

Oral History Interview with Jacques Tocatlian (JT)

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Les Rosiers sur Loire, France”

Interviewed by Michel Menou (MM)

MM: Mr. Tocatlian, can you tell us, how did you become interested in information science?

JT: Yes. I was working on my Master's degree in chemistry at the University, and I had to take one course in literature searching; that is, we were given assignments to find the answer to a specific question, and we spent time in the library, looking in all sorts of sources, and how to find the answer to the question. I liked the exercise, which could take several hours, working like Sherlock Holmes, trying to see where that information was hidden, and I liked it very much. So when I got my degree in the States, and I applied for jobs, I looked for literature chemist, which was that thing. At the time, chemical industry had some chemists, not working in the lab but in the library, helping with the literature searching. And I applied, I went to Monsanto in St. Louis, where they had an opening, and there, after the interview, because I had straight As and they thought I was too good for this job, they suggested that I apply at the plastics division in Springfield, Massachusetts, where they had the better position in the lab. And this is what I did, and I got the job, and I began working in the lab, in Springfield, Massachusetts.

MM: So you worked actually as a researcher...

JT: As a research chemist

MM: Research chemist for several years...

JT: For four years, and what I'd found was patented, and went into production, and Monsanto made the several....

MM: Wow. You got a pay increase?

JT: No, I got congratulations by my big boss. [laughs]

MM: No?

JT: But, nevertheless... I don't know... I couldn't *feel* myself spending my whole life doing this. And I kept an eye for jobs as literature chemist. And I found one in FMC Corporation in Princeton, New Jersey, and I applied, and I got the job. And there, it confirmed that this is the type of work I liked. And I went back to Drexel for a Master's degree in information science, and from there on I left the lab and continued in this direction. This is how I moved.

MM: You went for the main steps later on...?

JT: Well, after FMC Corporation, I worked...

MM: What's that, FMC?

JT: FMC, Food and Machinery Corporation, it's a chemical... There, I did literature searching.

We entered the first pilot project with Chemical Abstract Service for SDI [selective dissemination of information]. Chem Abstract had selected a few industries, so we had the profile of researchers, and that was the first steps; it was interesting. This was 1966, '67, '68.

Then I went to Merck Sharp & Dohme, also on similar activity, until I landed in UNESCO Paris.

How did I go there? [laughs] I attended an ASIS&T meeting, annual meeting, Columbus, Ohio,

1968, and there, the keynote presentation was given by Bert Atkinson, the title of which was

“UNESCO Feasibility Study for Establishing a World Science Information System,” called

UNISIST. I was fascinated by the speech, and I tried to see Atkinson there, to ask him a little bit more about the background, and...

MM: You managed to talk to him?

JT: Well, it was difficult. It was very difficult, because he is a busy man, and he had a lot of money, which he gave to various... to support research in information science. Then every time

I tried to approach him, there was a big queue, and he did not know me, and so I was a little shy, but I kept trying, and one evening I found him sitting in the bar, and I went next to him, and I introduced myself, and we spoke, and he told me about it. The conversation lasted ten minutes. And he gave me the address and said, 'why don't you apply? You seem fit for that.' And I did apply, and I got a negative reply, and a year later, UNESCO wrote back and said, 'are you still interested in that opening?' And I said 'yes,' and eventually I got it. I sold my house, and took my children and my wife, and there we went to Paris and started this new venture. And years later, I found out, when I asked my boss, Scott Adams, I said, 'how come I was selected for this job?' because I saw that there were many good candidates, and so on. And then he told me that he was interested in my profile, but before offering the job, he called Bert Atkinson (he was a big boss in information science at the time) and asked him, 'Jacques Tocatlian is in the list of applicants, do you know him?' And apparently Bert stopped for a couple of seconds and then said, 'oh yes, yes, I remember, he's a good guy.' And this is how I got in. Voila.

MM: Yeah. That... there were also similar steps within UNESCO.

JT: Yeah. Well, yeah.

MM: [inaudible]

JT: I entered what we called a P4 level, and right there they were working on the feasibility study of UNISIST...

MM: science sector... small group.

JT: In the science sector, there was a small unit. The head of it was Adam Wysocki and then we immediately had to organize an intergovernmental conference for launching that program. An intergovernmental conference is a big deal in the UN, because those who attend represent member states. They speak for their countries. It's not the professional where you speak from

the technical point of view only. So I did this, I helped with this organization, and it was a successful conference, and launched the UNISIST program. And I got a raise right away, because, into a P5 level, which is a high-end level. And later on, when Adam said ... Do I have to go into the internal...?

MM: No, but after the first conference, where UNISIST won, then there was a division for the UNISIST program...

JT: Yes. Well, there was an internal problem in UNESCO. There was already...

MM: Only one?

JT: A major one, in our field. There was a division which dealt with documentation, library, and archives.

MM: DPA?

JT: Yes. DPA. This was in the communication sector. And we... UNISIST was started in the science sector with scientific and technical information. But very quickly you could see that the two areas overlapped, there was conflict because the two divisions approached the same problem differently and advised member states in different ways, so eventually they couldn't solve it; they married the two divisions into one. They called it the General Information Program, PGI, which is for the French Program Generale d'Information. So Adam Wysocki became the boss of that, which incorporated our actions in the field of library archives and documentation, in the same scheme that had been designed for UNISIST, for scientific and technical information.

MM: After UNISIST, a second conference, right?

JT: Later on there was a second conference, yes, which expanded beyond science and technology into all fields of... And Adam Wysocki had to leave and return to Poland, and I was given the job as the director. Until my retirement. That's it.

MM: So, Mr. Tocatlian, also it's perhaps a difficult question, could you explain what, in your opinion, you have contributed to the field of information science and information systems?

JT: Well, when we speak about my contribution, we have to understand that I have been working in a large organization, and with a team of people. So, we had a program which comprised work in policy, in training, in infrastructure building, in assisting, especially, the member states. All of this is done by a number of people. So when I speak, I'm not speaking only in my name, I'm not the one who has done everything, but I was part of it, I was directing this effort. We have to say that UNESCO, as an intergovernmental organization, has a very special position, in relation to its member states, 170 or 180 member states, and can reach not only the professionals in the countries, the non-governmental organization, but can reach the governments, can reach the decision-makers, those that provide funds for development. So this is an advantage for introducing and promoting information science around the world. This is what we have done. So, in general, if we made one contribution, it is the preaching of the information science gospel around the world. And trying to convince countries that information is essential for development. It's essential for progress, it's essential for a number of things. In that sense, I think, we are being somewhat successful.

Having said this, we can give a few examples, of specific things we did. I'm talking about the '70s and the '80s. From the 1970 to the end of the '80s, for about twenty years. This is the time covered by this effort. For example, we noticed that at the beginning of the '80s there were some 900 databases around the world, bibliographic databases, for which only one percent of the developing countries contributed to. Ninety-nine percent of those databases were produced and used in the developed world. So one thing we did, part of our program, is trying to introduce some pilot projects, give equipment, training, guidelines to a number of countries

around the world, and having them create their own databases. Which they did, and they have become more or less some partners in international efforts. And also, in the same line of thought, creation of information networks and regional systems, regional cooperation. Countries in the developing world were not in the habit of working together. For example, let me cite one which was pretty successful in Southeast Asia, which was a fifteen countries including China, Japan, Australia, New Zealand, Philippines, etcetera. To exchange know-how and scientific and technical information. They had regional meetings, they had a lot of cooperation among them that did not exist before. I think this was... And we tried to do the same thing in the Arab countries as well as in Latin America, with perhaps less success. But this is another type of effort.

Information policy... that was... that did not exist when we began this effort. This convinced countries that for the development of information, enhanced access to scientific and technical information, for being able to develop and use it, they needed some sort of effort, nationally, of coordination, of policy. So, if you have the libraries, the archives, some documentation centers... it was not coherent. So, there were guidelines, there were meetings, and we asked countries to establish a focal point in each country, which was responsible for the national coordination. Then we had meetings bringing them together. So little by little, they got used to working together in the regions. And give attention to the importance of scientific and technical information, of information science, we call it. Training and education also, we gave a lot of effort in this field. For example, the question of literacy. We were, I think, very early in the '80s, we gave a lot of effort into user training. Not only give attention to building systems and services, but were the users or potential users using it. So again, through training programs and guidelines, we made some successful effort in that field.

Another thing is, traditionally, the professionals in the developing countries got their education in the West. They used to go in the States or in Europe and get their education and training, some of them never came back to their country, the brain drain problem. Also, if they went back to their countries they found that the conditions locally did not allow to apply what they had learned. So, we encouraged, with some success, the creation of regional training, in the country. For example, we had established a Master's degree in the University of the Philippines, in Manila, created by people from the region, for them, and I think over the years it proved to be a successful effort. Now, also... we spent some effort in developing tools for systems and their connection, and guidelines, norms and standards; the idea was to create compatible systems at the time. Well, that is some examples.

MM: And, there are also some more... historically significant ones, like the royal revival of the Library of Alexandria.

JT: Yes.

MM: Which was under your supervision if I... [laughs] So could you tell something about that?

JT: Yes. [laughs] Yes, it's my favorite project, because, as you know, I was born in Alexandria, Egypt, before coming to the States, and when the Egyptians sent a request that they intended to rebuild a library in the idea of the ancient library of antiquity, that landed on my desk because we dealt in the PGI...

MM: [inaudible]

JT: So, I put my heart in it. We had not foreseen any funds. As you know, we worked on a bi-annual system, the PGI has to approve a program and budget for two years, so when something lands like that on your desk, you have no money, you have not foreseen anything, it was a big effort, but the project interested a lot of people around the world. The idea seemed to... and we

got a lot of international support for that, and eventually, we had the feasibility study, and we had the architectural competition, the Norwegians won the design, we set up a lot of committees, sub-committees, and expertise, and eventually it was built. I don't know if you had the chance to see it...

MM: [inaudible]

JT: It is a beautiful building, very, very nice, and it's very successful because the Director General of Unesco, has grasped the idea of what the ancient library was, it was open to the world, and there was a lot of exchange, it was a sort of a center, a cultural center, which this library has become, because they have concerts, they have exhibits, they have meetings, so it's very lively. Now, with some of the latest political events, there's lot of worry about the future, if I may say.

MM: Mr. Tocatlian, in the course of your relatively long career, if I may say, you probably have met most of the people who count in the field of information science and systems, policies, and so on, so asking you for some personal memories of people who have been a source of inspiration, guidance, help, and so on, may take us a bit far.

JT: [laughs]

MM: But there are certainly a few names of figures you would like to mention here as people who contributed to your personal enlightenment.

JT: Yes. Yes, indeed. Well, the first one I have to mention is my teacher at Drexel, Claire Schultz, who has been very influential, indeed, at a moment where I was making a transition between chemistry and information science, and I think it's thanks to her inspiration that I believed in the field, and give me the courage to do the jump, so to speak. She was a merit award winner, I think, from ASIS&T, as well.

Of course, as soon as I arrived at UNESCO, one other person that was very influential and inspired me was called Scott Adams. As a matter of fact, on the first day I arrived at UNESCO, this was the day I met him. As he was leaving, he was working as a consultant at the time. Scott Adams had been educated in traditional chemistry, but had accompanied the field and the evolution from library science into information science, and MEDLARS, and the Library of Medicine. He was an exceptional person. I was lucky to have met him.

I mentioned Burt Atkinson because he was very influential as well, in helping me finding the way to UNESCO.

In UNESCO, Scott Adams was my boss; he had, I think I learned some baby steps with him in international work. Because I realized that it was not only a technical effort. In international work, there is politics, there is diplomacy, and a number of other skills that are necessary in order to arrive at reaching your goals. And he was very good at that.

I should mention Jean Claude [?], who had done the feasibility study for UNISIST as well, and a number of people. But the list, as you mentioned, is quite long. But it was a great opportunity to deal with all these people around the world. I say that with a little bit of nostalgia now.

MM: Now, of course we are not going to mention all the troublemakers...

JT: [laughs]

MM: Probably a [?]

JT: [laughs]

MM: Now, we can try to take a closer look at the contribution of information science to development in general, the development of societies. What do you consider as a major

accomplishment or achievement of information science? For which it can deserve the recognition appreciation of the rest of humanity?

JT: Well, by understanding, the way people search, find, utilize information, information science, I think, has infiltrated all subsystems of society. I... to me, it's very difficult to imagine any progress in research, or possibly in several other activities, without the backing of information. This is what information science does. It organizes information for storage and retrieval, in various ways. I don't think good research is possible without it. I don't see, for example, medicine, progressing the way it is now, without relying on literature, data that's organized and available to the doctors and to researchers and physicians. Is education possible, really possible, without information? It's there, even though we don't recognize it, but it's all there, it's all information organizing one way or another. Management, everything. I see it there. And this is the importance, the beauty, of information science. Now, the difficulty is that it's not very clear what information science is; the boundaries between library science, computer science, information science, cognitive sciences and so on, is not very clear. And especially if you consider this aspect from an international point of view. What is informatics in the Soviet Union or in Russia, and what is informatics in the States, etcetera. So, and this is a weakness. So, interdisciplinarity of information science is its strength and its weakness at the same time.

MM: Judging from the role ASIS&T has played in your own trajectory, I suspect you see that it has had a significant role in the development of the field of information science on the applications in general.

JT: Yes, very much so. As I mentioned earlier, the lack of clear definition between boundaries of this interdisciplinary field, to me, needs attention. I suppose ASIS&T works and thinks in this

direction. For example, the teaching in the universities of information science, does it need some harmonization among curricula, is there a core package among them? I suppose I'm not really very much up to it because I'm retired now, I'm not [?], but I feel that some attention is very much needed. As difficult as it is.

Well, the Internet occupies a fantastic role in everything we do nowadays, the way we manage, the way we do research, the way we look for information. But, I don't know how to explain this... To me, there is a tool, and there is a content. Now, the Internet can access a fantastic large amount of information in little time, and we all use it, we are all excited about it, but what happens to the substance, information? Who looks after it? Who looks after its credibility, its quality? Now, for science, for research, it's very important. And I do not know to what extent ASIS&T is concerned with this aspect, but I feel very strongly that it's very important for the future, that that not be left only in the hands of computer scientists, and...

MM: Merchants.

JT: Merchants, of course; there's a lot of money behind it. But it is important is to save and look after the quality of information. And I hope that this is a field that will attract the youngsters in the future, as a career, because it's very important, for quality control, code of conduct, ethical issues, all of this, I think, and I hope that ASIS&T is considering and looking after that, because nobody else would.

JT: Thank you!

MM: Thank you!

END OF INTERVIEW