides yet another approach to architectural and urban research. This data could be treated in the same way as any data on audience and acceptance is treated, i.e. with a dual historical and theoretical approach.

Over the next few years, the type of digital archives that we have started to create will be faced with issues not only of enabling regular, updated access, but also the issue of data sharing between relational databases. The work on metadata standardisation is heading in this direction, but we feel that the trend for information universalisation, tending towards uniformisation, is a shame. If research, digital documentation and document access are a basic tripod, it is also clear the logical next step of any digital archiving project is international networking. In this perspective, metadata could be viewed as an intermediary for facilitating knowledge-sharing. However, metadata should not be an end in itself, no more than digital documentation itself should be.

Conclusion: archiving events means putting knowledge out into the public domain

Is the public domain a 'knowledge market'? Are our project databases digital archives? In the strict sense of the term, doubts could be raised – they are no more an archive than pressed flowers or butterfly collections represent archives of living nature. However, these relational and most of all contextual documentary databases form a method for archiving these competition events. Architects are on the right track in their ever increasing tendency to seek a home for their projects in our catalogues, alongside their former competitors, rather than at the bottom of their document drawers, even if these drawers are electronic. Documenting a competition is of course about documenting projects and gathering information by which the competition conditions and parameters can be understood. However, most of all it is about documenting an event, reiterating the basic conditions of a collective event and offering a second chance. What is a competition? What is a project? What is an idea? Let us conclude with an ontological question. If we agree that documents can be archived, can we say that an event can be archived? Undoubtedly so, if we consider that many architects enter competitions to renew their ideas and develop their practice through this

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confrontation with other architects. It becomes clear that if a project is not merely a collection of drafts, neither is a competition merely a collection of projects. It is an encounter between a brief, some projects, experts and juries.

At the end of the day, one unforeseen consequence of our work has been to realise that our databases are now starting to be considered as potential archives in which architects in some way entrust their ideas and proposals to us, to keep their memory. On both sides, there is a form of generosity. Archiving the event has become a way of 're-presenting' it.

Finally, therefore, coming back to this Chinese encyclopaedia whose incomprehensible classification of the real and imaginary so amused Foucault, distinguishing animals as: "embalmed... tame... fabulous... frenzied... drawn with a very fine camel-hair brush... that from a long way off look like flies...," it is time to remind ourselves of the name of this encyclopaedia, strangely omitted by Foucault. Borges' encyclopaedia was entitled *The Celestial Emporium of Benevolent Knowledge*. Is this not the very definition of our digital archive projects? It seems to me that this type of "Emporium of Architectural Knowledge" ought to start being compiled over the new few years as our different archives, digital or otherwise, come into contact one with another.

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