

## **DISCUSSION AFTER PROFESSOR WOLF'S PAPER**

PROF. ROCCO BUTTIGLIONE: What first came to my mind, looking at you, rather than listening to you, is Professor Rizzolati and his studies on the mirroring neurons. He explains that, when you see, there are some areas of our brain that are immediately encouraged to do the same, to act in the same way. Imitation has a tremendous power for teaching. And Socrates also came to my mind and you quoted him, the seventh letter of Plato, the most important things cannot be written on paper, they must be written on the soul of the people. And I found a kind of contradiction, perhaps a kind of complementarity between what Professor Tognon said and what you have been saying now, because you have told us of a method in which it seems that the teacher almost disappears. I don't believe it's possible. Perhaps Professor Tognon exaggerated a little bit, I don't think we can send so many people to teach in foreign countries and I wonder how will they be received in Islamic countries, for instance. But on the other hand, we cannot do without.

PROF. MARYANNE WOLF: Exactly. Now you are literally... I could not really explain the Nicholas of Cusa Paradox, the contradictions that I live, but that is at the heart of them. But my answer is what I am learning and that is, the children become the teachers in ways that I never would have understood. The little girl who was giving the alphabet, she was an amazing teacher. These little girls, she was drilling them. She had become a teacher. Now, it does not mean I believe this replaces teachers. You heard me say that. I don't want that, but can it complement teachers? Or, when it is not there at all, can we use this to inspire the teaching of each other? So one piece of the whole work is called "Child-driven learning" and there's an interesting professor in India, who's called the slum professor, Sugata Mitra, who goes and sticks a computer in a village wall and then comes back and many of the kids are computer-literate, this is a piece, not the whole.

PROF. ROCCO BUTTIGLIONE: Then, one important aspect is to communicate enthusiasm because, if you don't communicate enthusiasm, it is very unlikely that things may work.

PROF. MARYANNE WOLF: You're so correct about enthusiasm. One of the ways that we look at apps – we have all the data so any child that puts on

an app, how many minutes, that comes back to us – if it doesn't engage, it's out. So that's a piece of the formula.

DR. JUAN GRABOIS: A brief comment and one question. First, as I told you in the taxi, from the popular sectors in Latin America we have a very rich experience. For instance, if I'm not wrong, one of the most literate countries is Cuba and it has a system called "Yo sí puedo" that has educated several million kids in different countries of the world where there are no schools. So that's one experience to take into account. Another experience, more in the line of Tognon, is what we call "popular education" and the theoretician of this is Paulo Freire, which is another experience of a new model for education. A third thing, more basic, is taking Pope Francis' words to value the historical memory of old people in the transmission of knowledge, that should be, I think, as important as technical thinking in education.

The last thing, and a question for you is, in your model I don't see the role of the State and I think that education is not a voluntary thing, it's a right, and the State has to compulsorily make everybody able to study. What is the role of the State in your model?

PROF. MARYANNE WOLF: In the United States I'm working with something called "Literate Nation" in which literacy is to be declared a right. We are using that state by state, so that same philosophy, I believe, should be country by country. In essence, what we are doing when we go into a country where we asked to have a deployment, we engage, for example in Ethiopia, in long conversations about why literacy should be a human right. So I could not agree with you more, I'm working on it in my own country, state by state. I believe that when we go into a country and work with people we do that in a small way, but in a large way the large sense that you are talking about, I myself am not doing anything yet but I will join any effort towards that.

MSGR. MARCELO SÁNCHEZ SORONDO: I have a question and in reality it's not only for you, but it's a real question that wasn't put on the table, we can say, but which is very central for Pope Francis: the question of corruption. He says that corruption is the devil, is the antichrist, and we all are sinners but the corrupted have no salvation, and these very strong statements about corruption. I think this is also very important in education because, in the end, the people who caused all these questions, for example in the financial sector, were people who were educated in the most important universities, in Harvard etc. and the consequence was this. And this was the question that the Queen of England asked the London School of Economics, how

could it be possible that these people didn't see it coming? I think this is a very important question and what is the solution to communicate values.

PROF. MARYANNE WOLF: I cannot solve the question of good and evil, but I can quote Solzhenitsyn who said, "if only it were possible to have evil in only one place", but the reality is that there is a dividing line between good and evil in every person and it is up to us all to choose, I would say, to choose daily. And what I would say to you about all of this is that corruption, if we read Katherine Boo's book, in Mumbai's Annawadi, you know, one of the most horrible slums in the world, you see good and evil being debated in people who are illiterate as well as highly literate. It's in us all to fight but what I would say, as a solution, and it's not a solution, it's an approach, I have really benefited from – I think you know – Venerable Tenzin, who was the second under the Dalai Lama, and we are literally making stories that children learn from. They learn how to read, but they learn how to think about dilemmas. I studied with Lawrence Kohlberg, among other people, who was a philosopher of moral development, and I actually never believed that I would be using his work as a cognitive neuroscientist, but I'm using his work to establish dilemmas that children read about what is right and what is not, and these are part and parcel of the ethical development that I hope that we can give, when we are confronted not only by a society that's influenced by Pope Francis, but a very secularized society. So we want this for everyone.

FR. KEITH PECKLERS: I want to ask about the One Laptop Per Child initiative, because it seems related to what you're actually speaking about.

PROF. MARYANNE WOLF: It's related in that Nicholas Negroponte had, let's say, mixed success with One Laptop Per Child. One Laptop Per Child several years ago had a foundation and distributed 2.4 million laptops and they went to many places, and some of them were very successful, for example Uruguay was a great success story, other places were not. And he actually came to me and said, part of the reason why they were not successful was because the children were not literate. What do you do with a laptop if you have no literacy? And so he asked the question and then a group of us became so completely committed to this idea. Nicholas has gone on to what is called the X Prize. The X Prize in the USA gives money for huge societal impact, and the last one was on oil, one was on space, one was on energy, etc. This one, based on the Ethiopia data, is going to be on global literacy and how can countries around the world, with all of their expertise,

contribute. It's like a Margaret Mead story, can a small group of people do something? We ignite – like Pope Francis but at a tiny level – we ignite the imagination and I think it's imagination and a moral vision that is what's needed. We have knowledge, but how do we take our imagination and apply it in new ways. And so I think that's what's happening.