editorial editorial entrevista

ágora

tapete

artigo nomads nomads paper

projetos projects

expediente credits próxima v!rus

VI20
revista VIRUS
VIRUS journal

issn 2175-974x ano 2020 year semestre 01 semester Julho 2020 July



BUSCANDO O QUE AINDA NÃO EXISTE SEEKING WHAT DOES NOT YET EXIST

MARIA LÚCIA MALARD, MARCELO TRAMONTANO

PT | EN

Maria Lúcia Malard has a degree and a Ph.D. in Architecture and Urbanism. She is an Emeritus Professor at the Federal University of Minas Gerais, teaching at the Postgraduate Program in Architecture and Urbanism of the same institution. Her research topics include Architecture and Urban Design, and, in particular, the architecture of universities, final graduate work, housing projects, evaluation of the built environment, and physical planning. Currently, she conducts and guides research related to the development of creativity. mlmalard@gmail.com

Marcelo Tramontano is an Architect, Master, Doctor, and Livre-docente in Architecture and Urbanism, with a Post-doctorate in Architecture and Digital Media. He is an Associate Professor at the Institute of Architecture and Urbanism of the University of Sao Paulo, Brazil, and the Graduate Program in Architecture and Urbanism of the same institution. He directs Nomads.usp and is the Editor-in-Chief of V!RUS journal. tramont@sc.usp.br

How to quote this text: Malard, M. L., Tramontano, M., 2020. Seeking what does not yet exist. Translated from Portuguese by Marcelo Tramontano. V!rus, Sao Carlos, 20. [online] Available at: ">http://www.nomads.usp.br/virus20/?sec=2&item=1&lang=en>">http://www.nomads.usp.br/virus20/?sec=2&item=1&lang=en>">http://www.nomads.usp.br/virus20/?sec=2&item=1&lang=en>">http://www.nomads.usp.br/virus20/?sec=2&item=1&lang=en>">http://www.nomads.usp.br/virus20/?sec=2&item=1&lang=en>">http://www.nomads.usp.br/virus20/?sec=2&item=1&lang=en>">http://www.nomads.usp.br/virus20/?sec=2&item=1&lang=en>"

Marcelo Tramontano: Thank you so much for accepting our invitation to this conversation, Maria Lúcia. I would like us to start by talking a little about your brilliant path, through which it is possible to read the transformations that the public university has undergone in our country. In the 1960s, you were a graduate student at a public university – the Federal University of Minas Gerais, UFMG –, then you became part of the university's staff as an architect, and later joined the faculty. In addition to teaching, you actively participated in the administration of the university and the School of Architecture. You were among those who created the school's Postgraduate Program in Architecture and Urbanism, at a time when the number of graduate programs has greatly increased in Brazil. And you also coordinated the conception and implementation of a new undergraduate course in Architecture, in line with public policies for inclusion and expanding access to public universities. In addition, you have created and coordinated two important research groups, closely connected to teaching and university extension. We would be delighted to hear a brief reading from you about this period.

Maria Lúcia Malard: I have had very special opportunities in my life. As soon as I graduated, in 1966, I worked briefly with urban planning, in the city of Contagem, within the metropolitan region of Belo Horizonte, from 1967 to mid-1968. In 1969, I started working on architectural design within the technical-administrative sphere of the university, designing the buildings of the Pampulha campus, in the city of Belo Horizonte. So, I

can say that, since I graduated, I came across the question of a method for work, creation, and analysis. The reason is that urban planning almost always relies on some methodology. In urban planning, one does not improvise as much as one usually improvises in building design.

When I started working at the university's Dean's Office on the campus project at the invitation of the architect Alípio Castelo Branco, he had already structured a team which was defining an approach method to design the buildings. Such a method was based on premises and structuralist understandings of the task, as we intended to build a campus with modulated buildings, which would allow some freedom for future spatial transformations and modifications. Thus, I started my professional career working with methodological issues, or, as I would call it, systematic ways of doing.

Methodological issues have always interested me, both in my doctoral research and later, in a postdoctoral internship I undertook at the University of Warwick, in England, under the supervision of David Miller, a disciple and co-author of Karl Popper. At that time, I was already interested in Philosophy of Science and issues related to theories of knowledge. I often had this privileged opportunity to cross mental and intellectual conceptions with the design activity. I believe it made a major difference in my career, giving me a very practical sense to search to understand everything. When designing, an architect has to solve the problems he encounters, and he must be able to argue about his proposals, especially when working as a team. I worked in large teams, with many architects and other professionals. This is why my trajectory was not guided by the authorial practice that highlights authorship, the author's name, and which is very popular among architects.

For fifteen years, I taught scientific research methodology in our graduate program. I have always avoided discussions about research techniques and instruments, preferring to approach the ways in which knowledge is acquired and innovated. This should be the most exciting question in graduate schools: the reflection on how knowledge is generated. It recalls me of a very interesting phrase from Popper. He said that the existing knowledge does not grow, as it is static, as on a shelf. Knowledge only grows when we seek for what does not yet exist. Unfortunately, dissertations and theses are becoming more and more like bibliographic reviews on some topic, instead of constituting an attempt to discover something that does not yet exist on the shelves. People are afraid to face this challenge, and prefer to take a more predictable path: they compile the existing knowledge on a subject, add some comments and call it a thesis or dissertation. That is why the question of method is part of everything we do, even though many deny it.

MT: You led the creation of the undergraduate evening course in Architecture and Urbanism at the Federal University of Minas Gerais. This course has a very original proposal, also in terms of design methodology. Could you talk a little bit about it?

MLM: The evening course in Architecture and Urbanism of our university is quite innovative but also very contested, both by students and teachers. Freedom is something that people don't deal with very well. They talk a lot about it but cannot fully exercise it. We have structured the course around the approach to problems of various kinds – architectural, urban, of human settlements – so that theoretical ground was offered when requested to problematize practical issues. In other words, we tried to organize an architecture teaching and learning process avoiding pre-requisition. We assume that learning one thing after another does not correspond to what actually happens in a learning process. Prerequisite is a false thing. The order in which things are learned varies from person to person.

However, from the beginning teachers and students have tried to modify the course and fit it in the traditional format of sequential courses with pre-requisition. Students do not like the course, although their results are good. It is funny because the students of the morning course feared that the school's grade in the National Evaluation of Courses would fall because of the evening course, which seemed to them to be very disorganized. But the opposite happened, as the school's grade went up. It means that those supposedly disorganized started to learn more and better compared to the supposed organized ones. In fact, most students preferred to have someone to tell them what to do, instead of taking control of the construction of their own knowledge. They thought it was more comfortable – and they still do – because they got used to it since elementary school. But they are developing very well and showing very positive results.

Later, the evening course was almost completely redesigned to become similar to the daytime course. After much discussion, however, they decided to do the opposite: make the daytime course similar to the evening one. In reality, behind this discussion, there was a very trivial issue, which was the desire to make everyone's work easier. The teacher who taught in the morning wanted to teach the same class in the evening, and not have to prepare two different classes. At our school, it is very difficult for teachers to meet to discuss, particularly when it comes to issues related to teaching. They live research productivism, in which it is necessary to write, write, write, and publish, and teaching questions nobody wants to discuss. As a matter of fact, this writing productivism is particularly difficult in the Humanities. I use to say that an afternoon of work

in a Biology laboratory can provide material for an article, but an afternoon of studies in Architecture and Urbanism does not provide material for absolutely anything, sometimes even not for a sentence.

MT: Yes, let's talk about research. You participated in the creation of the research group Lagear, at the UFMG School of Architecture. Lagear takes us back to the moment when digital media entered the architecture field, and, perhaps more precisely, to the issue of digital culture in teaching, research and extension in Architecture and Urbanism. How do you see this Lagear experience today?

MLM: We conceived Lagear seeking to introduce the School to the universe of digital media. We were in the early 1990s, and the production of architectural drawings was not yet computerized. We intended to update the architecture teaching in line with the technologies of that time. But my feeling is that the attention paid to the media has become excessive. Today, we can find a huge body of research on digital media and very little research on design processes. Obviously, technologies are tools, and theories are not. Theories help to explain the object and technologies help to obtain it. Digital technologies have not been used to their full potential in architecture and urbanism courses, and are often used to imitate other technologies.

I will give you an example: digital models. It makes no sense for the student – or perhaps it does some because it saves time – to use digital three-dimensional modeling as a replacement for the physical model, which takes longer to build. It makes no sense to use – as it has been used so much – two-dimensional CAD as a replacement for the drawing board. We have often seen new tools being used to replace old ones. I believe this is because the design process itself is not much researched. If there is no progress in the creation processes, nor in research on such processes, design technologies will always be used only as more effective instruments for visualization or presentations.

The call you made public for this edition of V!RUS touches on a very relevant issue, which are more contemporary design approaches, the most transdisciplinary, or with community participation. Digital technologies could enhance these new contexts and approaches and everyone involved would gain a lot. However, it is necessary to undo the belief that technologies provide a new architecture. This is not quite true. No built architecture could only have been produced by using digital technologies. Therefore, it is not about new architecture, but a new way of working. A new architecture is not born of tools, but of new social relationships, new contexts, new interactions, new materials, new modes of production. The new architecture is born out of the thought that brings it all together.

We have a very interesting question there. It has been fifteen or twenty years since we have been hearing about the idea of "designing by drawing", or "learning by doing". Of course, we only learn something by doing it. And how do you learn to design by designing? With a computer, with sketches... But, if designing is just drawing, either with a computer or with a pencil, how can you learn to design by drawing? If we agree that a project is an intellectual production, then we have also to agree that one learns to design by thinking. Because drawing, or any other medium you use, is the expression of your thinking.

Therefore, the focus is not on the instrument, but on thinking. Intellectual processes are learned only by developing them intellectually. Someone can not develop intellectually just by working manually. These are contradictions that need to be discussed and better resolved so that we can enter this new world of technology. Because we have not yet entered it. We are not using the potential that this new world offers. Neither in research nor teaching.

Take, for example, a crisis like the current one of the new coronavirus pandemic, which finds the university unprepared to face the continuity of the remote educational process. In architecture schools, we can hear people saying that "it is not possible to teach architectural design at a distance". Why is it not possible? Why can't I see, on a screen, what the student is doing, discuss with him, and make my comments and criticisms about his work? He will not be able to do some things remotely, such as experimental and laboratory activities, either building construction, or other subjects. However, if we add the hours of design, theory, and history, we will see that the laboratory part is insignificantly small in all curricula.

This pandemic is teaching us several things, which will show us that it is feasible to interact virtually for the benefit of knowledge. Our problem is that we have to rethink teaching and research issues to optimize our schedule. The research group I coordinate, for example, is working fully during the pandemic. We are producing more than before the suspension of face-to-face activities because we have no other bureaucratic duties, whose demands tend to take a lot of time.

Teaching must be profoundly changed. For example, the 3,600-hour logic has nothing to do with public education. The requirement to complete at least 3,600 hours in classes refers to the logic of private schools because they sell the hour to the student and pay the hour to the teacher. But at the public university, nothing

is being sold. So what is this silly logic? Why does the Brazilian public education system accept this? In other countries, the mandatory presence of students in the classroom rarely exceeds 800 hours. In addition to having to attend 3,600 hours of classes, our students still have to work in extra-class activities as much as their American, English, and French colleagues. We waste their time in the classroom. And that must change.

Now, it is also up to us, the teachers, to research how to give guidance without needing the students to be there, in person. We can teach in virtual forums, leaving the face-to-face activities to laugh and play together, talk, show, and discuss the results of their work. That means, in short, to build a university. Because, in fact, we do not have today a university in the proper sense of the term. Our students do not have access to knowledge other than the one specific to their area. They have to fulfill so many tasks in this area that they can not be transdisciplinary.

MT: When you talk about ways of communicating remotely related to architectural design processes, I can't avoid thinking about BIM, whose applications allow remote communication between different participants, at different levels, as part of design processes.

MLM: Recently, a colleague from the School of Architecture and I designed the UFMG Vaccine Technology Center, funded by the National Council for Scientific Research. We designed the building but their researchers, who are biochemists, biologists, and physicians, are trying to get funds to build it. If it was already built, it would be very useful in the current crisis, by the way. All design documents were produced in BIM, but not the creative part. A BIM creation process that excludes structural, electrical, hydraulic, and air conditioning projects, as they are specialties that architects do not master, becomes just representation. Enabling the participation of these professionals in the creation process is a problem that the market has not yet solved. How can we talk about an information model for construction, which is BIM, if the design is done first and the other professionals are only called after everything is defined? What integration is this? Rather, it is a matter of making the process of producing technical documents more efficient than the integration process. That said, BIM's potential to integrate all disciplines is very good and almost untapped.

Another misunderstanding is the End of Course Work of architecture and urbanism students. In the law that regulates the courses, it is written that it must be individual work. How is it possible to talk about individual work considering the complexity of contemporary human settlements? End of Course Work in any area should be interdisciplinary, and not just of the student of a given area. It should be the work of a team gathering students of Architecture, Engineering, Law, Sociology, Nursing, etc., who would approach a problem in society and present a solution. Each one bringing the competences of his or her area, producing collective work. Then we would be really preparing students for collective creation.

In the particular case of architecture and urbanism, when we discuss this issue in the central administrative bodies, in Brasilia, they defend this nonsense, that the work has to be done exclusively by architecture and urbanism students. But what is today exclusive to the architect? He is no longer that Renaissance craftsman, and we have not paused to reflect on that. Instead, we keep reinforcing these outdated understandings. We need to reflect on how to turn the teaching-learning process into problematization, and not only in the field of architecture. Questioning is different from formulating a small problem whose final answer is already known. Problematizing requires the contribution of knowledge from other areas.

MT: This is the reason I mentioned BIM. You were commenting on the use of digital technologies in architectural design, and quite correctly you drew attention to the fact that they are often used to perpetuate ways of thinking about architecture, consolidated since before such technologies existed. At Nomads.usp, we have been studying BIM looking for ways to encourage transdisciplinarity, involving different actors, with varied knowledge, several bodies of production, interconnected on the same platform. We imagine that perhaps this would be a way to bring together digital technologies and design thinking, in the effort to review architectural practices.

MLM: I believe this is the way. From experiments with defined groups, we may know better how an interdisciplinary interaction can take place. Such interaction must start while the problem is being formulated, or when problematizing and discussing. If we call the other professionals once everything is decided, they are not participating. They are only answering our questions, which is different from contributing to them. I believe that the kind of research you mentioned is the best way. Unfortunately, I don't see very often research projects like that.

In architecture schools, some full-time professors are very committed to joint research projects with local communities. It is undoubtedly crucial to work with communities, but this is not the solution to all problems, neither those of architecture nor those of the city. Of course, we must have groups doing this kind of work, but not all groups have to do it. Otherwise, we will narrow the diversity of proposals. It seems to me that things are moving in a somewhat uncompensated way. I would not say crooked ways because I don't think it is crooked to work with communities. But we have other problems, intercommunity ones, that are not exhausted within a specific community. We have metropolitan problems, of several natures, in small and large cities. These issues need to be addressed interdisciplinarily and not within territorial confinements. We need to be a little careful with community participation methods because we architects also have to participate and bring our spatial vision to communities, our way of understanding space. We cannot give that up. Otherwise, we will become unnecessary.

Anyway, BIM is a great solution for truly interdisciplinary collaborative work attempts, in which the entire team can work on a single model, interacting and building solutions together from the beginning. The development of this work process can even be called a work method, and it can have a very positive impact on the teaching and learning of architecture. Very positive because, today, digital technologies are being used only for visualization. Visualization is great, but it does not exhaust the problem of intellectual aggregation of knowledge to solve today's complex problems.

MT: Please allow me to return to an issue you mentioned earlier, related to the urban sphere. You were talking on the growing complexity of the contemporary city's problems and it reminds me of the issues related to methods to face such new complexities. If, on the one hand, society and the city are, in fact, more complex, on the other hand, we now have the means to perceive and integrate into our design processes an infinitely greater amount of information about the society and the city. So, in addition to the greater complexity of the problem itself, the ways of dealing with it have also become more complex. I would be glad to hear from you about this question of method in the processes of study and intervention on an urban scale.

MLM: The urban issue needs to be shaken in Brazil. Because it remains very much attached to an explanatory thought matrix, where analysis and diagnosis prevail, as in Lefebvre, Castells, and the great Marxists who approach the urban question. Urban planners and people concerned with cities are increasingly at the rear of what happens in reality. This situation can be noticed in dissertations and theses in Urbanism, most of which produce peculiar case studies. One study examines how an occupation took place on a marginal avenue, another one examines how something happened somewhere, but always afterward. No study proposes: "let's imagine a way for this reality not to happen". This tradition of urbanism closely connected to sociology, and to the excessive emphasis on analysis, makes urbanists give up spatial synthesis. And if we give it up, who will help to make the synthesis? Sociology is very important, but should the architect also work as a sociologist? If we keep acting this way, what will become the architect's role concerning the city? Possibly collect data, analyze it, and explain what happened.

But what can we do to prevent absurd urban situations? What methods can we use to formulate our proposals? What can we say to a mayor who comes to the university to ask for our collaboration? Would we reply that "in two years we will give you an answer because we have first to collect all the data for the entire municipality"? Such an answer is extremely controversial because we cannot debate the city disconnected from the local government. If we reflect on the city to interfere in the way of doing of its managers, then we have to build reflections together with them. Partnerships between the university and local governments are essential to growing reflection on the city.

Currently, a very intense partnership is taking place here in Belo Horizonte between the university and the current mayor, due to the Covid-19 pandemic. The mayor listens to researchers in Medicine, Pharmacy, and other areas at UFMG before making decisions about changes in the functioning of the city. This is fantastic, but we, the researchers in Urbanism and Urban Planning, have to tell the mayor that not only in the pandemic can we collaborate. We have to start developing projects of interest to the local government. Otherwise, there is no point in talking about Urban Planning or Urban Management at the university. Theoretical reflections aside, we have to debate and formulate practical work and effective actions in partnership with the local government. How does this happen in a city like Sao Carlos, where your campus is located?

MT: São Carlos is an exception because we already had two mayors who were former rectors of the Federal University of Sao Carlos. For twelve years in a row, universities participated very actively of local administrations in several departments, in different areas. Processes were really rich, first for the city, but

also the government and the university. I agree with everything you said, but I think that, from a political party perspective, it is quite difficult to make some cooperation processes a reality. Because often, for ideological reasons, those in office – whether in the Executive or the Legislative branch – want to lead the city on a path different from that which researchers would point out following technical criteria.

MLM: Yes, unfortunately, this can happen, but we have to build bridges capable of recognizing also the political commitments that the governors in office have assumed. This is why partnerships must be institutional projects, not personal ones, nor of research groups. When it is housed in institutional projects, cooperation continues even though, with the ideological alternation of municipal administrations, some research groups feel uncomfortable in collaborating. But regardless of political party issues, some actions would be accepted by any public manager. For example, the organization of the city information system can be useful to different administrations, from different parties, and does not need to remain tied to the vision of a specific group or party. It has to be an institutional project. Cooperation between the university and the government must be based on public policies, not government policies.

MT: What you are saying, and well said, is that the University has to assume its role as a social agent. It means, just as it would be unacceptable for the local government as an institution to withdraw from the discussion of public management for disagreeing circumstantial issues, the university should also not act so.

MLM: It should not, at all. The university has to be present and if there is a break from the local government, it has to pay for it. I doubt that the permanent role of the university in public administration would be disliked or unwanted by any mayor. Except in very special circumstances such as those we are living nowadays in Brazil. But it is also an exceptionality, a very special circumstance. There has always been a strong collaboration between universities and the Ministry of Education, in different governments, with different views. At the present time there is no cooperation, but it is an exception caused by a break from the government, and not by the universities. This can happen. But in general, the university is usually a support for the design and implementation of public policies, offering debates, promotion of ideas, transfer of technology, staff instruction, and training.

The local government technical teams are made up of permanent public officials. They remain in their positions despite the alternation of political managers. We have to join them and not a mayor because he is our friend. We have to build an institutional bridge, from institution to institution. If the partnership is made with teams working in the city hall, this relationship will be more enduring.

MT: In order to participate and be a proponent of such partnerships, the university needs to review its way of doing research, as well as its research methods and procedures in graduate studies.

MLM: Yes, for sure. We have to start discussing our graduate programs from the perspective of innovation. I am not talking about technological innovation only, but the innovation of concepts and proposals. And we must also stop the abuse of a practice called "case study". "Case study" is becoming a kind of academic gossip. Everything is a "case study". Bruno Latour has an interesting proposal in this regard. He says that if a case is representative of a universe, then we should be studying the universe. But if this case is not representative of a universe, then it does not deserve to be studied.

The proliferation of graduate programs in Brazil has a good side and a bad side. The good side is the possibility of qualifying a larger number of young people. The downside is the requirement to publish, publish, and publish, even if nonsense is published. The academic productivism must end. We are encouraging dishonest practices by demanding over-production. It is not credible that a researcher has so much to say that justifies the publication of two or three important articles per year. And since it is not possible to have so many new things to say, you start to repeat, repeat, and repeat. This has to stop. We need to address innovative problems. As, for example, this experience you are doing at Nomads.usp, bringing together various professions and profiles to experience issues related to BIM. This is what we need: empirics to innovate. We need innovations that add knowledge to the shelf. We are growing in number of publications, but we are not growing in knowledge.

I recently did a brief investigation that I hope later to transform into a research project. It is the analysis of the contents of theses and dissertations of our graduate programs in architecture and urbanism, and a compilation of their foreign authors' quotes. Every Brazilian academic work has a huge amount of foreign authors' quotes. This would not be a problem if our graduate programs had not started being created sixty

years ago already. After sixty years, if there is no Brazilian academic production to be cited, something must be wrong. If there is and the researchers are not citing it, something is wrong, too: either this production was worthless or we are lagging.

I also think we need to end the habit of including the literature review as part of the dissertation or thesis. Of course students have to review the literature, they must study what has already been done on the subject, but they do not need to make a chapter to prove they have done such a review. In their thesis, they should write about their own production and not about the production of others. We need to put more emphasis on creativity, and on this issue, I consider you a partner, Marcelo. You have always worked hard with an emphasis on the creative process.

MT: Speaking of reviews leads us to speak of references to questions of method. Which authors are your main references?

MLM: In my career, I have been finding several authors and trying to understand their contributions to architecture. Martin Heidegger was a phenomenologist at first, who later moved away from phenomenology. And Karl Popper was a critical rationalist, sitting, therefore, on the opposite side from Heidegger. I found fascinating the way Heidegger discusses the being of objects. He says there are objects which are in the world: stones, rocks, plants. And there are things that man has worked to build. In this respect, the stone is different from the hammer, because the stone is already there, but the hammer has been made to hammer. To fulfill its function, this latter must have good ergonomics for hammering, it must have a weight for hammering, it must have hardness for hammering. It has to contain some attributes to hammer. The same is true of a house, which is made for living in, and therefore must gather some attributes to be a home. It seemed to me a very interesting idea to link the technical, technological, and material characteristics of objects to their human and social use. This I found in Heidegger.

Popper was a rationalist and was not interested in phenomenology. But he brings a fundamental concept: the idea that knowledge originates from the time we identify a problem and raise a hypothesis for its solution. Popper says the most important thing, in research, is to correctly identify a good problem. Identifying the problem is the most important part, not the procedure to find the answer, which we call the method. I then thought that I could appropriate Heidegger's understanding of what an object's attribute is, and Popper's notion of the path I must take to reach that attribute.

Heidegger was initially rejected by the academy and was only accepted later in Western culture after Sartre recognized his importance. As for Popper, many people are ashamed to quote him because Marxists say he is a positivist. They say that without knowing his thought, without having read it. By the way, when some intellectuals start classifying knowledge according to ideological aspects, a conversation is no longer possible. Some of them do not talk to those who are not Marxists or to those who are positivists. But this is absurd because these are currents of thought, they have their logic, and there is always something to learn from all of them. Everything we read that differs from what we think is important for our learning.

MT: Produce knowledge through dialogue with the difference that enables criticism is, in the end, one of the foundations of the concept of academia.

MLM: Of course, even to make the debate possible. How can we be for or against something that we don't know? In the urban planning area, for example, there is a very clear Marxist orientation. There is not a single text in urban planning courses that does not display a Marxist bias. How is it possible to discuss within such limits? Without someone to raise questions, the area becomes a religion.

I think there should be no policing of what is read, and at the same time, we must cultivate a critical view of these readings. It is important to compare what we read to what people are discussing, and thus select what interests us and what doesn't. This is what is called free will. We cannot discriminate between authors in the academy. Frequently we hear things like "This guy here I won't read because he worked for the government of Mr. So-and-so". This is silly. I read everything and check if it has anything to do with what I think, trying to learn from that experience.

I keep reading Heidegger whenever I can, although his texts are still challenging to understand, to interpret. Every time I read Heidegger, I find something new. I keep reading Popper and did a post-doctorate on his thinking. He is an essential author, who now permeates almost all contemporary texts without being mentioned. Peter Sloterdijk is a widely quoted philosopher, mainly by computer researchers. He rarely quotes Popper, but his thinking is Popperian. Bruno Latour does not mention Popper, but his thinking is also Popperian. The Actor-Network Theory proposed by Latour lays very close to the situational analysis proposed by Popper.

We should be interested in knowing everything with a critical eye, but without asking what party the person joined, what religion he professes, what his sex is, whether he likes a man or a woman. It does not matter. Once a text is produced, it no longer belongs to its author, but to the world. I keep reading authors who were important in my education. I continue to read Marx and Marxist authors, I like Henri Lefebvre very much, and I am not a member of any intellectual fan club.

I also like to read the work of philosophers. They produce reflective works that do not depend on the authors' ideological affiliation, and that always add something to me. It is a pity that our students of architecture and urbanism have no opportunity to attend philosophy courses, mainly for lack of time. They end up getting philosophical concepts by second means, by secondary sources, especially from teachers in classes. It would be much more useful if they could have direct access to the discussions that philosophers raise. Anyway, we need to move towards that, in the future.

MT: A final question, Maria Lúcia: does the future look promising?

MLM: I am a hopeless optimist. I always think that the best year of my life will be the next one. I think that the big amount of information – or the possibility of communication – had a great impact on society, tending, at first, to general exhibitionism. But I suspect that, when the printing press was invented, they must have printed a huge amount of nonsense which did not reach us. Only the great writings did. Thus, I believe that this current moment, of so intense communication via the Internet, including fake news, will bring us very good things.

After a first moment of overall exposure, I believe there will come a second moment, as the real possibility of communication. Something perhaps like we are here today, talking remotely with Nomads.usp researchers, that I possibly would not have known without this opportunity. Perhaps a year from now, I will be attending a class of yours and recommending it to a student of mine, and you will be recommending a class of mine to your students. We will organize courses with good classes, with teachers from all over Brazil. It will also be feasible to do architectural projects in a team bringing together an architect from the state of Minas Gerais, another one from Amazonas, and the third one from another country.

I think of the positive side of it all, after that first impact that makes us very exhibitionist. Sometimes I lack the patience to use Facebook as I get very irritated by the nonsense I end up reading. But we have to work hard so that digital media are not appropriate for defamation, lies, and slander. This is one of the greatest dangers. Because a single person can mistreat millions through digital media. But as I still think that at least 90% of humanity is made up of good people, I believe we cannot allow the remaining 10% to dominate.

I am very optimistic and have no prejudice against any new technology. On the contrary, I always want to learn every new technology that comes up. That's it. We have to believe and look forward because otherwise, it is very difficult to live. [The Brazilian poet] Guimarães Rosa said that living is very dangerous, and it is dangerous, yes, it is very dangerous. But we have to keep trying to make life less dangerous.