

**Debate on the Presentations  
Second Theme, Part II**

*Chair:*  
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### **Nadia Hoyet**

I want to add as an aside that the famous French writer, Flaubert in his 'dictionnaire des idées reçues', once said that architects are silly because they always forget the staircase; so I think that we can feel smart because, as I noted, staircases were very much present in all the presentations we have seen.

By the way, databanks put always the question of standards' harmonisation, as we do not have the same standards from one country to the other. But if we define data in terms of performance, and not of the characteristics, we could perhaps acquire the best tools for discussion.

In front of these obvious differences how can digital tools be diffused in our teaching. I wonder if the students we educate are, therefore, more efficient than before. What will this new know-how represent given that they will be professionals, amongst all those participating in the construction and face all their responsibilities?

Then there is the question of the database: for example, Herman, where does the information come from when you 'build' your database, and how do you control the validity of all the information?

### **Herman Neuckermans**

The information comes mainly from our staff, from pictures taken and drawings done by our staff; otherwise it is taken from publications. And that is the reason why in this kind of database you need to set up an association, and why if you do not they take you to court. We have been very careful to be legal. The validation is done by a member of our staff, a Doctor of Engineering. Maybe it is not the ultimate verification, but the information is certainly checked. It is a little like what TIME magazine presents: cases without judgement. The only thing we added was a structure for accessing the database. For example – because I see different proposals here – the first thing I would like to do in terms of structures is that when you choose 'structures' in our database there will be a link to your textile structures. This could easily be done; we do not have to rebuild the whole thing. In my opinion it is would just be a more universal access, that is all.

### **Dimitris Papalexopoulos**

I think that we have arrived at a point where we can broadly discuss databases and gather different approaches and examples. Adding to that 'building memory' is a software programme that creates, in data version, historical construction systems of building. It is open to the Internet, so you can visit it if you like at the National Technical University of Athens website. Another problem is that historical buildings have no clear classification of the elements, so I accept your classification of historical buildings. It is a bit difficult, because you have to use a more open system that will accept new classifications for when you have a find – a cistern, for instance, that you have found in a village in Greece – that does not quite fit into any category, but you have to classify it. So there is a huge discussion about that; but I think that the whole database question could be structured as follows: there are two kinds of databases, the personal database, that Herman described very well, and what we might call an institutional database, that is, a database that a university creates and that is validated by its name and its experts. So we are faced with the following very com-

plex problem: that at a certain moment we may think that the personal database could be used as a help for the structuring or input of material for an institutional database that can carry out research on meta-data, that is, on describing the data. I think that this is a very crucial problem. And then, at an academic level we have to have fine-tuning for the different descriptions between the architectural schools, for instance.

The second trend that I cannot explain is that it appears that, in the schools of architecture, construction courses are a very hot point concerning continuous education and cutting-edge formation within the European Community. **The old idea was, and we see it now with your databases and our database, that a student on the edge of the profession constructs a database of details, of buildings, etc., inside the university, and then when he leaves the university he takes with him not only his diploma but the database that the university has helped him review. I mention this very hot point because the role of the public university, the economic role of the public university in the European Community, and the school of architecture, now passes through construction, not design, not urban planning. Construction teaching is very close to professional life and to continuous education.**

But so as not to abuse any more of your time, I will very briefly explain that 'Building Memory' was a research project carried out with the Computer Technology Institute of Patras for making software for the creation of a multimedia database of construction systems. At a certain point in time the product was finished; we had the software and we had entered twenty historical buildings into it; and the question was whether or not to sell it. There is a street in Athens called Stournara St. which sells almost only computers, so we were asking whether we should put it on sale in Stournara St. and then everyone could create their own database. The answer from the university, and in my opinion it was the right answer, was no, because the university and the school of architecture have somehow to continuously validate the building description and the fragmentation in order to input things into it. I will stop here, after I say once again that I believe that the database issue is a crucial one, and that we should perhaps have a larger session in the next years dedicated to it.

### **Herman Neuckermans**

You make a clear distinction in your reasoning between the individual database and the institutional one. I do not know whether they have to be separated that strictly, because, and I forgot to say this before, a lot of the projects that are in our database are the result of student assignments and analyses of buildings, which are revised or checked by the teachers before they are entered. They contribute to it, and they can use it, and when they graduate they can still use it. You can use it too, even though you were not a student at our school. So it is not only, or necessarily, a matter of property.

### **Dimitris Papalexopoulos**

Yes, I agree with you on that. I am talking about a database from the point of view of how, if I am in your office and I have plenty of information, I can classify it, hold it together. That is a different thing from using your database, and I think that it is

a very real problem. That could be a matter of teaching, inside architecture. In the lesson I told you about previously, we started in the ninth semester, and for the last two years the assignment given to the students was to make the first page of their personal database; that is, to make a schematic building that you can click on to, etc. And when I asked them if they understood what they had to do, they answered sort of, which was the normal response. And then one of them asked me if I meant that they could do what the design studios do not let them do. And I agreed that that was right: they were to do an imaginary building, do the fragmentation of the image of an imaginary building. That is how you classify information. I do not say that it is a resolved problem – it is an open question.

### **Herman Neuckermans**

There is still one thing I want to say. The reason I presented this is because I think that one of the legitimations of this kind of meeting is the exchange not only of ideas but also of things that we have built. It is less interesting to hear that, for instance, you have a treasure in your school that you are sitting on, and we have another one, and so on. I think that one of the purposes or aims of the European Association for Architectural Education, which initiated this thing, is that we should do things that none of us can do alone. And you can never 'build', on your own, a database that your students can really consult while designing. I agree with you, of course, when you say that we should have further debate on this, because you can discuss what is in the database, how it is input into the database and, in terms of information technology, what made the data – these are all important issues. I am always a little bit sad when people just give their presentation and go home and sit on their own thing – what have we accomplished then? We know that they have something, that I have something, that you have something. We all have something to give, and my ambition is to put these things together. In my understanding, from what I have seen of the textiles, I would say that in our database on structures I would like to have a link to your base – I am not going to copy it, but I would like to have a link to it. It widens the access, that is all. If you go, for example, to the museums in our database and select Guggenheim, you enter the Guggenheim site, which is four sites and full documentation, much more than you can find in the books or anything you can have in your office.

### **Dimitris Papalexopoulos**

I am sorry to interrupt, but I do not understand your comment. My database and a database built by an institution are two different things. Institutional databases have to be interconnected, but this a huge problem that was tackled ten years ago – on this I think we can agree. It is not just a question of making a link – that is very easy; the question is whether we can make a way to communicate between different databases. Do you have to build a huge European database, or can you standardise the link between databases? This is a European Community research problem that has been going on for the last fifteen years and has not been solved yet. This is something that we have to work on together. You could do a database for textiles, perhaps; I could do antiseismic construction types, you buildings, and so on. So it is a clear theme for cooperation, and we can remain there; but there is also, in parallel, not mutually exclusive, the right – because Internet is also freedom – to fab-

ricate a personal database on something; and the school of architecture must at some point give guidelines as to how to structure this database.

**Donal Hickey**

I just have a couple of quick questions. Who edits the databases? Who evaluates the information that goes into it, to say that it is viable or useful? For instance, if I have done a nice factory and I have a lot of images and I send them to you, who says what is viable? And the second part of the question is, if everything is viable then what is the point?

**Herman Neuckermans**

Is that a question for me?

**Donal Hickey**

For both you and Dimitri.

**Herman Neuckermans**

As far as we are concerned, if it is the description of a project that exists and is documented by photographs, then we can check the internal elements; but the check is more for when students start to do analyses which are interpretations of things, and then somebody has to say whether we can show this or not.

**Donal Hickey**

When you set something like this up, does everything that has ever been built end up on it? I mean, at the moment you have a database that is quite small, you have eighty museums at the moment; but if every museum that was ever built was put on it, some of which are not very good or not particularly interesting, how would you evaluate them?

**Herman Neuckermans**

There is no evaluation, no.

**Antonino Saggio**

I think it is not so difficult: you choose examples that are of interest to the department that is going to manage the database. Objectively, your knowledge may be very interesting, but if for the purpose of the database it is not, then you do not allow this or that museum to be in your database. The database is not objective, and it is not only information; it is also a tool for you to teach what you are teaching.

**Donal Hickey**

I understand that, but if there is to be a Europe-wide database that has lots of things in it, then who decides what goes in? You have your criteria in terms of learning outcomes or whatever you decide is suitable and appropriate, and Herman has his particular criteria that include some things but not others; **but the big question is, who edits the information? And why? What is the reasoning behind your decision to include something?**

### **Herman Neuckermans**

I have the same answer as my colleague. So far what we have entered is for the most part examples and precedents that we thought were relevant to the assignments we give to the students. For example, in the third year they have to design a museum, and a lot of our staff have visited museums that are interesting and up contemporary standards. But as long as the information is correct I do not exclude museums that are not modern, because someone may be interested in them. In the previous session, too, there was some confusion about information and knowledge; these are different things, you understand. The database has information, that is all; and the person using it has to build their knowledge and, as I said, be critical of the information they have.

### **Ola Wedebunn**

In this network database, are you actually screening something, or are you just taking in a lot of information in one realm without evaluating it? This is, of course, a standard way of exploring new territory. I mean, if you go somewhere you have never been before, or to some new land that has never been explored, then you have to find out what all the spaces in the area are, and you have to bring them all together before you can really find out what it is about. Is this how the databases will work? Or is the idea that this database will be for buildings that have this or that character, or construction, or aesthetics, or some other core idea; and if so is there somebody managing this database? **Or is it the other way round, that everything goes in and then we weed out afterwards anything that should not be there?** These are the two possibilities, as I see them, and I would like to ask if perhaps they are both viable.

### **Herman Neuckermans**

My answer is that it is a self-regulating system. I am not asking the layman, the man in the street, to input things into the database. I am asking people like you, who I presume are aware of what is happening in architecture and aware of what Information Technology allows one to do. For example, if I had to prepare a lecture, and we have seen several lectures here, maybe I could take images from the database. The use of the database is open, and the structure is the one we have given it, with categories of formal articulation, of composition, of things, etc. If you are looking for examples of houses on a slope with a skylight, for instance, you will find them there – if there are any. Whether there are any or not depends on who enters information, and I agree with you that it is the weak point of the system. Maybe it is the strong point of your system; I have the impression that textiles were well documented, so it has a theme. Ours has many themes, and that is its weak point; but I can imagine, and that is why I suggested we open a window on re-use, so that you can input examples of re-use and copying old and connecting the old and the new. This could be done; and if many schools came to view it, then it would ultimately become the place to go when you have a question about re-use. That is my aim, my ultimate goal. When I talked about structures, I thought that from the point of view of construction in general there could be an interest for a specific community – maybe builders or those that teach construction would go there.

### **Ola Wedebrunn**

I have another question, which follows on from what you have been saying: **Do we know what it is that we are growing in these databases?** Whether it tomatoes or cucumbers? We cannot decide from the beginning what the database will grow into. We go into a field where we have planted a lot of different things and we will nourish these databases and we will find out what is good in them with regard to both the examples that we put in and how we structure them within it. Perhaps it is very difficult if we describe what we put in there too rigidly from the beginning. I can agree with you, but I am asking because this is a way of education. I would think that we have to navigate into this kind of way of gathering information, and then, from this navigation, eventually we will find out if it is cucumbers or tomatoes.

### **Koen Van de Vreken**

It is not a question; rather, it is an answer. Would it not be possible to add a tab, a page, to the site for criticism, where anyone could record an opinion? The only thing is, as Herman suggested, that you would need a filter for rubbish. That is the only thing. So we would have the objective characteristics of a building, and in that way we could build such a site as a dynamo. But you can very easily add a tab for criticism.

### **Herman Neuckermans**

I did not show it, but briefly, when you surf to one of the projects you have different keys: you have pictures, if there are pictures; you have drawings, if there are drawing; and you have texts. The texts can be either criticism or references, publications about the particular theme. And if you want to add a criticism of your own, you can. If somebody enters rubbish, then we will eliminate it. And of course it is very important that everybody can give criticism.

### **Nikolaos Panagiotopoulos**

Commercial databases know what they are doing and what they are for; non-profit organisations create databases because they want to give you information about whatever their purpose is. So far, so good. Now, university databases follow practically the same path that university teachers follow: namely, they try to prove to the world how good they are. So there are millions of databases coming from universities, apart from the commercial ones, that add practically nothing to the situation so far. **What I would appreciate from a university would be useful information from a database to be input into some software so that I can explore, investigate further, a specific situation – for example, if I am going to be building in Africa or Indonesia or the Middle East. That is what I would appreciate. To that end we need collaboration among universities, and we need to filter out useful information and see that it is operable, that I can use it in my software, or that it has a format, a protocol that can be used universally.**

### **Zoltan Hunyadi**

In my school, we have the same kind of experiment as you. My students and I have made a database of about 120 buildings. As in your case a group of students did the research, they made the accommodation, and I think, the information is absolutely

neutral. It should be neutral and it should be accurate, because it is a document. And I think that even an ugly block of flats from the communist era must be documented, because it is good for educational reasons. Everything else – the sort of knowledge, the information, the attitude, the ethics, how you teach – is personal. This is up to you: you will make your selection, and I will add my things to your database.

### **Sabine Chardonnet**

I have two remarks. One is about the issue of the information that students can find by themselves when they surf through the database and all the links; and they can surf far away. So I think that this creates a problem of validation that we have to try to deal with. This is an issue that I feel we should be thinking about. The other thing is a question of growth. When an airport is growing rapidly, it reaches a certain point where you cannot let it grow any larger, you have to build a new one; and I think this is also true for information. If you want to hide precious information, just put it in the middle of a lot of information. This is the way strategic developments are now going about hiding information. So I wonder if teachers are going to become a sort of navigators in wide and expanding circles of information stored in an enormous databank. This is another issue that I think we have to think about. But the question of validation is certainly very important, because if you are sitting in, for example, a seminar, where your students have to write an essay, and they have to build their references and they have to define a corpus, there will always be one who comes and tells you that there is a new database that you do not know about, for thirty people in a room will always know a lot more than one person, even if he or she is the teacher and twenty years older than the rest. I think that there is a moment when the question of the evaluation and assessment of the quality of information found in databases will start to be a problem; and if links are going here and there, it can turn into a very odd and curious thing.

Just to finish, one of the teachers in my school is a very well-known engineer in France, who is commonly called in when people have difficulties in solving a problem; and he says that the young engineers that he meets in industry or in different firms are making more and more errors, simply because of the way in which they work. They search the Web and they import a process or a piece or a product and patch it into something else, and in the end it does not fit; and he says that he has to correct more and more information that comes from different departments and that is supposed to be validated. And this is starting to become a real problem.

### **Herman Neuckermans**

If I may, I would like to make one last comment. There is, of course, plenty of readable material in the world; but I hope that if you visit our database you will see that it is conceived for architectural education, and the questions and the indexes derive from what we taught, and there could be interesting approaches to what is there. It is not like a firm, selling all kinds of wood products. It is a perception, a view of architecture from the point of view of education and design. We asked ourselves what kind of questions a student would face with, for instance, the design of clustered housing. Do we have examples of clustered housing somewhere? Yes? Then put them in, so they can find them. Maybe you underestimate us, but when I speak of

seven years I mean not only for entering data, but also for the structure and the software that were part of the effort. Anyone can build a database, but it costs a lot of effort. We had four or five projects going for financing this thing. Thank you.

### **Donal Hickey**

I just wanted to make one last remark. It sort of responds to what was said about things that can go wrong, giving an example of what might happen. Take Gehry's project in Bilbao, which is included on your website. I go to the building, I take photographs that show all the defects in the building, all the things that have gone wrong, which are very interesting technically, aesthetically, and in terms of learning outcomes. **I think that these are good ideas, and I will say that I am the author, I have taken these photographs, and I have looked at what exists, and I give them to you for your website; but there may be an issue, if you put them on your website, with the negativity or the potential negativity that may be construed from having information that is not positive about something. This might create a problem. How would you feel about that sort of scenario?**

### **Herman Neuckermans**

Maybe I have to clarify. We are already collaborating with schools that want to contribute, and others, but this does not mean that you can log on and do what you like. I think that if schools in Europe would like to contribute to something, that is fine. I am not a seller here; I am just showing things that we have. There should be some kind of concentration, of course.

Maybe you know, and someone did touch on the issue of e-learning, that there is a whole system in Europe that is called Ariadne. It is an empty system interconnecting eighteen or so universities, and you, as a teacher, can input your course and it is circulated to everyone in the system. It has a structure, and a board that rules on things and looks at the things to be put in. In legal terms, if you show the failures of a building, it belongs to the association, so I do not think that there is a problem there. I think it needs concentration. My presentation was more to see if people were interested in working with us; and when you say 'your' database, yes, of course, we built it, but in fact, when you use it, it is as much yours as ours.

### **Donal Hickey**

So there is a collective responsibility there.

### **Herman Neuckermans**

Yes, of course. I think the responsibility is collective, and maybe we have to ask for a European project.

