

CLOSING ADDRESS

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Ladies and Gentlemen, Friends and Colleagues,

I have had the honour of being asked to close both the previous meeting in Tatranská Lomnica, Slovakia, in 2002 and now here at the Zentrum für interdisziplinäre Forschung der Universität Bielefeld (ZiF) in 2005. I am a bit worried. What significance does this have? Am I perceived somehow as having some special talent for ending meetings and thereby help to disperse friends?

I was fortunate to speak on the first day, because for the rest of the week I could relax and enjoy a real “out-of-body” experience, listening to all the fascinating talks that were to follow. And what could be more fascinating than the subject of time? Well, I have to say that in one respect, our meeting here was a complete failure. Time is still mysterious, I am sorry to say, but maybe that’s not so bad, on second thoughts. It means we have not been deprived of the exciting possibility of meeting “old” and new friends at the next in what is now a successful series of workshops.

Let me remind you of the history of these meetings. Way back in 1996, Rosolino Buccheri from Palermo, Sicily and Metod Saniga from Tatranská Lomnica, Slovakia, found a mutual interest in time and consciousness and started a scientific collaboration in that area. Before long they decided to organize an international workshop on the subject, in which all relevant aspects of time and consciousness would be considered. That meeting was in Palermo in 1999, which I attended. There I met for the first time a group of extraordinary people involved with its organization and I am delighted to say we are still friends. The success of that meeting encouraged Lino and Metod to plan the second of these workshops, in Tatranská Lomnica, Slovakia in 2002. Now the third has been held here in the ZiF Institute in Bielefeld. All have been excellent. Where the next meeting will be has yet

to be finalized, but I am sure some good colleagues will rise to the challenge and organize the fourth in what it is hoped will be a long term series of workshops in a truly fascinating subject full of significance to all people.

Looking back at the journey we have taken from Palermo, through Tatranská Lomnica and now to Bielefeld, it appears to me that there have been some subtle changes along the way. There have been fewer completely speculative talks, with more rigorous lines of thinking developed throughout the week with more focus on certain key areas such as the role of quantum mechanics and the structure of the brain. And of course, no one who was here this week will quickly forget the numerous amusing references to the concept of a “zombie”, which featured in a number of talks. The plan of the meeting, which was structured into four interrelated sessions, was well drawn by the organising committee. I found myself interested in all sessions and this was the first conference I attended where I did not miss a single talk.

A remarkable feature of these meetings which I came to appreciate very much in Palermo, then in Tatranská Lomnica, and now here at ZiF, has been the contribution of the philosophers. Their function is like that of the man who stood behind a successful Roman general on his chariot during the general’s triumph through the streets of Ancient Rome. A golden crown was held over the general’s head and he was reminded constantly that he was, after all, mortal. By definition, philosophers cannot give scientists new scientific results, for then philosophers would be scientists themselves. What philosophers can do for scientists is to constantly remind them that humans have an amazing capacity to make serious conceptual mistakes. It would be no bad thing, perhaps, if all scientific conferences, particularly those on string theory, reserved a place of honour for a philosopher, charging them with the duty of reminding participants that they too are mortal and could be wrong in their fundamental assumptions. The timely address from Professor Emilios Bouratinos on this the last day serves as an important reminder to us of the dangers of blind objectification, of believing in the reality of our mathematical descriptions, without any regard to the complex processes of thought which led us to those descriptions. In the words of Professor Bouratinos, amended from Plato’s *Republic*, “Scientists should become philosophers and philosophers scientists. Scientists need to learn more about how to think, thinkers need to learn more about how science operates.”

Another remarkable feature of this meeting has been the active participation of a number of outstanding young people. I pay tribute to the

excellence of their talks, which were at a very high level, and to the impressive way in which they were given.

The importance of such meetings cannot be overestimated. We go to them not only to advertise and sell our own wares, but to buy new ones. We meet old friends and reinforce existing collaborations; we make new friends and establish new collaborations. In order to do this, we rely on the generosity of sponsors and organizations such as ZiF. Without them, nothing could be done.

ZiF is a remarkable institution. Over many years it has followed an enlightened policy of inviting academics from all over the world to participate in interdisciplinary programmes such as ours in a friendly and comfortable setting. Many people including us have benefitted from this wise policy and long may it continue. Bielefeld has been our home and our University over this last week and we shall miss it and its people. It is a great pleasure to thank the Director and all staff of ZiF for being such excellent hosts. Everyone will want to thank the Catering Staff in particular for putting on such an excellent Conference Banquet.

I am sure all participants will wish me to extend our gratitude to our other chief sponsor, SkyEurope Airlines, for their invaluable contribution. Thank you SkyEurope for your help; it is greatly appreciated.

Of course, any meeting relies on the people who attend. Without them, there could be no meeting. So on behalf of the Organizers, I sincerely thank all you participants for making the effort to come here and for all your invaluable contributions. These Proceedings are an enduring testament to the quality of your efforts. Finally, let us never forget to thank all our friends and our family back home for covering for us during this time.

It is a pleasure to give special thanks to a number of key individuals, without whom this meeting would not have taken place. On behalf of all participants, I thank Metod Saniga, Rosolino Buccheri and Avshalom Elitzur for their very hard work in organizing this successful meeting. Last but not least, I thank Trixi Valentin, our tireless secretary here at ZiF, for keeping us so well-informed during the run up to the meeting, for making our travel to ZiF so trouble-free, and for her constant help during this week.

Time is information, information is time. We do not know at the time of writing where the next meeting will be held, but plans are under way. Let us make the effort to keep in touch and work hard to meet again in the not too distant future.